



# FILM CAPACITORS

CAT. No. E1003D

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| Item         | Series                                                                                                             | Rated voltage range            | Rated Capacitance range (μF) | Category temperature range (°C) |
|--------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|---------------------------------|
| <b>TACD</b>  | High frequency use, metallized polypropylene film.<br>Standard type (Downsizing of TACB series)                    | 250 to 1000<br>V <sub>dc</sub> | 0.033 to 22                  | -40 to +105                     |
| <b>TACC</b>  | High frequency use, metallized polypropylene film.<br>Large capacitance type of TACB series                        | 450 to 1000<br>V <sub>dc</sub> | 1.0 to 18                    | -40 to +105                     |
| <b>TACB</b>  | High frequency use, metallized polypropylene film.                                                                 | 250 to 800<br>V <sub>dc</sub>  | 0.033 to 22                  | -40 to +105                     |
| <b>HACD</b>  | High frequency use, metallized polypropylene film.<br>High voltage type of TACD series (Downsizing of HACB series) | 630 to 4000<br>V <sub>dc</sub> | 0.0033 to 1.5                | -40 to +105                     |
| <b>HACB</b>  | High frequency use, metallized polypropylene film.<br>High voltage type of TACB series                             | 630 to 4000<br>V <sub>dc</sub> | 0.001 to 1.2                 | -40 to +105                     |
| <b>DADC</b>  | High frequency use, metallized polypropylene film.<br>For general use                                              | 250 to 630<br>V <sub>dc</sub>  | 0.01 to 4.7                  | -40 to +105                     |
| <b>DLDA</b>  | High frequency use, metallized polypropylene film.<br>For resonance circuit use                                    | 800 to 1800<br>VH              | 0.001 to 0.1                 | -40 to +105                     |
| <b>DTD-Z</b> | General use, metallized polyester film.<br>Resin dipped stacked type, small size                                   | 35 to 250<br>V <sub>dc</sub>   | 0.0015 to 22                 | -40 to +105                     |
| <b>DFDD</b>  | General use, metallized polyester film.<br>Resin dipped wound type, small size                                     | 250 to 630<br>V <sub>dc</sub>  | 0.01 to 2.2                  | -40 to +105                     |

## 1 In designing device circuits

- (1) Confirming operating and installation environment, use capacitors within the performance limits prescribed in their catalog or product specifications.
- (2) Do not use capacitors at the environment of which temperature drastically changes even though it stays within the prescribed range.
- (3) Do not use capacitors at the humid or dewy environment.
- (4) Select the proper capacitors matching for an application.
- (5) Do not use the capacitors, which have particularly been designed for a specific application, into other applications. In particular, do not use the capacitor samples, which are provided for the purpose of appearance or electrical check, for other purpose.
- (6) Charge and discharge cycles that are rapidly repeated at more than the prescribed conditions causes capacitors to deteriorate in their characteristics or breakdown.
- (7) Unless otherwise prescribed, do not apply the surge or ripple voltage of which peak voltage exceeds the specified full rated voltage.
- (8) Where using capacitors at a rated temperature, do not apply voltage more than the derating voltage specified at the temperature.
- (9) Where using capacitors into AC or pulsing circuits, do not apply current more than the specified maximum permissible current. For the details, consult us.
- (10) A rise in capacitor temperature, which is caused by a ripple current, shall be so set as not to exceed the specified limit at non-circulating air condition. Note that a capacitor changes in the temperature rise by the operating temperature as its capacitance changes.
- (11) The sum of ambient temperature, including the influence of heat from other components, and the rise of temperature by self-heating must be within the specified upper category.
- (12) Do not connect capacitors in series or parallel. Consult us for it.

## 2 Installation and assembly board washing

- (1) Do not pull or twist the lead wires of a capacitor by applying the force more than the limits when installing the capacitor into the printed circuit board. In particular, the capacitor shall be so installed into the board as not to have a crack in the covering resin of the capacitor. If it cannot be avoided, use capacitors with pre-formed lead wires.
- (2) If a large-sized capacitor is installed and/or the device is exposed to a vibration shock, anchor the body of the capacitor to the board by means of a clamp or adhesive that does not effect the capacitor.
- (3) Do not touch the exterior cover of a capacitor to the metal part of the device or other components.
- (4) For soldering, follow the specified conditions. Because the plastic film of the capacitors is effected by heat, overheating the capacitors during soldering causes  $\tan\delta$  to increase.
- (5) If the assembly boards are washed for the purposes of removing residual flux, follow the specified conditions.
  - ① Suitable Solvents Fluorocarbon, Alcohols, Water soluble solvents.

- ② Cleaning Methods Vaporized Cleaning, Dip Cleaning, Ultrasonic Cleaning. When Cleaning, Temperature and Period Shall not Be Exceeded 50°C and 5 Minutes.
- ③ After Treatment It is Necessary To Remove Cleaning Solvent From P.W.B. By enough Dryness.

## 3 While devices are operating

- (1) Do not touch a capacitor, while under load, directly with bare hands. Touching the capacitor causes a shock hazard.
- (2) Even under non-load condition, a capacitor may have charge. Also, the capacitor that has been discharged may be spontaneously recharged by dielectric absorption. Handle the capacitor after discharging with a discharge resistor.
- (3) Do not short the terminals of a capacitor by applying any conductive object. Do not spill any electric-conductive liquid such as acid or alkaline solution over the capacitor as well.
- (4) Do not use capacitors at the following environment ;
  - ① Water, chemicals or oil spatters on the capacitors."
  - ② Direct sunlight pours down onto the capacitors.
  - ③ Ozone, ultraviolet rays or radiation is applied to the capacitors.
  - ④ Corrosive gas is exposed to the capacitors.

## 4 If a capacitor should fail while under load, follow the below

If smoke, fire or stench should be emitted while the device is operating, turn off or unplug the power supply of the device and then extinguish a fire.

## 5 Storage and handling

- (1) For the capacitors that are stored for more than a year, make sure of their characteristics and lead solder ability before use.
- (2) Don't increase an excessive vibration, a shock, pressure, and so on to the capacitors.
- (3) Don't add the excessive power to the lead wire.
- (4) Scratching the dielectric film of a capacitor causes If a capacitor body is scratched or damaged so deep that the dielectric film is damaged, the dielectric will be destructively damaged. Handle capacitors with care. In particular, note that CQ92 series capacitors have thin exterior cover resin because of miniaturization.

## 6 Disposal

Burning capacitors may discharge toxic gas. Ask a specialist for the disposal of industrial wastes.

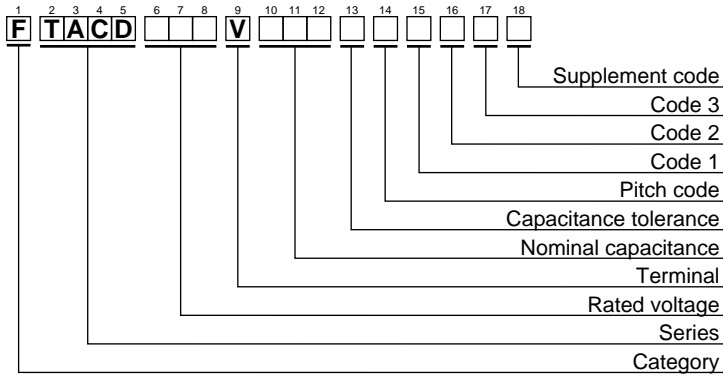
## 7 Catalogs

Specifications in catalogs, materials, etc. are subject to change without notice. Performance test data in the catalogs show typical values, which are not assured as specifications. For the details, refer to guidelines EIAJ RCR-2350 for plastic film fixed capacitors for electronic equipment.

## ◆GLOBAL CODE SYSTEM

The current parts numbering system is changed to new system for global coding.  
Your cooperation will be very much appreciated.

(Example) TACD series



When ordering, always specify complete "Part Number" of Catalog No.1003



# ELECTRONIC EQUIPMENT FILM CAPACITOR

## TACD Series

- Maximum operating temperature 105°C.
- Allowable temperature rise 15K max.
- Downsizing of TACB series.



### ◆ SPECIFICATIONS

| Items                                       | Characteristics                                                                                             |                                                   |     |     |     |     |      |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----|-----|-----|-----|------|
| Category temperature range                  | -40 to +105°C                                                                                               |                                                   |     |     |     |     |      |
| Rated voltage range                         | 250 to 1000V <sub>dc</sub>                                                                                  |                                                   |     |     |     |     |      |
| Capacitance tolerance                       | ±5% (J) or ±10% (K)                                                                                         |                                                   |     |     |     |     |      |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                   |                                                   |     |     |     |     |      |
| Dissipation factor (tanδ)                   | Not more than 0.05% : Equal or less than 1μF.<br>Not more than (c×0.015+0.05)% : More than 1μF.             |                                                   |     |     |     |     |      |
| Insulation resistance (Terminal - Terminal) | No less than 30000MΩ : Equal or less than 0.33μF.<br>No less than 10000ΩF : More than 0.33μF.               |                                                   |     |     |     |     |      |
|                                             | Rated voltage (V <sub>dc</sub> )                                                                            | 250                                               | 315 | 400 | 630 | 800 | 1000 |
|                                             | Measurement voltage (V <sub>dc</sub> )                                                                      | 100                                               | 100 | 100 | 500 | 500 | 500  |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 105°C.   |                                                   |     |     |     |     |      |
|                                             | Appearance                                                                                                  | No serious degradation                            |     |     |     |     |      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 10000MΩ : Equal or less than 0.33μF. |     |     |     |     |      |
|                                             |                                                                                                             | No less than 3000ΩF : More than 0.33μF.           |     |     |     |     |      |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than initial specification at 1kHz.       |     |     |     |     |      |
| Capacitance change                          | Within ±5% of initial value.                                                                                |                                                   |     |     |     |     |      |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH. |                                                   |     |     |     |     |      |
|                                             | Appearance                                                                                                  | No serious degradation.                           |     |     |     |     |      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 10000MΩ : Equal or less than 0.33μF. |     |     |     |     |      |
|                                             |                                                                                                             | No less than 3000ΩF : More than 0.33μF.           |     |     |     |     |      |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than initial specification at 1kHz.       |     |     |     |     |      |
| Capacitance change                          | Within ±5% of initial value.                                                                                |                                                   |     |     |     |     |      |

### ◆ STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Dimensions (mm) |      |                    |                    |                    | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|-----------------------|----------|-----------------|------|--------------------|--------------------|--------------------|-------------------------------|----------|--------------------|------------------------------------------------|
|                       |          | W               | H    | T                  | F                  | φd                 |                               |          |                    |                                                |
| 250                   | 0.82     | 16.2            | 10.8 | 10.3               | 10.0               | 0.8                | 4.94                          | 100      | FTACD251V824□DLCZ0 | TACD2E824□                                     |
|                       | 1.0      |                 | 11.6 | 11.1               |                    |                    | 5.45                          |          | FTACD251V105□DLCZ0 | TACD2E105□                                     |
|                       | 1.2      |                 | 12.5 | 11.9               |                    |                    | 5.97                          |          | FTACD251V125□DLCZ0 | TACD2E125□                                     |
|                       | 1.5      |                 | 13.6 | 13.0               |                    |                    | 6.67                          |          | FTACD251V155□DLCZ0 | TACD2E155□                                     |
|                       | 1.8      |                 | 14.7 | 14.0               |                    |                    | 7.31                          |          | FTACD251V185□DLCZ0 | TACD2E185□                                     |
|                       | 2.2      |                 | 15.9 | 15.2               |                    |                    | 8.08                          |          | FTACD251V225□DLCZ0 | TACD2E225□                                     |
|                       | 2.7      | 23.2            | 14.0 | 13.4               | 17.5               | 1.0                | 6.05                          |          | FTACD251V275□ELHZ0 | TACD2E275□                                     |
|                       | 3.3      |                 | 15.2 | 14.5               |                    |                    | 6.69                          |          | FTACD251V335□ELHZ0 | TACD2E335□                                     |
|                       | 3.9      |                 | 16.4 | 15.6               |                    |                    | 7.27                          |          | FTACD251V395□ELHZ0 | TACD2E395□                                     |
|                       | 4.7      |                 | 17.8 | 16.9               |                    |                    | 7.98                          |          | FTACD251V475□ELHZ0 | TACD2E475□                                     |
|                       | 5.6      |                 | 17.1 | 16.3               |                    |                    | 7.15                          |          | FTACD251V565□FLEZ0 | TACD2E565□                                     |
|                       | 6.8      |                 | 18.7 | 17.8               |                    |                    | 7.88                          |          | FTACD251V685□FLEZ0 | TACD2E685□                                     |
|                       | 8.2      |                 | 20.3 | 19.3               |                    |                    | 8.65                          |          | FTACD251V825□FLEZ0 | TACD2E825□                                     |
|                       | 10       |                 | 22.2 | 21.2               |                    |                    | 9.34                          |          | FTACD251V106□FLEZ0 | TACD2E106□                                     |
|                       | 12       |                 | 24.1 | 23.0               |                    |                    | 9.34                          |          | FTACD251V126□FLEZ0 | TACD2E126□                                     |
| 15                    | 26.8     | 25.5            | 9.34 | FTACD251V156□FLEZ0 | TACD2E156□         |                    |                               |          |                    |                                                |
| 315                   | 0.33     | 16.2            | 8.6  | 8.2                | 10.0               | 0.8                | 3.44                          | 125      | FTACD3B1V334□DLCZ0 | TACD2F334□                                     |
|                       | 0.39     |                 | 9.1  | 8.7                |                    |                    | 3.74                          |          | FTACD3B1V394□DLCZ0 | TACD2F394□                                     |
|                       | 0.47     |                 | 9.7  | 9.2                |                    |                    | 4.10                          |          | FTACD3B1V474□DLCZ0 | TACD2F474□                                     |
|                       | 0.56     |                 | 10.3 | 9.8                |                    |                    | 4.48                          |          | FTACD3B1V564□DLCZ0 | TACD2F564□                                     |
|                       | 0.68     |                 | 11.0 | 10.5               |                    |                    | 4.94                          |          | FTACD3B1V684□DLCZ0 | TACD2F684□                                     |
|                       | 0.82     |                 | 11.9 | 11.3               |                    |                    | 5.34                          |          | FTACD3B1V824□DLCZ0 | TACD2F824□                                     |
|                       | 1.0      | 12.8            | 12.2 | 5.90               | FTACD3B1V105□DLCZ0 | TACD2F105□         |                               |          |                    |                                                |
|                       | 1.2      | 18.2            | 12.9 | 12.3               | 12.5               | 1.0                | 5.66                          |          | FTACD3B1V125□HLGZ0 | TACD2F125□                                     |
|                       | 1.5      |                 | 14.1 | 13.4               |                    |                    | 6.33                          |          | FTACD3B1V155□HLGZ0 | TACD2F155□                                     |
|                       | 1.8      |                 | 15.2 | 14.5               |                    |                    | 6.94                          |          | FTACD3B1V185□HLGZ0 | TACD2F185□                                     |
|                       | 2.2      |                 | 14.4 | 13.7               |                    |                    | 5.90                          |          | FTACD3B1V225□ELHZ0 | TACD2F225□                                     |
|                       | 2.7      |                 | 15.6 | 14.9               |                    |                    | 6.54                          |          | FTACD3B1V275□ELHZ0 | TACD2F275□                                     |
|                       | 3.3      |                 | 17.1 | 16.3               |                    |                    | 7.23                          |          | FTACD3B1V335□ELHZ0 | TACD2F335□                                     |
|                       | 3.9      |                 | 18.3 | 17.5               |                    |                    | 7.86                          |          | FTACD3B1V395□ELHZ0 | TACD2F395□                                     |
|                       | 4.7      |                 | 19.9 | 19.0               |                    |                    | 8.63                          |          | FTACD3B1V475□ELHZ0 | TACD2F475□                                     |
|                       | 5.6      |                 | 19.3 | 18.4               |                    |                    | 7.74                          |          | FTACD3B1V565□FLEZ0 | TACD2F565□                                     |
|                       | 6.8      | 28.2            | 21.0 | 20.0               | 22.5               | 1.0                | 8.53                          |          | FTACD3B1V685□FLEZ0 | TACD2F685□                                     |
|                       | 8.2      |                 | 22.9 | 21.8               |                    |                    | 9.34                          |          | FTACD3B1V825□FLEZ0 | TACD2F825□                                     |
|                       | 10       |                 | 25.1 | 23.9               |                    |                    | 9.34                          |          | FTACD3B1V106□FLEZ0 | TACD2F106□                                     |
|                       | 12       |                 | 27.3 | 26.0               |                    |                    | 9.34                          |          | FTACD3B1V126□FLEZ0 | TACD2F126□                                     |
|                       | 15       |                 | 24.2 | 23.1               |                    |                    | 8.48                          |          | FTACD3B1V156□TLJZ0 | TACD2F156□                                     |
|                       | 18       |                 | 26.3 | 25.1               |                    |                    | 9.29                          |          | FTACD3B1V186□TLJZ0 | TACD2F186□                                     |
| 22                    | 43.2     | 28.9            | 27.5 | 37.5               | 9.34               | FTACD3B1V226□TLJZ0 | TACD2F226□                    |          |                    |                                                |

(1) The symbol "□" is Capacitance tolerance code. (J : ±5%, K : ±10%)

(2) The maximum ripple current : +85°C max., 100kHz, sine wave

(3) WV(V<sub>ac</sub>) : 50Hz or 60Hz, sine wave



# ELECTRONIC EQUIPMENT FILM CAPACITOR

## TACD Series

### ◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |                    |                    | Maximum ripple current (Arms) | WV (Vac)           | Part Number        | Previous Part Number (Just for your reference) |
|----------|----------|-----------------|------|------|--------------------|--------------------|-------------------------------|--------------------|--------------------|------------------------------------------------|
|          |          | W               | H    | T    | F                  | φd                 |                               |                    |                    |                                                |
| 400      | 0.22     | 16.2            | 8.7  | 8.3  | 10.0               | 0.8                | 3.55                          | 150                | FTACD401V224□DLCZ0 | TACD2G224□                                     |
|          | 0.27     |                 | 9.3  | 8.9  |                    |                    | 3.94                          |                    | FTACD401V274□DLCZ0 | TACD2G274□                                     |
|          | 0.33     |                 | 10.0 | 9.5  |                    |                    | 3.88                          |                    | FTACD401V334□DLCZ0 | TACD2G334□                                     |
|          | 0.39     |                 | 10.6 | 10.1 |                    |                    | 4.22                          |                    | FTACD401V394□DLCZ0 | TACD2G394□                                     |
|          | 0.47     |                 | 11.4 | 10.8 |                    |                    | 4.63                          |                    | FTACD401V474□DLCZ0 | TACD2G474□                                     |
|          | 0.56     |                 | 12.2 | 11.6 |                    |                    | 5.05                          |                    | FTACD401V564□DLCZ0 | TACD2G564□                                     |
|          | 0.68     | 13.1            | 12.5 | 5.57 | FTACD401V684□DLCZ0 |                    | TACD2G684□                    |                    |                    |                                                |
|          | 0.82     | 13.2            | 12.6 | 5.35 | FTACD401V824□HLGZ0 |                    | TACD2G824□                    |                    |                    |                                                |
|          | 1.0      | 18.2            | 14.3 | 13.7 | 5.91               |                    | FTACD401V105□HLGZ0            |                    | TACD2G105□         |                                                |
|          | 1.2      |                 | 13.4 | 12.8 | 5.19               |                    | FTACD401V125□ELHZ0            |                    | TACD2G125□         |                                                |
|          | 1.5      | 23.2            | 14.7 | 14.1 | 5.57               |                    | FTACD401V155□ELHZ0            |                    | TACD2G155□         |                                                |
|          | 1.8      |                 | 15.9 | 15.2 | 6.10               |                    | FTACD401V185□ELHZ0            |                    | TACD2G185□         |                                                |
|          | 2.2      |                 | 17.4 | 16.5 | 6.75               |                    | FTACD401V225□ELHZ0            |                    | TACD2G225□         |                                                |
|          | 2.7      |                 | 19.0 | 18.1 | 7.48               |                    | FTACD401V275□ELHZ0            |                    | TACD2G275□         |                                                |
|          | 3.3      |                 | 28.2 | 18.6 | 17.7               |                    | 6.79                          |                    | FTACD401V335□FLEZ0 | TACD2G335□                                     |
|          | 3.9      |                 |      | 20.0 | 19.1               |                    | 7.39                          |                    | FTACD401V395□FLEZ0 | TACD2G395□                                     |
|          | 4.7      | 21.8            |      | 20.7 | 8.11               |                    | FTACD401V475□FLEZ0            |                    | TACD2G475□         |                                                |
|          | 5.6      | 23.6            |      | 22.5 | 8.85               |                    | FTACD401V565□FLEZ0            |                    | TACD2G565□         |                                                |
| 6.8      | 25.8     | 24.5            |      | 9.34 | FTACD401V685□FLEZ0 | TACD2G685□         |                               |                    |                    |                                                |
| 8.2      | 28.1     | 26.8            |      | 9.34 | FTACD401V825□FLEZ0 | TACD2G825□         |                               |                    |                    |                                                |
| 630      | 0.1      | 16.2            | 9.1  | 8.7  | 0.8                | 2.72               | 175                           | FTACD631V104□DLCZ0 | TACD2J104□         |                                                |
|          | 0.12     |                 | 9.6  | 9.2  |                    | 2.98               |                               | FTACD631V124□DLCZ0 | TACD2J124□         |                                                |
|          | 0.15     |                 | 10.4 | 10.0 |                    | 3.33               |                               | FTACD631V154□DLCZ0 | TACD2J154□         |                                                |
|          | 0.18     |                 | 11.2 | 10.7 |                    | 3.65               |                               | FTACD631V184□DLCZ0 | TACD2J184□         |                                                |
|          | 0.22     |                 | 12.0 | 11.5 |                    | 4.04               |                               | FTACD631V224□DLCZ0 | TACD2J224□         |                                                |
|          | 0.27     |                 | 13.1 | 12.5 |                    | 4.47               |                               | FTACD631V274□DLCZ0 | TACD2J274□         |                                                |
|          | 0.33     | 13.1            | 12.5 | 4.33 |                    | FTACD631V334□HLGZ0 |                               | TACD2J334□         |                    |                                                |
|          | 0.39     | 18.2            | 14.0 | 13.4 |                    | 4.70               |                               | FTACD631V394□HLGZ0 | TACD2J394□         |                                                |
|          | 0.47     |                 | 15.2 | 14.5 |                    | 5.16               |                               | FTACD631V474□HLGZ0 | TACD2J474□         |                                                |
|          | 0.56     | 23.2            | 14.0 | 13.4 |                    | 4.35               |                               | FTACD631V564□ELHZ0 | TACD2J564□         |                                                |
|          | 0.68     |                 | 15.2 | 14.5 |                    | 4.79               |                               | FTACD631V684□ELHZ0 | TACD2J684□         |                                                |
|          | 0.82     |                 | 16.5 | 15.7 |                    | 5.26               |                               | FTACD631V824□ELHZ0 | TACD2J824□         |                                                |
|          | 1.0      |                 | 18.0 | 17.1 |                    | 5.81               |                               | FTACD631V105□ELHZ0 | TACD2J105□         |                                                |
|          | 1.2      |                 | 19.5 | 18.6 |                    | 6.36               |                               | FTACD631V125□ELHZ0 | TACD2J125□         |                                                |
|          | 1.5      |                 | 19.1 | 18.2 |                    | 5.84               |                               | FTACD631V155□FLEZ0 | TACD2J155□         |                                                |
|          | 1.8      | 28.2            | 20.8 | 19.8 |                    | 6.40               |                               | FTACD631V185□FLEZ0 | TACD2J185□         |                                                |
|          | 2.2      |                 | 22.7 | 21.7 |                    | 7.08               |                               | FTACD631V225□FLEZ0 | TACD2J225□         |                                                |
|          | 2.7      |                 | 25.0 | 23.8 |                    | 7.84               |                               | FTACD631V275□FLEZ0 | TACD2J275□         |                                                |
| 3.3      | 27.4     |                 | 26.1 | 8.67 | FTACD631V335□FLEZ0 | TACD2J335□         |                               |                    |                    |                                                |
| 3.9      | 43.2     |                 | 23.9 | 22.8 | 6.30               | FTACD631V395□TLJZ0 | TACD2J395□                    |                    |                    |                                                |
| 4.7      |          |                 | 25.9 | 24.7 | 6.92               | FTACD631V475□TLJZ0 | TACD2J475□                    |                    |                    |                                                |
| 5.6      |          | 28.1            | 26.8 | 7.55 | FTACD631V565□TLJZ0 | TACD2J565□         |                               |                    |                    |                                                |
| 800      |          | 0.056           | 16.2 | 8.5  | 8.1                | 0.8                | 2.36                          | 200                | FTACD801V563□DLCZ0 | TACD2K563□                                     |
|          | 0.068    | 9.0             |      | 8.6  | 2.60               |                    | FTACD801V683□DLCZ0            |                    | TACD2K683□         |                                                |
|          | 0.082    | 9.6             |      | 9.2  | 2.85               |                    | FTACD801V823□DLCZ0            |                    | TACD2K823□         |                                                |
|          | 0.1      | 10.3            |      | 9.8  | 3.04               |                    | FTACD801V104□DLCZ0            |                    | TACD2K104□         |                                                |
|          | 0.12     | 11.0            |      | 10.5 | 3.33               |                    | FTACD801V124□DLCZ0            |                    | TACD2K124□         |                                                |
|          | 0.15     | 12.0            |      | 11.4 | 3.72               |                    | FTACD801V154□DLCZ0            |                    | TACD2K154□         |                                                |
|          | 0.18     | 12.4            | 11.8 | 3.56 | FTACD801V184□HLGZ0 |                    | TACD2K184□                    |                    |                    |                                                |
|          | 0.22     | 18.2            | 13.4 | 12.8 | 3.94               |                    | FTACD801V224□HLGZ0            |                    | TACD2K224□         |                                                |
|          | 0.27     |                 | 14.6 | 13.9 | 4.36               |                    | FTACD801V274□HLGZ0            |                    | TACD2K274□         |                                                |
|          | 0.33     | 23.2            | 13.5 | 12.9 | 3.72               |                    | FTACD801V334□ELHZ0            |                    | TACD2K334□         |                                                |
|          | 0.39     |                 | 14.4 | 13.8 | 4.05               |                    | FTACD801V394□ELHZ0            |                    | TACD2K394□         |                                                |
|          | 0.47     |                 | 15.6 | 14.9 | 4.44               |                    | FTACD801V474□ELHZ0            |                    | TACD2K474□         |                                                |
|          | 0.56     |                 | 16.8 | 16.0 | 4.85               |                    | FTACD801V564□ELHZ0            |                    | TACD2K564□         |                                                |
|          | 0.68     |                 | 18.3 | 17.5 | 5.34               |                    | FTACD801V684□ELHZ0            |                    | TACD2K684□         |                                                |
|          | 0.82     |                 | 19.9 | 19.0 | 5.87               |                    | FTACD801V824□ELHZ0            |                    | TACD2K824□         |                                                |
|          | 1.0      | 28.2            | 19.2 | 18.3 | 5.32               |                    | FTACD801V105□FLEZ0            |                    | TACD2K105□         |                                                |
|          | 1.2      |                 | 20.8 | 19.9 | 5.83               |                    | FTACD801V125□FLEZ0            |                    | TACD2K125□         |                                                |
|          | 1.5      |                 | 23.0 | 22.0 | 6.52               |                    | FTACD801V155□FLEZ0            |                    | TACD2K155□         |                                                |
| 1.8      | 25.1     |                 | 23.9 | 7.14 | FTACD801V185□FLEZ0 | TACD2K185□         |                               |                    |                    |                                                |
| 2.2      | 27.5     |                 | 26.2 | 7.89 | FTACD801V225□FLEZ0 | TACD2K225□         |                               |                    |                    |                                                |
| 2.7      | 23.8     |                 | 22.7 | 5.85 | FTACD801V275□TLJZ0 | TACD2K275□         |                               |                    |                    |                                                |
| 3.3      | 43.2     | 26.0            | 24.8 | 6.47 | FTACD801V335□TLJZ0 | TACD2K335□         |                               |                    |                    |                                                |
| 3.9      |          | 28.0            | 26.7 | 7.03 | FTACD801V395□TLJZ0 | TACD2K395□         |                               |                    |                    |                                                |

(1)The symbol "□" is Capacitance tolerance code. (J : ±5%, K : ±10%)

(2)The maximum ripple current : +85°C max., 100kHz, sine wave

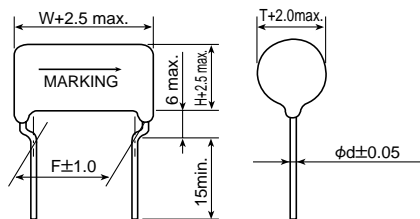
(3)WV(Vac) : 50Hz or 60Hz, sine wave

◆STANDARD RATINGS

| WV<br>(Vdc) | Cap<br>(μF) | Dimensions (mm) |      |      |                    |            | Maximum<br>ripple current<br>(Arms) | WV<br>(Vac) | Part Number        | Previous Part Number<br>(Just for your reference) |
|-------------|-------------|-----------------|------|------|--------------------|------------|-------------------------------------|-------------|--------------------|---------------------------------------------------|
|             |             | W               | H    | T    | F                  | φd         |                                     |             |                    |                                                   |
| 1000        | 0.033       | 16.2            | 8.9  | 8.5  | 10.0               | 0.8        | 2.07                                | 250         | FTACD102V333□DLCZ0 | TACD3A333□                                        |
|             | 0.039       |                 | 9.4  | 9.0  |                    |            | 2.25                                |             | FTACD102V393□DLCZ0 | TACD3A393□                                        |
|             | 0.047       |                 | 10.0 | 9.6  |                    |            | 2.47                                |             | FTACD102V473□DLCZ0 | TACD3A473□                                        |
|             | 0.056       |                 | 10.7 | 10.2 |                    |            | 2.70                                |             | FTACD102V563□DLCZ0 | TACD3A563□                                        |
|             | 0.068       |                 | 11.5 | 11.0 |                    |            | 2.98                                |             | FTACD102V683□DLCZ0 | TACD3A683□                                        |
|             | 0.082       |                 | 12.4 | 11.8 |                    |            | 3.27                                |             | FTACD102V823□DLCZ0 | TACD3A823□                                        |
|             | 0.1         | 12.3            | 11.7 | 3.16 | FTACD102V104□HLGZ0 | TACD3A104□ |                                     |             |                    |                                                   |
|             | 0.12        | 18.2            | 13.2 | 12.6 | 12.5               | 3.46       | FTACD102V124□HLGZ0                  |             | TACD3A124□         |                                                   |
|             | 0.15        | 14.5            | 13.8 | 3.87 | FTACD102V154□HLGZ0 | TACD3A154□ |                                     |             |                    |                                                   |
|             | 0.18        | 13.3            | 12.7 | 3.27 | FTACD102V184□ELHZ0 | TACD3A184□ |                                     |             |                    |                                                   |
|             | 0.22        | 14.4            | 13.8 | 3.61 | FTACD102V224□ELHZ0 | TACD3A224□ |                                     |             |                    |                                                   |
|             | 0.27        | 15.8            | 15.0 | 4.00 | FTACD102V274□ELHZ0 | TACD3A274□ |                                     |             |                    |                                                   |
|             | 0.33        | 23.2            | 17.2 | 16.4 | 17.5               | 4.42       | FTACD102V334□ELHZ0                  |             | TACD3A334□         |                                                   |
|             | 0.39        | 18.5            | 17.6 | 4.81 | FTACD102V394□ELHZ0 | TACD3A394□ |                                     |             |                    |                                                   |
|             | 0.47        | 20.1            | 19.1 | 5.28 | FTACD102V474□ELHZ0 | TACD3A474□ |                                     |             |                    |                                                   |
|             | 0.56        | 19.2            | 18.3 | 4.74 | FTACD102V564□FLEZ0 | TACD3A564□ |                                     |             |                    |                                                   |
|             | 0.68        | 20.9            | 19.9 | 5.22 | FTACD102V684□FLEZ0 | TACD3A684□ |                                     |             |                    |                                                   |
|             | 0.82        | 28.2            | 22.8 | 21.7 | 22.5               | 5.73       | FTACD102V824□FLEZ0                  |             | TACD3A824□         |                                                   |
|             | 1.0         | 24.9            | 23.7 | 6.33 | FTACD102V105□FLEZ0 | TACD3A105□ |                                     |             |                    |                                                   |
|             | 1.2         | 27.1            | 25.8 | 6.93 | FTACD102V125□FLEZ0 | TACD3A125□ |                                     |             |                    |                                                   |

- (1)The symbol "□" is Capacitance tolerance code. (J : ±5%, K : ±10%)
- (2)The maximum ripple current : +85°C max., 100kHz, sine wave
- (3)WV(Vac) : 50Hz or 60Hz, sine wave

◆DIMENSIONS (mm)





# ELECTRONIC EQUIPMENT FILM CAPACITOR

## TACC Series

- Maximum operating temperature 105°C.
- Allowable temperature rise 15K max.
- Large capacitance of TACB series.



### ◆SPECIFICATIONS

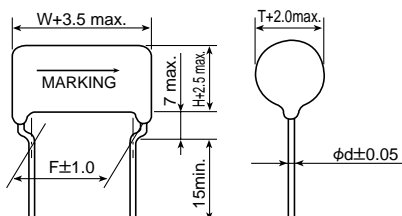
| Items                                       | Characteristics                                                                                             |                                                   |     |     |      |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----|-----|------|
| Category temperature range                  | -40 to +105°C                                                                                               |                                                   |     |     |      |
| Rated voltage range                         | 450 to 1000V <sub>dc</sub>                                                                                  |                                                   |     |     |      |
| Capacitance tolerance                       | ±5% (J) or ±10% (K)                                                                                         |                                                   |     |     |      |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                   |                                                   |     |     |      |
| Dissipation factor (tanδ)                   | No more than 0.05% : Equal or less than 1μF.<br>No more than (c×0.015+0.05)% : More than 1μF.               |                                                   |     |     |      |
| Insulation resistance (Terminal - Terminal) | No less than 30000MΩ : Equal or less than 0.33μF.                                                           |                                                   |     |     |      |
|                                             | No less than 10000ΩF : More than 0.33μF.                                                                    |                                                   |     |     |      |
|                                             | Rated voltage (V <sub>dc</sub> )                                                                            | 450                                               | 630 | 800 | 1000 |
|                                             | Measurement voltage (V <sub>dc</sub> )                                                                      | 100                                               | 500 | 500 | 500  |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 85°C.    |                                                   |     |     |      |
|                                             | Appearance                                                                                                  | No serious degradation                            |     |     |      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 10000MΩ : Equal or less than 0.33μF. |     |     |      |
|                                             |                                                                                                             | No less than 3000ΩF : More than 0.33μF.           |     |     |      |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than initial specification at 1kHz.       |     |     |      |
| Capacitance change                          | Within ±5% of initial value.                                                                                |                                                   |     |     |      |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH. |                                                   |     |     |      |
|                                             | Appearance                                                                                                  | No serious degradation.                           |     |     |      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 10000MΩ : Equal or less than 0.33μF. |     |     |      |
|                                             |                                                                                                             | No less than 3000ΩF : More than 0.33μF.           |     |     |      |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than initial specification at 1kHz.       |     |     |      |
| Capacitance change                          | Within ±5% of initial value.                                                                                |                                                   |     |     |      |

### ◆STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Dimensions (mm) |      |      |      |     | Maximum ripple current (Arms) | WV (V <sub>ac</sub> ) | Part Number        | Previous Part Number (Just for your reference) |
|-----------------------|----------|-----------------|------|------|------|-----|-------------------------------|-----------------------|--------------------|------------------------------------------------|
|                       |          | W               | H    | T    | F    | φd  |                               |                       |                    |                                                |
| 450                   | 5.6      | 33.2            | 21.0 | 20.0 | 27.5 | 1.0 | 7.0                           | 115                   | FTACC451V565□RLFZ0 | TACC2W565□                                     |
|                       | 6.8      |                 | 22.9 | 21.9 |      |     | 7.7                           |                       | FTACC451V685□RLFZ0 | TACC2W685□                                     |
|                       | 8.2      |                 | 25.0 | 23.8 |      |     | 8.5                           |                       | FTACC451V825□RLFZ0 | TACC2W825□                                     |
|                       | 10       |                 | 27.4 | 26.1 |      |     | 9.4                           |                       | FTACC451V106□RLFZ0 | TACC2W106□                                     |
|                       | 12       | 43.2            | 25.7 | 24.5 | 37.5 |     | 7.5                           |                       | FTACC451V126□TLJZ0 | TACC2W126□                                     |
|                       | 15       | 53.2            | 28.5 | 27.1 | 47.5 |     | 8.4                           |                       | FTACC451V156□TLJZ0 | TACC2W156□                                     |
|                       | 18       | 53.2            | 27.4 | 26.1 | 47.5 |     | 7.3                           |                       | FTACC451V186□ULWZ0 | TACC2W186□                                     |
| 630                   | 3.3      | 33.2            | 21.5 | 20.4 | 27.5 | 1.0 | 5.6                           | 150                   | FTACC631V335□RLFZ0 | TACC2J335□                                     |
|                       | 3.9      |                 | 23.2 | 22.1 |      |     | 6.1                           |                       | FTACC631V395□RLFZ0 | TACC2J395□                                     |
|                       | 4.7      |                 | 25.2 | 24.0 |      |     | 6.7                           |                       | FTACC631V475□RLFZ0 | TACC2J475□                                     |
|                       | 5.6      |                 | 27.4 | 26.1 |      |     | 7.3                           |                       | FTACC631V565□RLFZ0 | TACC2J565□                                     |
|                       | 6.8      | 43.2            | 25.8 | 24.6 | 37.5 |     | 5.9                           |                       | FTACC631V685□TLJZ0 | TACC2J685□                                     |
|                       | 8.2      | 53.2            | 28.0 | 26.7 | 47.5 |     | 6.5                           |                       | FTACC631V825□TLJZ0 | TACC2J825□                                     |
|                       | 10       | 53.2            | 27.3 | 26.0 | 47.5 |     | 5.6                           |                       | FTACC631V106□ULWZ0 | TACC2J106□                                     |
| 800                   | 2.2      | 33.2            | 21.9 | 20.8 | 27.5 | 1.0 | 4.5                           | 175                   | FTACC801V225□RLFZ0 | TACC2K225□                                     |
|                       | 2.7      |                 | 24.0 | 22.9 |      |     | 5.0                           |                       | FTACC801V275□RLFZ0 | TACC2K275□                                     |
|                       | 3.3      |                 | 26.3 | 25.1 |      |     | 5.6                           |                       | FTACC801V335□RLFZ0 | TACC2K335□                                     |
|                       | 3.9      |                 | 28.5 | 27.1 |      |     | 6.0                           |                       | FTACC801V395□RLFZ0 | TACC2K395□                                     |
|                       | 4.7      | 43.2            | 26.8 | 25.5 | 37.5 |     | 4.9                           |                       | FTACC801V475□TLJZ0 | TACC2K475□                                     |
|                       | 5.6      | 53.2            | 25.7 | 24.5 | 47.5 |     | 4.2                           |                       | FTACC801V565□ULWZ0 | TACC2K565□                                     |
|                       | 6.8      | 53.2            | 28.0 | 26.7 | 47.5 |     | 4.6                           |                       | FTACC801V685□ULWZ0 | TACC2K685□                                     |
| 1000                  | 1.0      | 33.2            | 23.4 | 22.3 | 27.5 | 1.0 | 3.9                           | 200                   | FTACC102V105□RLFZ0 | TACC3A105□                                     |
|                       | 1.2      |                 | 25.5 | 24.3 |      |     | 4.2                           |                       | FTACC102V125□RLFZ0 | TACC3A125□                                     |
|                       | 1.5      |                 | 28.2 | 26.9 |      |     | 4.7                           |                       | FTACC102V155□RLFZ0 | TACC3A155□                                     |
|                       | 1.8      |                 | 43.2 | 26.4 |      |     | 25.2                          |                       | 37.5               | 3.8                                            |
|                       | 2.2      | 53.2            | 25.8 | 24.6 | 47.5 |     | 3.3                           |                       | FTACC102V225□ULWZ0 | TACC3A225□                                     |
|                       | 2.7      | 53.2            | 28.2 | 26.9 | 47.5 |     | 3.7                           |                       | FTACC102V275□ULWZ0 | TACC3A275□                                     |

- (1)The symbol "□" is Capacitance tolerance code. (J : ±5%, K : ±10%)
- (2)The maximum ripple current : +85°C max., 100kHz, sine wave
- (3)WV(V<sub>ac</sub>) : 50Hz or 60Hz, sine wave

### ◆DIMENSIONS (mm)







# ELECTRONIC EQUIPMENT FILM CAPACITOR

## TACB Series

- Maximum operating temperature 105°C.
- Allowable temperature rise 15K max.
- A little hum is produced when applied AC voltage.



### ◆ SPECIFICATIONS

| Items                                       | Characteristics                                                                                             |                                                                                              |     |     |     |     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----|-----|-----|-----|
| Category temperature range                  | -40 to +105°C                                                                                               |                                                                                              |     |     |     |     |
| Rated voltage range                         | 250 to 800V <sub>dc</sub>                                                                                   |                                                                                              |     |     |     |     |
| Capacitance tolerance                       | ±5% (J) or ±10% (K)                                                                                         |                                                                                              |     |     |     |     |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                   |                                                                                              |     |     |     |     |
| Dissipation factor (tanδ)                   | No more than 0.05% : Equal or less than 1μF.<br>No more than (c×0.015+0.05)% : More than 1μF.               |                                                                                              |     |     |     |     |
| Insulation resistance (Terminal - Terminal) | No less than 30000MΩ : Equal or less than 0.33μF.<br>No less than 10000ΩF : More than 0.33μF.               |                                                                                              |     |     |     |     |
|                                             | Rated voltage (V <sub>dc</sub> )                                                                            | 250                                                                                          | 315 | 400 | 630 | 800 |
|                                             | Measurement voltage (V <sub>dc</sub> )                                                                      | 100                                                                                          | 100 | 100 | 500 | 500 |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 105°C.   |                                                                                              |     |     |     |     |
|                                             | Appearance                                                                                                  | No serious degradation                                                                       |     |     |     |     |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 10000MΩ : Equal or less than 0.33μF.<br>No less than 3000ΩF : More than 0.33μF. |     |     |     |     |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than initial specification at 1kHz.                                                  |     |     |     |     |
|                                             | Capacitance change                                                                                          | Within ±5% of initial value.                                                                 |     |     |     |     |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH. |                                                                                              |     |     |     |     |
|                                             | Appearance                                                                                                  | No serious degradation.                                                                      |     |     |     |     |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 10000MΩ : Equal or less than 0.33μF.<br>No less than 3000ΩF : More than 0.3μF.  |     |     |     |     |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than initial specification at 1kHz.                                                  |     |     |     |     |
|                                             | Capacitance change                                                                                          | Within ±5% of initial value.                                                                 |     |     |     |     |

### ◆ STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Dimensions (mm) |      |                    |                    |            | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|-----------------------|----------|-----------------|------|--------------------|--------------------|------------|-------------------------------|----------|--------------------|------------------------------------------------|
|                       |          | W               | H    | T                  | F                  | φd         |                               |          |                    |                                                |
| 250                   | 0.33     | 16.2            | 8.6  | 8.3                | 10.0               | 0.8        | 3.08                          | 125      | FTACB251V334□DLCZ0 | TACB2E334□                                     |
|                       | 0.39     |                 | 9.2  | 8.8                |                    |            | 3.34                          |          | FTACB251V394□DLCZ0 | TACB2E394□                                     |
|                       | 0.47     |                 | 9.7  | 9.3                |                    |            | 3.67                          |          | FTACB251V474□DLCZ0 | TACB2E474□                                     |
|                       | 0.56     |                 | 10.3 | 9.8                |                    |            | 4.01                          |          | FTACB251V564□DLCZ0 | TACB2E564□                                     |
|                       | 0.68     |                 | 11.1 | 10.6               |                    |            | 4.42                          |          | FTACB251V684□DLCZ0 | TACB2E684□                                     |
|                       | 0.82     |                 | 11.9 | 11.4               |                    |            | 4.85                          |          | FTACB251V824□DLCZ0 | TACB2E824□                                     |
|                       | 1.0      | 12.9            | 12.3 | 5.35               | FTACB251V105□DLCZ0 | TACB2E105□ |                               |          |                    |                                                |
|                       | 1.2      | 12.9            | 12.3 | 5.03               | FTACB251V125□HLGZ0 | TACB2E125□ |                               |          |                    |                                                |
|                       | 1.5      | 14.1            | 13.5 | 5.63               | FTACB251V155□HLGZ0 | TACB2E155□ |                               |          |                    |                                                |
|                       | 1.8      | 15.2            | 14.5 | 6.17               | FTACB251V185□HLGZ0 | TACB2E185□ |                               |          |                    |                                                |
|                       | 2.2      | 14.5            | 13.8 | 5.04               | FTACB251V225□ELHZ0 | TACB2E225□ |                               |          |                    |                                                |
|                       | 2.7      | 15.7            | 15.0 | 5.58               | FTACB251V275□ELHZ0 | TACB2E275□ |                               |          |                    |                                                |
|                       | 3.3      | 17.1            | 16.3 | 6.17               | FTACB251V335□ELHZ0 | TACB2E335□ |                               |          |                    |                                                |
|                       | 3.9      | 18.4            | 17.5 | 6.71               | FTACB251V395□ELHZ0 | TACB2E395□ |                               |          |                    |                                                |
|                       | 4.7      | 20.0            | 19.0 | 7.36               | FTACB251V475□ELHZ0 | TACB2E475□ |                               |          |                    |                                                |
|                       | 5.6      | 19.3            | 18.4 | 6.38               | FTACB251V565□FLEZ0 | TACB2E565□ |                               |          |                    |                                                |
|                       | 6.8      | 21.0            | 20.0 | 7.03               | FTACB251V685□FLEZ0 | TACB2E685□ |                               |          |                    |                                                |
|                       | 8.2      | 22.1            | 21.9 | 7.72               | FTACB251V825□FLEZ0 | TACB2E825□ |                               |          |                    |                                                |
|                       | 10       | 25.2            | 24.0 | 8.52               | FTACB251V106□FLEZ0 | TACB2E106□ |                               |          |                    |                                                |
|                       | 12       | 27.3            | 26.0 | 9.34               | FTACB251V126□FLEZ0 | TACB2E126□ |                               |          |                    |                                                |
|                       | 15       | 24.2            | 23.1 | 6.45               | FTACB251V156□TLJZ0 | TACB2E156□ |                               |          |                    |                                                |
|                       | 18       | 26.3            | 25.1 | 7.07               | FTACB251V186□TLJZ0 | TACB2E186□ |                               |          |                    |                                                |
| 22                    | 28.9     | 27.5            | 7.81 | FTACB251V226□TLJZ0 | TACB2E226□         |            |                               |          |                    |                                                |
| 315                   | 0.22     | 16.2            | 8.7  | 8.3                | 10.0               | 0.8        | 2.81                          | 150      | FTACB3B1V224□DLCZ0 | TACB2F224□                                     |
|                       | 0.27     |                 | 9.3  | 9.0                |                    |            | 3.11                          |          | FTACB3B1V274□DLCZ0 | TACB2F274□                                     |
|                       | 0.33     |                 | 10.0 | 9.6                |                    |            | 3.44                          |          | FTACB3B1V334□DLCZ0 | TACB2F334□                                     |
|                       | 0.39     |                 | 10.7 | 10.2               |                    |            | 3.74                          |          | FTACB3B1V394□DLCZ0 | TACB2F394□                                     |
|                       | 0.47     |                 | 11.4 | 10.9               |                    |            | 4.10                          |          | FTACB3B1V474□DLCZ0 | TACB2F474□                                     |
|                       | 0.56     |                 | 12.1 | 11.6               |                    |            | 4.48                          |          | FTACB3B1V564□DLCZ0 | TACB2F564□                                     |
|                       | 0.68     | 13.2            | 12.6 | 4.94               | FTACB3B1V684□DLCZ0 | TACB2F684□ |                               |          |                    |                                                |
|                       | 0.82     | 13.2            | 12.6 | 4.65               | FTACB3B1V824□HLGZ0 | TACB2F824□ |                               |          |                    |                                                |
|                       | 1.0      | 14.4            | 13.7 | 5.14               | FTACB3B1V105□HLGZ0 | TACB2F105□ |                               |          |                    |                                                |

(1) The symbol "□" is Capacitance tolerance code. (J : ±5%, K : ±10%)

(2) The maximum ripple current : +85°C max., 100kHz, sine wave

(3) WV(V<sub>ac</sub>) : 50Hz or 60Hz, sine wave



### ◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |                    |                    |                    | Maximum ripple current (Arms) | WV (Vac)           | Part Number        | Previous Part Number (Just for your reference) |     |                    |            |
|----------|----------|-----------------|------|--------------------|--------------------|--------------------|-------------------------------|--------------------|--------------------|------------------------------------------------|-----|--------------------|------------|
|          |          | W               | H    | T                  | F                  | φd                 |                               |                    |                    |                                                |     |                    |            |
| 315      | 1.2      | 23.2            | 13.4 | 12.8               | 17.5               | 0.8                | 4.16                          | 150                | FTACB3B1V125□DLHZO | TACB2F125□                                     |     |                    |            |
|          | 1.5      |                 | 14.8 | 14.1               |                    |                    | 4.65                          |                    | FTACB3B1V155□DLHZO | TACB2F155□                                     |     |                    |            |
|          | 1.8      |                 | 15.9 | 15.2               |                    |                    | 5.09                          |                    | FTACB3B1V185□DLHZO | TACB2F185□                                     |     |                    |            |
|          | 2.2      |                 | 17.3 | 16.5               |                    |                    | 5.63                          |                    | FTACB3B1V225□DLHZO | TACB2F225□                                     |     |                    |            |
|          | 2.7      |                 | 19.0 | 18.1               |                    |                    | 6.24                          |                    | FTACB3B1V275□DLHZO | TACB2F275□                                     |     |                    |            |
|          | 3.3      | 28.2            | 18.6 | 17.7               | 22.5               | 1.0                | 5.47                          |                    | FTACB3B1V335□FLEZO | TACB2F335□                                     |     |                    |            |
|          | 3.9      |                 | 20.0 | 19.0               |                    |                    | 5.95                          |                    | FTACB3B1V395□FLEZO | TACB2F395□                                     |     |                    |            |
|          | 4.7      |                 | 21.8 | 20.7               |                    |                    | 6.53                          |                    | FTACB3B1V475□FLEZO | TACB2F475□                                     |     |                    |            |
|          | 5.6      |                 | 23.6 | 22.5               |                    |                    | 7.13                          |                    | FTACB3B1V565□FLEZO | TACB2F565□                                     |     |                    |            |
|          | 6.8      |                 | 25.8 | 24.6               |                    |                    | 7.86                          |                    | FTACB3B1V685□FLEZO | TACB2F685□                                     |     |                    |            |
| 8.2      | 28.1     | 26.8            | 8.63 | FTACB3B1V825□FLEZO | TACB2F825□         |                    |                               |                    |                    |                                                |     |                    |            |
| 400      | 0.1      | 16.2            | 9.2  | 8.8                | 10.0               | 0.8                | 2.40                          | 175                | FTACB401V104□DLCZO | TACB2G104□                                     |     |                    |            |
|          | 0.12     |                 | 9.7  | 9.3                |                    |                    | 2.62                          |                    | FTACB401V124□DLCZO | TACB2G124□                                     |     |                    |            |
|          | 0.15     |                 | 10.5 | 10.1               |                    |                    | 2.93                          |                    | FTACB401V154□DLCZO | TACB2G154□                                     |     |                    |            |
|          | 0.18     |                 | 11.2 | 10.7               |                    |                    | 3.21                          |                    | FTACB401V184□DLCZO | TACB2G184□                                     |     |                    |            |
|          | 0.22     |                 | 12.1 | 11.6               |                    |                    | 3.55                          |                    | FTACB401V224□DLCZO | TACB2G224□                                     |     |                    |            |
|          | 0.27     | 13.1            | 12.5 | 3.94               | FTACB401V274□DLCZO | TACB2G274□         |                               |                    |                    |                                                |     |                    |            |
|          | 0.33     | 18.2            | 13.2 | 12.6               | 12.5               | 0.8                | 3.71                          |                    | FTACB401V334□HLGZO | TACB2G334□                                     |     |                    |            |
|          | 0.39     |                 | 14.1 | 13.5               |                    |                    | 4.04                          |                    | FTACB401V394□HLGZO | TACB2G394□                                     |     |                    |            |
|          | 0.47     |                 | 15.2 | 14.5               |                    |                    | 4.43                          |                    | FTACB401V474□HLGZO | TACB2G474□                                     |     |                    |            |
|          | 0.56     |                 | 14.1 | 13.5               |                    |                    | 3.54                          |                    | FTACB401V564□ELHZO | TACB2G564□                                     |     |                    |            |
|          | 0.68     |                 | 15.3 | 14.6               |                    |                    | 3.90                          |                    | FTACB401V684□ELHZO | TACB2G684□                                     |     |                    |            |
|          | 0.82     | 23.2            | 16.6 | 15.8               | 17.5               | 1.0                | 4.29                          |                    | FTACB401V824□ELHZO | TACB2G824□                                     |     |                    |            |
|          | 1.0      |                 | 18.1 | 17.2               |                    |                    | 4.73                          |                    | FTACB401V105□ELHZO | TACB2G105□                                     |     |                    |            |
|          | 1.2      |                 | 19.6 | 18.6               |                    |                    | 5.19                          |                    | FTACB401V125□ELHZO | TACB2G125□                                     |     |                    |            |
|          | 1.5      |                 | 19.2 | 18.3               |                    |                    | 4.58                          |                    | FTACB401V155□FLEZO | TACB2G155□                                     |     |                    |            |
|          | 1.8      |                 | 20.8 | 19.8               |                    |                    | 5.02                          |                    | FTACB401V185□FLEZO | TACB2G185□                                     |     |                    |            |
|          | 2.2      | 28.2            | 22.8 | 21.8               | 22.5               | 1.0                | 5.55                          |                    | FTACB401V225□FLEZO | TACB2G225□                                     |     |                    |            |
|          | 2.7      |                 | 25.1 | 23.9               |                    |                    | 6.15                          |                    | FTACB401V275□FLEZO | TACB2G275□                                     |     |                    |            |
|          | 3.3      |                 | 27.5 | 26.2               |                    |                    | 6.79                          |                    | FTACB401V335□FLEZO | TACB2G335□                                     |     |                    |            |
|          | 3.9      |                 | 23.9 | 22.8               |                    |                    | 4.57                          |                    | FTACB401V395□TLJZO | TACB2G395□                                     |     |                    |            |
| 4.7      | 25.9     |                 | 24.7 | 5.02               |                    |                    | FTACB401V475□TLJZO            | TACB2G475□         |                    |                                                |     |                    |            |
| 5.6      | 43.2     | 28.1            | 26.8 | 37.5               | 1.0                | 5.48               | FTACB401V565□TLJZO            | TACB2G565□         |                    |                                                |     |                    |            |
| 630      |          | 0.056           | 16.2 |                    |                    | 8.5                | 8.2                           | 10.0               | 0.8                | 1.96                                           | 200 | FTACB631V563□DLCZO | TACB2J563□ |
|          |          | 0.068           |      |                    |                    | 9.1                | 8.7                           |                    |                    | 2.16                                           |     | FTACB631V683□DLCZO | TACB2J683□ |
|          |          | 0.082           |      |                    |                    | 9.6                | 9.2                           |                    |                    | 2.38                                           |     | FTACB631V823□DLCZO | TACB2J823□ |
|          |          | 0.1             |      |                    |                    | 10.3               | 9.8                           |                    |                    | 2.62                                           |     | FTACB631V104□DLCZO | TACB2J104□ |
|          | 0.12     | 11.0            |      | 10.5               | 2.88               | FTACB631V124□DLCZO | TACB2J124□                    |                    |                    |                                                |     |                    |            |
|          | 0.15     | 11.9            | 11.4 | 3.21               | FTACB631V154□DLCZO | TACB2J154□         |                               |                    |                    |                                                |     |                    |            |
|          | 0.18     | 18.2            | 12.3 | 11.8               | 12.5               | 0.8                | 3.10                          | FTACB631V184□HLGZO | TACB2J184□         |                                                |     |                    |            |
|          | 0.22     |                 | 13.4 | 12.8               |                    |                    | 3.42                          | FTACB631V224□HLGZO | TACB2J224□         |                                                |     |                    |            |
|          | 0.27     |                 | 14.6 | 13.9               |                    |                    | 3.79                          | FTACB631V274□HLGZO | TACB2J274□         |                                                |     |                    |            |
|          | 0.33     |                 | 13.5 | 12.9               |                    |                    | 3.04                          | FTACB631V334□ELHZO | TACB2J334□         |                                                |     |                    |            |
|          | 0.39     |                 | 14.5 | 13.8               |                    |                    | 3.30                          | FTACB631V394□ELHZO | TACB2J394□         |                                                |     |                    |            |
|          | 0.47     | 23.2            | 15.6 | 14.9               | 17.5               | 1.0                | 3.63                          | FTACB631V474□ELHZO | TACB2J474□         |                                                |     |                    |            |
|          | 0.56     |                 | 16.8 | 16.0               |                    |                    | 3.96                          | FTACB631V564□ELHZO | TACB2J564□         |                                                |     |                    |            |
|          | 0.68     |                 | 18.3 | 17.4               |                    |                    | 4.36                          | FTACB631V684□ELHZO | TACB2J684□         |                                                |     |                    |            |
|          | 0.82     |                 | 19.9 | 18.9               |                    |                    | 4.79                          | FTACB631V824□ELHZO | TACB2J824□         |                                                |     |                    |            |
|          | 1.0      |                 | 19.2 | 18.3               |                    |                    | 4.16                          | FTACB631V105□FLEZO | TACB2J105□         |                                                |     |                    |            |
|          | 1.2      | 28.2            | 20.8 | 19.8               | 22.5               | 1.0                | 4.55                          | FTACB631V125□FLEZO | TACB2J125□         |                                                |     |                    |            |
|          | 1.5      |                 | 23.0 | 22.0               |                    |                    | 5.09                          | FTACB631V155□FLEZO | TACB2J155□         |                                                |     |                    |            |
| 1.8      | 25.1     |                 | 23.9 | 5.58               |                    |                    | FTACB631V185□FLEZO            | TACB2J185□         |                    |                                                |     |                    |            |
| 2.2      | 27.5     |                 | 26.2 | 6.17               |                    |                    | FTACB631V225□FLEZO            | TACB2J225□         |                    |                                                |     |                    |            |
| 2.7      | 23.8     |                 | 22.7 | 4.17               |                    |                    | FTACB631V275□TLJZO            | TACB2J275□         |                    |                                                |     |                    |            |
| 3.3      | 43.2     | 26.0            | 24.8 | 37.5               | 1.0                | 4.61               | FTACB631V335□TLJZO            | TACB2J335□         |                    |                                                |     |                    |            |
| 3.9      |          | 28.0            | 26.7 |                    |                    | 5.01               | FTACB631V395□TLJZO            | TACB2J395□         |                    |                                                |     |                    |            |

(1)The symbol "□" is Capacitance tolerance code. (J : ±5%, K : ±10%)

(2)The maximum ripple current : +85°C max., 100kHz, sine wave

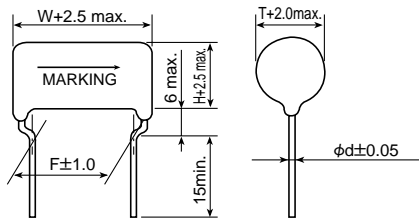
(3)WV(Vac) : 50Hz or 60Hz, sine wave

◆STANDARD RATINGS

| WV<br>(Vdc) | Cap<br>( $\mu$ F) | Dimensions (mm) |      |      |      |                    | Maximum<br>ripple current<br>(Arms) | WV<br>(Vac) | Part Number        | Previous Part Number<br>(Just for your reference) |
|-------------|-------------------|-----------------|------|------|------|--------------------|-------------------------------------|-------------|--------------------|---------------------------------------------------|
|             |                   | W               | H    | T    | F    | $\phi$ d           |                                     |             |                    |                                                   |
| 800         | 0.033             | 16.2            | 9.0  | 8.6  | 10.0 | 0.8                | 1.81                                | 250         | FTACB801V333□DLCZ0 | TACB2K333□                                        |
|             | 0.039             |                 | 9.5  | 9.1  |      |                    | 1.97                                |             | FTACB801V393□DLCZ0 | TACB2K393□                                        |
|             | 0.047             |                 | 10.1 | 9.7  |      |                    | 2.16                                |             | FTACB801V473□DLCZ0 | TACB2K473□                                        |
|             | 0.056             |                 | 10.8 | 10.3 |      |                    | 2.36                                |             | FTACB801V563□DLCZ0 | TACB2K563□                                        |
|             | 0.068             |                 | 11.5 | 11.0 |      |                    | 2.60                                |             | FTACB801V683□DLCZ0 | TACB2K683□                                        |
|             | 0.082             |                 | 12.5 | 11.9 |      |                    | 2.85                                |             | FTACB801V823□DLCZ0 | TACB2K823□                                        |
|             | 0.1               | 18.2            | 12.3 | 11.8 | 12.5 | 0.8                | 2.67                                |             | FTACB801V104□HLGZ0 | TACB2K104□                                        |
|             | 0.12              |                 | 13.3 | 12.7 |      |                    | 2.92                                |             | FTACB801V124□HLGZ0 | TACB2K124□                                        |
|             | 0.15              |                 | 14.6 | 13.9 |      |                    | 3.26                                |             | FTACB801V154□HLGZ0 | TACB2K154□                                        |
|             | 0.18              |                 | 13.4 | 12.8 |      |                    | 2.59                                |             | FTACB801V184□ELHZ0 | TACB2K184□                                        |
|             | 0.22              | 23.2            | 14.5 | 13.8 | 17.5 | 0.8                | 2.87                                |             | FTACB801V224□ELHZ0 | TACB2K224□                                        |
|             | 0.27              |                 | 15.8 | 15.1 |      |                    | 3.17                                |             | FTACB801V274□ELHZ0 | TACB2K274□                                        |
|             | 0.33              |                 | 17.2 | 16.4 |      |                    | 3.51                                |             | FTACB801V334□ELHZ0 | TACB2K334□                                        |
|             | 0.39              |                 | 18.5 | 17.6 |      |                    | 3.82                                |             | FTACB801V394□ELHZ0 | TACB2K394□                                        |
|             | 0.47              |                 | 20.1 | 19.1 |      |                    | 4.19                                |             | FTACB801V474□ELHZ0 | TACB2K474□                                        |
|             | 0.56              |                 | 28.2 | 19.2 |      |                    | 18.3                                |             | 22.5               | 1.0                                               |
|             | 0.68              | 20.9            |      | 19.9 | 3.96 | FTACB801V684□FLEZ0 | TACB2K684□                          |             |                    |                                                   |
|             | 0.82              | 22.8            |      | 21.8 | 4.35 | FTACB801V824□FLEZ0 | TACB2K824□                          |             |                    |                                                   |
|             | 1.0               | 25.0            |      | 23.8 | 4.80 | FTACB801V105□FLEZ0 | TACB2K105□                          |             |                    |                                                   |
|             | 1.2               | 27.2            |      | 25.9 | 5.26 | FTACB801V125□FLEZ0 | TACB2K125□                          |             |                    |                                                   |

- (1)The symbol "□" is Capacitance tolerance code. (J :  $\pm$ 5%, K :  $\pm$ 10%)  
 (2)The maximum ripple current : +85°C max., 100kHz, sine wave  
 (3)WV(Vac) : 50Hz or 60Hz, sine wave

◆DIMENSIONS (mm)





# ELECTRONIC EQUIPMENT FILM CAPACITOR

## HACD Series

- Maximum operating temperature 105°C.
- Allowable temperature rise 15K max.
- Downsizing of HACB series.



### ◆ SPECIFICATIONS

| Items                                       | Characteristics                                                                                             |                                                                                              |      |      |      |      |      |      |      |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------|------|------|------|------|------|------|
| Category temperature range                  | -40 to +105°C                                                                                               |                                                                                              |      |      |      |      |      |      |      |
| Rated voltage range                         | 630 to 4000V <sub>dc</sub>                                                                                  |                                                                                              |      |      |      |      |      |      |      |
| Capacitance tolerance                       | ±5%(J)                                                                                                      |                                                                                              |      |      |      |      |      |      |      |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                   |                                                                                              |      |      |      |      |      |      |      |
| Dissipation factor (tanδ)                   | No more than 0.05% : Equal or less than 1μF.<br>No more than (c×0.015+0.05)% : More than 1μF.               |                                                                                              |      |      |      |      |      |      |      |
| Insulation resistance (Terminal - Terminal) | No less than 30000MΩ : Equal or less than 0.33μF.<br>No less than 10000ΩF : More than 0.33μF.               |                                                                                              |      |      |      |      |      |      |      |
|                                             | Rated voltage (V <sub>dc</sub> )                                                                            | 630                                                                                          | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 |
|                                             | Measurement voltage (V <sub>dc</sub> )                                                                      | 500                                                                                          | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 105°C.   |                                                                                              |      |      |      |      |      |      |      |
|                                             | Appearance                                                                                                  | No serious degradation                                                                       |      |      |      |      |      |      |      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 10000MΩ : Equal or less than 0.33μF.<br>No less than 3000ΩF : More than 0.33μF. |      |      |      |      |      |      |      |
|                                             | Dissipation factor (tanδ)                                                                                   | Not more than initial specification at 1kHz.                                                 |      |      |      |      |      |      |      |
|                                             | Capacitance change                                                                                          | Within ±5% of initial value.                                                                 |      |      |      |      |      |      |      |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH. |                                                                                              |      |      |      |      |      |      |      |
|                                             | Appearance                                                                                                  | No serious degradation.                                                                      |      |      |      |      |      |      |      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 10000MΩ : Equal or less than 0.33μF.<br>No less than 3000ΩF : More than 0.33μF. |      |      |      |      |      |      |      |
|                                             | Dissipation factor (tanδ)                                                                                   | Not more than initial specification at 1kHz.                                                 |      |      |      |      |      |      |      |
|                                             | Capacitance change                                                                                          | Within ±5% of initial value.                                                                 |      |      |      |      |      |      |      |

### ◆ STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Dimensions (mm) |      |                    |                    |            | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|-----------------------|----------|-----------------|------|--------------------|--------------------|------------|-------------------------------|----------|--------------------|------------------------------------------------|
|                       |          | W               | H    | T                  | F                  | φd         |                               |          |                    |                                                |
| 630                   | 0.047    | 17.7            | 9.8  | 9.3                | 12.5               | 0.8        | 2.65                          | 250      | FHACD631V473J0LGZ0 | HACD2J473J                                     |
|                       | 0.056    |                 | 10.4 | 10.0               |                    |            | 2.89                          |          | FHACD631V563J0LGZ0 | HACD2J563J                                     |
|                       | 0.068    |                 | 11.0 | 10.5               |                    |            | 3.19                          |          | FHACD631V683J0LGZ0 | HACD2J683J                                     |
|                       | 0.082    |                 | 11.6 | 11.1               |                    |            | 3.50                          |          | FHACD631V823J0LGZ0 | HACD2J823J                                     |
|                       | 0.1      |                 | 12.3 | 11.7               |                    |            | 3.86                          |          | FHACD631V104J0LGZ0 | HACD2J104J                                     |
|                       | 0.12     |                 | 13.1 | 12.5               |                    |            | 4.23                          |          | FHACD631V124J0LGZ0 | HACD2J124J                                     |
|                       | 0.15     |                 | 14.1 | 13.5               |                    |            | 4.73                          |          | FHACD631V154J0LGZ0 | HACD2J154J                                     |
|                       | 0.18     |                 | 15.1 | 14.4               |                    |            | 5.18                          |          | FHACD631V184J0LGZ0 | HACD2J184J                                     |
|                       | 0.22     |                 | 13.8 | 13.2               |                    |            | 4.31                          |          | FHACD631V224J1LHZ0 | HACD2J224J                                     |
|                       | 0.27     | 14.9            | 14.2 | 4.78               | FHACD631V274J1LHZ0 | HACD2J274J |                               |          |                    |                                                |
|                       | 0.33     | 16.1            | 15.3 | 5.28               | FHACD631V334J1LHZ0 | HACD2J334J |                               |          |                    |                                                |
|                       | 0.39     | 17.1            | 16.3 | 5.74               | FHACD631V394J1LHZ0 | HACD2J394J |                               |          |                    |                                                |
|                       | 0.47     | 18.5            | 17.6 | 6.30               | FHACD631V474J1LHZ0 | HACD2J474J |                               |          |                    |                                                |
|                       | 0.56     | 19.9            | 18.9 | 6.88               | FHACD631V564J1LHZ0 | HACD2J564J |                               |          |                    |                                                |
|                       | 0.68     | 19.0            | 18.1 | 6.19               | FHACD631V684J2LEZ0 | HACD2J684J |                               |          |                    |                                                |
|                       | 0.82     | 20.5            | 19.6 | 6.79               | FHACD631V824J2LEZ0 | HACD2J824J |                               |          |                    |                                                |
|                       | 1.0      | 22.3            | 21.3 | 7.50               | FHACD631V105J2LEZ0 | HACD2J105J |                               |          |                    |                                                |
|                       | 1.2      | 24.2            | 23.0 | 8.22               | FHACD631V125J2LEZ0 | HACD2J125J |                               |          |                    |                                                |
| 1.5                   | 26.7     | 25.4            | 9.19 | FHACD631V155J2LEZ0 | HACD2J155J         |            |                               |          |                    |                                                |
| 1000                  | 0.033    | 17.7            | 10.0 | 9.6                | 12.5               | 0.8        | 2.43                          | 270      | FHACD102V333J0LGZ0 | HACD3A333J                                     |
|                       | 0.039    |                 | 10.4 | 10.0               |                    |            | 2.64                          |          | FHACD102V393J0LGZ0 | HACD3A393J                                     |
|                       | 0.047    |                 | 11.0 | 10.5               |                    |            | 2.90                          |          | FHACD102V473J0LGZ0 | HACD3A473J                                     |
|                       | 0.056    |                 | 11.5 | 11.0               |                    |            | 3.17                          |          | FHACD102V563J0LGZ0 | HACD3A563J                                     |
|                       | 0.068    |                 | 12.2 | 11.7               |                    |            | 3.49                          |          | FHACD102V683J0LGZ0 | HACD3A683J                                     |
|                       | 0.082    |                 | 13.0 | 12.4               |                    |            | 3.83                          |          | FHACD102V823J0LGZ0 | HACD3A823J                                     |
|                       | 0.1      |                 | 13.9 | 13.3               |                    |            | 4.23                          |          | FHACD102V104J0LGZ0 | HACD3A104J                                     |
|                       | 0.12     |                 | 14.9 | 14.2               |                    |            | 4.64                          |          | FHACD102V124J0LGZ0 | HACD3A124J                                     |
|                       | 0.15     |                 | 13.7 | 13.1               |                    |            | 3.90                          |          | FHACD102V154J1LHZ0 | HACD3A154J                                     |
|                       | 0.18     | 14.7            | 14.0 | 4.27               | FHACD102V184J1LHZ0 | HACD3A184J |                               |          |                    |                                                |
|                       | 0.22     | 15.8            | 15.1 | 4.72               | FHACD102V224J1LHZ0 | HACD3A224J |                               |          |                    |                                                |
|                       | 0.27     | 17.1            | 16.3 | 5.23               | FHACD102V274J1LHZ0 | HACD3A274J |                               |          |                    |                                                |
|                       | 0.33     | 18.6            | 17.7 | 5.79               | FHACD102V334J1LHZ0 | HACD3A334J |                               |          |                    |                                                |
|                       | 0.39     | 19.9            | 19.0 | 6.29               | FHACD102V394J1LHZ0 | HACD3A394J |                               |          |                    |                                                |

(1) The maximum ripple current : +85°C max., 100kHz, sine wave

(2) WV(V<sub>ac</sub>) : 50Hz or 60Hz, sine wave



# ELECTRONIC EQUIPMENT FILM CAPACITOR

## HACD Series

### ◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |                    |            | Maximum ripple current (Arms) | WV (Vac)           | Part Number        | Previous Part Number (Just for your reference) |                    |            |
|----------|----------|-----------------|------|------|--------------------|------------|-------------------------------|--------------------|--------------------|------------------------------------------------|--------------------|------------|
|          |          | W               | H    | T    | F                  | φd         |                               |                    |                    |                                                |                    |            |
| 1000     | 0.47     | 27.7            | 18.9 | 18.0 | 22.5               | 1.0        | 5.63                          | 270                | FHACD102V474J2LEZ0 | HACD3A474J                                     |                    |            |
|          | 0.56     |                 | 20.4 | 19.4 |                    |            | 6.15                          |                    | FHACD102V564J2LEZ0 | HACD3A564J                                     |                    |            |
|          | 0.68     |                 | 22.1 | 21.1 |                    |            | 6.78                          |                    | FHACD102V684J2LEZ0 | HACD3A684J                                     |                    |            |
|          | 0.82     |                 | 24.0 | 22.9 |                    |            | 7.44                          |                    | FHACD102V824J2LEZ0 | HACD3A824J                                     |                    |            |
|          | 1.0      |                 | 26.2 | 25.0 |                    |            | 8.22                          |                    | FHACD102V105J2LEZ0 | HACD3A105J                                     |                    |            |
|          | 1.2      |                 | 28.5 | 27.1 |                    |            | 9.00                          |                    | FHACD102V125J2LEZ0 | HACD3A125J                                     |                    |            |
| 1250     | 0.018    | 17.7            | 9.7  | 9.3  | 12.5               | 0.8        | 2.04                          | 300                | FHACD1C2V183J0LGZ0 | HACD3B183J                                     |                    |            |
|          | 0.022    |                 | 10.4 | 9.9  |                    |            | 2.25                          |                    | FHACD1C2V223J0LGZ0 | HACD3B223J                                     |                    |            |
|          | 0.027    |                 | 11.0 | 10.5 |                    |            | 2.50                          |                    | FHACD1C2V273J0LGZ0 | HACD3B273J                                     |                    |            |
|          | 0.033    |                 | 11.6 | 11.1 |                    |            | 2.76                          |                    | FHACD1C2V333J0LGZ0 | HACD3B333J                                     |                    |            |
|          | 0.039    |                 | 12.3 | 11.7 |                    |            | 3.00                          |                    | FHACD1C2V393J0LGZ0 | HACD3B393J                                     |                    |            |
|          | 0.047    |                 | 13.0 | 12.4 |                    |            | 3.29                          |                    | FHACD1C2V473J0LGZ0 | HACD3B473J                                     |                    |            |
|          | 0.056    | 13.8            | 13.2 | 3.60 | FHACD1C2V563J0LGZ0 | HACD3B563J |                               |                    |                    |                                                |                    |            |
|          | 0.068    | 14.8            | 14.2 | 3.96 | FHACD1C2V683J0LGZ0 | HACD3B683J |                               |                    |                    |                                                |                    |            |
|          | 0.082    | 13.3            | 12.7 | 3.24 | FHACD1C2V823J1LHZ0 | HACD3B823J |                               |                    |                    |                                                |                    |            |
|          | 0.1      | 14.3            | 13.6 | 3.57 | FHACD1C2V104J1LHZ0 | HACD3B104J |                               |                    |                    |                                                |                    |            |
|          | 0.12     | 15.3            | 14.6 | 3.91 | FHACD1C2V124J1LHZ0 | HACD3B124J |                               |                    |                    |                                                |                    |            |
|          | 0.15     | 16.7            | 15.9 | 4.38 | FHACD1C2V154J1LHZ0 | HACD3B154J |                               |                    |                    |                                                |                    |            |
|          | 0.18     | 17.9            | 17.1 | 4.79 | FHACD1C2V184J1LHZ0 | HACD3B184J |                               |                    |                    |                                                |                    |            |
|          | 0.22     | 19.5            | 18.6 | 5.30 | FHACD1C2V224J1LHZ0 | HACD3B224J |                               |                    |                    |                                                |                    |            |
|          | 0.27     | 18.5            | 17.7 | 4.77 | FHACD1C2V274J2LEZ0 | HACD3B274J |                               |                    |                    |                                                |                    |            |
|          | 0.33     | 20.1            | 19.2 | 5.28 | FHACD1C2V334J2LEZ0 | HACD3B334J |                               |                    |                    |                                                |                    |            |
|          | 0.39     | 21.6            | 20.6 | 5.74 | FHACD1C2V394J2LEZ0 | HACD3B394J |                               |                    |                    |                                                |                    |            |
|          | 0.47     | 23.4            | 22.3 | 6.30 | FHACD1C2V474J2LEZ0 | HACD3B474J |                               |                    |                    |                                                |                    |            |
|          | 0.56     | 25.3            | 24.1 | 6.87 | FHACD1C2V564J2LEZ0 | HACD3B564J |                               |                    |                    |                                                |                    |            |
|          | 0.68     | 27.6            | 26.3 | 7.58 | FHACD1C2V684J2LEZ0 | HACD3B684J |                               |                    |                    |                                                |                    |            |
|          | 0.82     | 23.2            | 22.1 | 5.55 | FHACD1C2V824J2LEZ0 | HACD3B824J |                               |                    |                    |                                                |                    |            |
|          | 1.0      | 25.4            | 24.2 | 6.13 | FHACD1C2V105J2LEZ0 | HACD3B105J |                               |                    |                    |                                                |                    |            |
|          | 1.2      | 27.5            | 26.2 | 6.72 | FHACD1C2V125J2LEZ0 | HACD3B125J |                               |                    |                    |                                                |                    |            |
|          | 1600     | 0.0068          | 19.7 | 10.0 | 9.5                | 15.0       | 0.8                           |                    | 1.72               | 350                                            | FHACD162V682JKLDZ0 | HACD3C682J |
| 0.0082   |          | 10.6            |      | 10.1 | 1.89               |            |                               | FHACD162V822JKLDZ0 | HACD3C822J         |                                                |                    |            |
| 0.01     |          | 11.2            |      | 10.6 | 2.09               |            |                               | FHACD162V103JKLDZ0 | HACD3C103J         |                                                |                    |            |
| 0.012    |          | 11.8            |      | 11.2 | 2.29               |            |                               | FHACD162V123JKLDZ0 | HACD3C123J         |                                                |                    |            |
| 0.015    |          | 12.6            |      | 12.0 | 2.56               |            |                               | FHACD162V153JKLDZ0 | HACD3C153J         |                                                |                    |            |
| 0.018    |          | 13.4            |      | 12.8 | 2.80               |            |                               | FHACD162V183JKLDZ0 | HACD3C183J         |                                                |                    |            |
| 0.022    |          | 14.4            | 13.7 | 3.10 | FHACD162V223JKLDZ0 | HACD3C223J |                               |                    |                    |                                                |                    |            |
| 0.027    |          | 15.0            | 14.3 | 3.43 | FHACD162V273JKLDZ0 | HACD3C273J |                               |                    |                    |                                                |                    |            |
| 0.033    |          | 16.3            | 15.5 | 3.80 | FHACD162V333JKLDZ0 | HACD3C333J |                               |                    |                    |                                                |                    |            |
| 0.039    |          | 13.0            | 12.4 | 2.60 | FHACD162V393J1LHZ0 | HACD3C393J |                               |                    |                    |                                                |                    |            |
| 0.047    |          | 13.8            | 13.2 | 2.85 | FHACD162V473J1LHZ0 | HACD3C473J |                               |                    |                    |                                                |                    |            |
| 0.056    |          | 14.7            | 14.0 | 3.11 | FHACD162V563J1LHZ0 | HACD3C563J |                               |                    |                    |                                                |                    |            |
| 0.068    |          | 15.8            | 15.1 | 3.43 | FHACD162V683J1LHZ0 | HACD3C683J |                               |                    |                    |                                                |                    |            |
| 0.082    |          | 17.0            | 16.2 | 3.77 | FHACD162V823J1LHZ0 | HACD3C823J |                               |                    |                    |                                                |                    |            |
| 0.1      |          | 18.4            | 17.6 | 4.16 | FHACD162V104J1LHZ0 | HACD3C104J |                               |                    |                    |                                                |                    |            |
| 0.12     |          | 17.2            | 16.4 | 3.68 | FHACD162V124J2LEZ0 | HACD3C124J |                               |                    |                    |                                                |                    |            |
| 0.15     |          | 18.9            | 18.0 | 4.12 | FHACD162V154J2LEZ0 | HACD3C154J |                               |                    |                    |                                                |                    |            |
| 0.18     |          | 20.4            | 19.4 | 4.51 | FHACD162V184J2LEZ0 | HACD3C184J |                               |                    |                    |                                                |                    |            |
| 0.22     |          | 22.2            | 21.1 | 4.99 | FHACD162V224J2LEZ0 | HACD3C224J |                               |                    |                    |                                                |                    |            |
| 0.27     |          | 24.2            | 23.1 | 5.53 | FHACD162V274J2LEZ0 | HACD3C274J |                               |                    |                    |                                                |                    |            |
| 0.33     |          | 26.5            | 25.3 | 6.11 | FHACD162V334J2LEZ0 | HACD3C334J |                               |                    |                    |                                                |                    |            |
| 2000     |          | 0.0033          | 19.7 | 9.3  | 8.9                | 15.0       | 0.8                           | 1.39               | 350                |                                                | FHACD202V332JKLDZ0 | HACD3D332J |
|          |          | 0.0039          |      | 9.7  | 9.2                |            |                               | 1.52               |                    |                                                | FHACD202V392JKLDZ0 | HACD3D392J |
|          |          | 0.0047          |      | 10.2 | 9.7                |            |                               | 1.66               |                    |                                                | FHACD202V472JKLDZ0 | HACD3D472J |
|          | 0.0056   | 10.9            |      | 10.4 | 1.82               |            |                               | FHACD202V562JKLDZ0 |                    | HACD3D562J                                     |                    |            |
|          | 0.0068   | 11.8            |      | 11.2 | 2.00               |            |                               | FHACD202V682JKLDZ0 |                    | HACD3D682J                                     |                    |            |
|          | 0.0082   | 12.6            |      | 12.0 | 2.20               |            |                               | FHACD202V822JKLDZ0 |                    | HACD3D822J                                     |                    |            |
|          | 0.01     | 13.5            |      | 12.9 | 2.43               |            |                               | FHACD202V103JKLDZ0 |                    | HACD3D103J                                     |                    |            |
|          | 0.012    | 14.4            |      | 13.7 | 2.66               |            |                               | FHACD202V123JKLDZ0 |                    | HACD3D123J                                     |                    |            |
|          | 0.015    | 15.6            |      | 14.9 | 2.97               |            |                               | FHACD202V153JKLDZ0 |                    | HACD3D153J                                     |                    |            |
|          | 0.018    | 16.7            |      | 16.0 | 3.26               |            |                               | FHACD202V183JKLDZ0 |                    | HACD3D183J                                     |                    |            |

(1)The maximum ripple current : +85°C max., 100kHz, sine wave

(2)WV(Vac) : 50Hz or 60Hz, sine wave

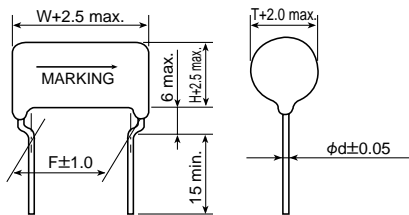
◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |      |     | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|----------|----------|-----------------|------|------|------|-----|-------------------------------|----------|--------------------|------------------------------------------------|
|          |          | W               | H    | T    | F    | φd  |                               |          |                    |                                                |
| 2000     | 0.022    | 22.7            | 13.1 | 12.5 | 17.5 | 0.8 | 2.27                          | 350      | FHACD202V223J1LHZ0 | HACD3D223J                                     |
|          | 0.027    |                 | 14.0 | 13.4 |      |     | 2.51                          |          | FHACD202V273J1LHZ0 | HACD3D273J                                     |
|          | 0.033    |                 | 15.1 | 14.4 |      |     | 2.78                          |          | FHACD202V333J1LHZ0 | HACD3D333J                                     |
|          | 0.039    |                 | 16.1 | 15.3 |      |     | 3.02                          |          | FHACD202V393J1LHZ0 | HACD3D393J                                     |
|          | 0.047    |                 | 17.3 | 16.5 |      |     | 3.32                          |          | FHACD202V473J1LHZ0 | HACD3D473J                                     |
|          | 0.056    |                 | 18.6 | 17.7 |      |     | 3.62                          |          | FHACD202V563J1LHZ0 | HACD3D563J                                     |
|          | 0.068    | 27.7            | 17.5 | 16.6 | 22.5 | 1.0 | 3.22                          |          | FHACD202V683J2LEZ0 | HACD3D683J                                     |
|          | 0.082    |                 | 18.8 | 18.0 |      |     | 3.54                          |          | FHACD202V823J2LEZ0 | HACD3D823J                                     |
|          | 0.1      |                 | 20.5 | 19.5 |      |     | 3.91                          |          | FHACD202V104J2LEZ0 | HACD3D104J                                     |
|          | 0.12     |                 | 22.1 | 21.1 |      |     | 4.28                          |          | FHACD202V124J2LEZ0 | HACD3D124J                                     |
|          | 0.15     |                 | 24.4 | 23.2 |      |     | 4.79                          |          | FHACD202V154J2LEZ0 | HACD3D154J                                     |
|          | 0.18     |                 | 26.4 | 25.2 |      |     | 5.24                          |          | FHACD202V184J2LEZ0 | HACD3D184J                                     |
|          | 0.22     | 42.7            | 22.6 | 21.5 | 37.5 |     | 3.93                          |          | FHACD202V224JTLJZ0 | HACD3D224J                                     |
|          | 0.27     |                 | 24.7 | 23.5 |      |     | 4.35                          |          | FHACD202V274JTLJZ0 | HACD3D274J                                     |
|          | 0.33     |                 | 27.0 | 25.7 |      |     | 4.81                          |          | FHACD202V334JTLJZ0 | HACD3D334J                                     |
|          |          |                 |      |      |      |     |                               |          |                    |                                                |
| 2500     | 0.015    | 34.7            | 12.7 | 12.1 | 30.0 | 1.0 | 2.11                          | 500      | FHACD252V153JRLQZ0 | HACD3E153J                                     |
|          | 0.018    |                 | 13.6 | 13.0 |      |     | 2.31                          |          | FHACD252V183JRLQZ0 | HACD3E183J                                     |
|          | 0.022    |                 | 14.8 | 14.1 |      |     | 2.55                          |          | FHACD252V223JRLQZ0 | HACD3E223J                                     |
|          | 0.027    |                 | 16.1 | 15.3 |      |     | 2.83                          |          | FHACD252V273JRLQZ0 | HACD3E273J                                     |
|          | 0.033    |                 | 17.4 | 16.6 |      |     | 3.13                          |          | FHACD252V333JRLQZ0 | HACD3E333J                                     |
|          | 0.039    |                 | 18.8 | 17.9 |      |     | 3.40                          |          | FHACD252V393JRLQZ0 | HACD3E393J                                     |
|          | 0.047    |                 | 20.4 | 19.4 |      |     | 3.73                          |          | FHACD252V473JRLQZ0 | HACD3E473J                                     |
|          | 0.056    |                 | 22.0 | 21.0 |      |     | 4.07                          |          | FHACD252V563JRLQZ0 | HACD3E563J                                     |
|          | 0.068    |                 | 24.0 | 22.9 |      |     | 4.49                          |          | FHACD252V683JRLQZ0 | HACD3E683J                                     |
|          | 0.082    |                 | 26.1 | 24.9 |      |     | 4.93                          |          | FHACD252V823JRLQZ0 | HACD3E823J                                     |
|          | 0.1      |                 | 28.7 | 27.3 |      |     | 5.44                          |          | FHACD252V104JRLQZ0 | HACD3E104J                                     |
|          |          |                 |      |      |      |     |                               |          |                    |                                                |
|          |          |                 |      |      |      |     |                               |          |                    |                                                |
| 3150     | 0.0068   | 34.7            | 12.5 | 11.9 | 30.0 | 1.0 | 1.64                          | 630      | FHACD3B2V682JRLQZ0 | HACD3F682J                                     |
|          | 0.0082   |                 | 13.3 | 12.7 |      |     | 1.80                          |          | FHACD3B2V822JRLQZ0 | HACD3F822J                                     |
|          | 0.01     |                 | 14.5 | 13.8 |      |     | 1.99                          |          | FHACD3B2V103JRLQZ0 | HACD3F103J                                     |
|          | 0.012    |                 | 15.5 | 14.8 |      |     | 2.18                          |          | FHACD3B2V123JRLQZ0 | HACD3F123J                                     |
|          | 0.015    |                 | 17.1 | 16.3 |      |     | 2.44                          |          | FHACD3B2V153JRLQZ0 | HACD3F153J                                     |
|          | 0.018    |                 | 18.5 | 17.6 |      |     | 2.67                          |          | FHACD3B2V183JRLQZ0 | HACD3F183J                                     |
|          | 0.022    |                 | 20.2 | 19.2 |      |     | 2.95                          |          | FHACD3B2V223JRLQZ0 | HACD3F223J                                     |
|          | 0.027    |                 | 22.1 | 21.1 |      |     | 3.27                          |          | FHACD3B2V273JRLQZ0 | HACD3F273J                                     |
|          | 0.033    |                 | 24.1 | 23.0 |      |     | 3.62                          |          | FHACD3B2V333JRLQZ0 | HACD3F333J                                     |
|          | 0.039    |                 | 26.0 | 24.8 |      |     | 3.93                          |          | FHACD3B2V393JRLQZ0 | HACD3F393J                                     |
|          | 0.047    |                 | 28.3 | 27.0 |      |     | 4.31                          |          | FHACD3B2V473JRLQZ0 | HACD3F473J                                     |
|          |          |                 |      |      |      |     |                               |          |                    |                                                |
|          |          |                 |      |      |      |     |                               |          |                    |                                                |
| 4000     | 0.0039   | 34.7            | 12.0 | 11.5 | 30.0 | 1.0 | 1.63                          | 720      | FHACD402V392JRLQZ0 | HACD3G392J                                     |
|          | 0.0047   |                 | 13.0 | 12.4 |      |     | 1.79                          |          | FHACD402V472JRLQZ0 | HACD3G472J                                     |
|          | 0.0056   |                 | 13.8 | 13.2 |      |     | 1.95                          |          | FHACD402V562JRLQZ0 | HACD3G562J                                     |
|          | 0.0068   |                 | 15.0 | 14.3 |      |     | 2.15                          |          | FHACD402V682JRLQZ0 | HACD3G682J                                     |
|          | 0.0082   |                 | 16.2 | 15.4 |      |     | 2.36                          |          | FHACD402V822JRLQZ0 | HACD3G822J                                     |
|          | 0.01     |                 | 17.6 | 16.8 |      |     | 2.60                          |          | FHACD402V103JRLQZ0 | HACD3G103J                                     |
|          | 0.012    |                 | 19.0 | 18.1 |      |     | 2.85                          |          | FHACD402V123JRLQZ0 | HACD3G123J                                     |
|          | 0.015    |                 | 21.0 | 20.0 |      |     | 3.19                          |          | FHACD402V153JRLQZ0 | HACD3G153J                                     |
|          | 0.018    |                 | 22.8 | 21.8 |      |     | 3.49                          |          | FHACD402V183JRLQZ0 | HACD3G183J                                     |
|          | 0.022    |                 | 25.0 | 23.8 |      |     | 3.86                          |          | FHACD402V223JRLQZ0 | HACD3G223J                                     |
|          | 0.027    |                 | 27.4 | 26.1 |      |     | 4.28                          |          | FHACD402V273JRLQZ0 | HACD3G273J                                     |
|          |          |                 |      |      |      |     |                               |          |                    |                                                |
|          |          |                 |      |      |      |     |                               |          |                    |                                                |

(1)The maximum ripple current : +85°C max., 100kHz, sine wave

(2)WV(Vac) : 50Hz or 60Hz, sine wave

◆DIMENSIONS (mm)





# ELECTRONIC EQUIPMENT FILM CAPACITOR

## HACB Series

- Maximum operating temperature 105°C.
- Allowable temperature rise 15K max.
- A little hum is produced when applied AC voltage.



### ◆ SPECIFICATIONS

| Items                                       | Characteristics                                                                                                                 |                                                                                              |      |      |      |      |      |      |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------|------|------|------|------|------|
| Category temperature range                  | -40 to +105°C                                                                                                                   |                                                                                              |      |      |      |      |      |      |
| Rated voltage range                         | 630 to 4000V <sub>dc</sub>                                                                                                      |                                                                                              |      |      |      |      |      |      |
| Capacitance tolerance                       | ±3% (H) or ±5% (J) : Equal or less than 2000V <sub>dc</sub> .<br>±5% (J) or ±10% (K) : Equal or more than 3150V <sub>dc</sub> . |                                                                                              |      |      |      |      |      |      |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                                       |                                                                                              |      |      |      |      |      |      |
| Dissipation factor (tanδ)                   | No more than 0.05% : Equal or less than 1μF.<br>No more than (c×0.015+0.05)% : More than 1μF.                                   |                                                                                              |      |      |      |      |      |      |
| Insulation resistance (Terminal - Terminal) | No less than 30000MΩ : Equal or less than 0.33μF.<br>No less than 10000ΩF : More than 0.33μF.                                   |                                                                                              |      |      |      |      |      |      |
|                                             | Rated voltage (V <sub>dc</sub> )                                                                                                | 630                                                                                          | 1000 | 1250 | 1650 | 2000 | 3150 | 4000 |
|                                             | Measurement voltage (V <sub>dc</sub> )                                                                                          | 500                                                                                          | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 105°C.                       |                                                                                              |      |      |      |      |      |      |
|                                             | Appearance                                                                                                                      | No serious degradation                                                                       |      |      |      |      |      |      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                                     | No less than 10000MΩ : Equal or less than 0.33μF.<br>No less than 3000ΩF : More than 0.33μF. |      |      |      |      |      |      |
|                                             | Dissipation factor (tanδ)                                                                                                       | Not more than initial specification at 1kHz.                                                 |      |      |      |      |      |      |
|                                             | Capacitance change                                                                                                              | Within ±5% of initial value.                                                                 |      |      |      |      |      |      |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH.                     |                                                                                              |      |      |      |      |      |      |
|                                             | Appearance                                                                                                                      | No serious degradation.                                                                      |      |      |      |      |      |      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                                     | No less than 10000MΩ : Equal or less than 0.33μF.<br>No less than 3000ΩF : More than 0.33μF. |      |      |      |      |      |      |
|                                             | Dissipation factor (tanδ)                                                                                                       | Not more than initial specification at 1kHz.                                                 |      |      |      |      |      |      |
|                                             | Capacitance change                                                                                                              | Within ±5% of initial value.                                                                 |      |      |      |      |      |      |

### ◆ STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Dimensions (mm) |      |                    |                    |            | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|-----------------------|----------|-----------------|------|--------------------|--------------------|------------|-------------------------------|----------|--------------------|------------------------------------------------|
|                       |          | W               | H    | T                  | F                  | φd         |                               |          |                    |                                                |
| 630                   | 0.033    | 17.7            | 8.7  | 8.3                | 12.5               | 0.8        | 2.54                          | 300      | FHACB631V333□0LGZ0 | HACB2J333□                                     |
|                       | 0.039    |                 | 9.3  | 8.8                |                    |            | 2.76                          |          | FHACB631V393□0LGZ0 | HACB2J393□                                     |
|                       | 0.047    |                 | 9.8  | 9.3                |                    |            | 3.04                          |          | FHACB631V473□0LGZ0 | HACB2J473□                                     |
|                       | 0.056    |                 | 10.4 | 10.0               |                    |            | 3.31                          |          | FHACB631V563□0LGZ0 | HACB2J563□                                     |
|                       | 0.068    |                 | 11.3 | 10.8               |                    |            | 3.65                          |          | FHACB631V683□0LGZ0 | HACB2J683□                                     |
|                       | 0.082    |                 | 12.1 | 11.6               |                    |            | 4.01                          |          | FHACB631V823□0LGZ0 | HACB2J823□                                     |
|                       | 0.1      | 13.1            | 12.5 | 4.42               | FHACB631V104□0LGZ0 | HACB2J104□ |                               |          |                    |                                                |
|                       | 0.12     | 14.0            | 13.4 | 4.84               | FHACB631V124□0LGZ0 | HACB2J124□ |                               |          |                    |                                                |
|                       | 0.15     | 12.9            | 12.3 | 3.83               | FHACB631V154□1LHZ0 | HACB2J154□ |                               |          |                    |                                                |
|                       | 0.18     | 13.8            | 13.2 | 4.19               | FHACB631V184□1LHZ0 | HACB2J184□ |                               |          |                    |                                                |
|                       | 0.22     | 15.1            | 14.4 | 4.64               | FHACB631V224□1LHZ0 | HACB2J224□ |                               |          |                    |                                                |
|                       | 0.27     | 16.5            | 15.7 | 5.14               | FHACB631V274□1LHZ0 | HACB2J274□ |                               |          |                    |                                                |
|                       | 0.33     | 18.0            | 17.1 | 5.68               | FHACB631V334□1LHZ0 | HACB2J334□ |                               |          |                    |                                                |
|                       | 0.39     | 19.3            | 18.4 | 6.17               | FHACB631V394□1LHZ0 | HACB2J394□ |                               |          |                    |                                                |
|                       | 0.47     | 18.4            | 17.5 | 5.26               | FHACB631V474□2LEZ0 | HACB2J474□ |                               |          |                    |                                                |
|                       | 0.56     | 19.9            | 18.9 | 5.74               | FHACB631V564□2LEZ0 | HACB2J564□ |                               |          |                    |                                                |
|                       | 0.68     | 21.7            | 20.6 | 6.33               | FHACB631V684□2LEZ0 | HACB2J684□ |                               |          |                    |                                                |
|                       | 0.82     | 23.6            | 22.5 | 6.95               | FHACB631V824□2LEZ0 | HACB2J824□ |                               |          |                    |                                                |
| 1.0                   | 25.8     | 24.6            | 7.67 | FHACB631V105□2LEZ0 | HACB2J105□         |            |                               |          |                    |                                                |
| 1.2                   | 28.1     | 26.8            | 8.41 | FHACB631V125□2LEZ0 | HACB2J125□         |            |                               |          |                    |                                                |
| 1000                  | 0.018    | 17.7            | 8.6  | 8.3                | 12.5               | 0.8        | 2.18                          | 350      | FHACB102V183□0LGZ0 | HACB3A183□                                     |
|                       | 0.022    |                 | 9.3  | 8.8                |                    |            | 2.41                          |          | FHACB102V223□0LGZ0 | HACB3A223□                                     |
|                       | 0.027    |                 | 9.8  | 9.5                |                    |            | 2.66                          |          | FHACB102V273□0LGZ0 | HACB3A273□                                     |
|                       | 0.033    |                 | 10.7 | 10.2               |                    |            | 2.95                          |          | FHACB102V333□0LGZ0 | HACB3A333□                                     |
|                       | 0.039    |                 | 11.3 | 10.8               |                    |            | 3.21                          |          | FHACB102V393□0LGZ0 | HACB3A393□                                     |
|                       | 0.047    |                 | 12.1 | 11.6               |                    |            | 3.52                          |          | FHACB102V473□0LGZ0 | HACB3A473□                                     |
|                       | 0.056    | 13.0            | 12.4 | 3.84               | FHACB102V563□0LGZ0 | HACB3A563□ |                               |          |                    |                                                |
|                       | 0.068    | 14.0            | 13.4 | 4.23               | FHACB102V683□0LGZ0 | HACB3A683□ |                               |          |                    |                                                |
|                       | 0.082    | 12.5            | 11.9 | 3.23               | FHACB102V823□1LHZ0 | HACB3A823□ |                               |          |                    |                                                |
|                       | 0.1      | 13.5            | 12.9 | 3.56               | FHACB102V104□1LHZ0 | HACB3A104□ |                               |          |                    |                                                |
|                       | 0.12     | 14.6            | 13.9 | 3.91               | FHACB102V124□1LHZ0 | HACB3A124□ |                               |          |                    |                                                |
|                       | 0.15     | 16.1            | 15.3 | 4.36               | FHACB102V154□1LHZ0 | HACB3A154□ |                               |          |                    |                                                |
|                       | 0.18     | 17.3            | 16.5 | 4.79               | FHACB102V184□1LHZ0 | HACB3A184□ |                               |          |                    |                                                |
|                       | 0.22     | 18.9            | 18.0 | 5.29               | FHACB102V224□1LHZ0 | HACB3A224□ |                               |          |                    |                                                |

(1)The symbol "□" is Capacitance tolerance code. (J : ±5%, H : ±3%)

(2)The maximum ripple current : +85°C max., 100kHz, sine wave

(3)WV(Vac) : 50Hz or 60Hz, sine wave





◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |      |                    | Maximum ripple current (Arms) | WV (Vac)   | Part Number        | Previous Part Number (Just for your reference) |                    |            |
|----------|----------|-----------------|------|------|------|--------------------|-------------------------------|------------|--------------------|------------------------------------------------|--------------------|------------|
|          |          | W               | H    | T    | F    | φd                 |                               |            |                    |                                                |                    |            |
| 1000     | 0.27     | 27.7            | 18.0 | 17.1 | 22.5 | 1.0                | 4.51                          | 350        | FHACB102V274□2LEZ0 | HACB3A274□                                     |                    |            |
|          | 0.33     |                 | 19.6 | 18.6 |      |                    | 4.99                          |            | FHACB102V334□2LEZ0 | HACB3A334□                                     |                    |            |
|          | 0.39     |                 | 21.1 | 20.1 |      |                    | 5.43                          |            | FHACB102V394□2LEZ0 | HACB3A394□                                     |                    |            |
|          | 0.47     |                 | 22.9 | 21.9 |      |                    | 5.96                          |            | FHACB102V474□2LEZ0 | HACB3A474□                                     |                    |            |
|          | 0.56     |                 | 25.0 | 23.8 |      |                    | 6.51                          |            | FHACB102V564□2LEZ0 | HACB3A564□                                     |                    |            |
|          | 0.68     |                 | 27.3 | 26.0 |      |                    | 7.16                          |            | FHACB102V684□2LEZ0 | HACB3A684□                                     |                    |            |
|          | 0.82     | 42.7            | 22.8 | 21.8 | 37.5 |                    | 4.70                          |            | FHACB102V824□4LJZ0 | HACB3A824□                                     |                    |            |
|          | 1.0      |                 | 25.0 | 23.8 |      |                    | 5.19                          |            | FHACB102V105□4LJZ0 | HACB3A105□                                     |                    |            |
|          | 1.2      |                 | 27.1 | 25.8 |      |                    | 5.68                          |            | FHACB102V125□4LJZ0 | HACB3A125□                                     |                    |            |
| 1250     | 0.012    | 17.7            | 8.5  | 8.2  | 12.5 | 0.8                | 1.95                          | 400        | FHACB1C2V123□0LGZ0 | HACB3B123□                                     |                    |            |
|          | 0.015    |                 | 9.2  | 8.8  |      |                    | 2.18                          |            | FHACB1C2V153□0LGZ0 | HACB3B153□                                     |                    |            |
|          | 0.018    |                 | 9.8  | 9.3  |      |                    | 2.39                          |            | FHACB1C2V183□0LGZ0 | HACB3B183□                                     |                    |            |
|          | 0.022    |                 | 10.5 | 10.1 |      |                    | 2.64                          |            | FHACB1C2V223□0LGZ0 | HACB3B223□                                     |                    |            |
|          | 0.027    |                 | 11.3 | 10.8 |      |                    | 2.92                          |            | FHACB1C2V273□0LGZ0 | HACB3B273□                                     |                    |            |
|          | 0.033    |                 | 12.2 | 11.7 |      |                    | 3.23                          |            | FHACB1C2V333□0LGZ0 | HACB3B333□                                     |                    |            |
|          | 0.039    |                 | 13.1 | 12.5 |      |                    | 3.51                          |            | FHACB1C2V393□0LGZ0 | HACB3B393□                                     |                    |            |
|          | 0.047    |                 | 14.0 | 13.4 |      |                    | 3.86                          |            | FHACB1C2V473□0LGZ0 | HACB3B473□                                     |                    |            |
|          | 0.056    |                 | 22.7 | 13.3 |      |                    | 12.7                          |            | 17.5               | 3.11                                           | FHACB1C2V563□1LHZ0 | HACB3B563□ |
|          | 0.068    | 14.4            |      | 13.7 | 3.43 |                    | FHACB1C2V683□1LHZ0            |            |                    | HACB3B683□                                     |                    |            |
|          | 0.082    | 15.5            |      | 14.8 | 3.76 |                    | FHACB1C2V823□1LHZ0            |            |                    | HACB3B823□                                     |                    |            |
|          | 0.1      | 27.7            | 16.9 | 16.1 | 22.5 |                    | 4.16                          |            | FHACB1C2V104□1LHZ0 | HACB3B104□                                     |                    |            |
|          | 0.12     |                 | 18.4 | 17.5 |      |                    | 4.56                          |            | FHACB1C2V124□1LHZ0 | HACB3B124□                                     |                    |            |
|          | 0.15     |                 | 17.2 | 16.4 |      |                    | 3.84                          |            | FHACB1C2V154□2LEZ0 | HACB3B154□                                     |                    |            |
|          | 0.18     |                 | 18.6 | 17.7 |      |                    | 4.21                          |            | FHACB1C2V184□2LEZ0 | HACB3B184□                                     |                    |            |
|          | 0.22     |                 | 20.3 | 19.3 |      |                    | 4.66                          |            | FHACB1C2V224□2LEZ0 | HACB3B224□                                     |                    |            |
|          | 0.27     |                 | 22.3 | 21.3 |      |                    | 5.16                          |            | FHACB1C2V274□2LEZ0 | HACB3B274□                                     |                    |            |
|          | 0.33     |                 | 24.4 | 23.3 |      |                    | 5.70                          |            | FHACB1C2V334□2LEZ0 | HACB3B334□                                     |                    |            |
|          | 0.39     |                 | 26.3 | 25.1 |      |                    | 6.20                          |            | FHACB1C2V394□2LEZ0 | HACB3B394□                                     |                    |            |
|          | 0.47     |                 | 42.7 | 21.9 |      |                    | 20.8                          |            | 37.5               | 4.03                                           | FHACB1C2V474□4LJZ0 | HACB3B474□ |
|          | 0.56     |                 |      | 23.7 |      |                    | 22.6                          |            |                    | 4.40                                           | FHACB1C2V564□4LJZ0 | HACB3B564□ |
|          | 0.68     |                 |      | 25.8 |      |                    | 24.6                          |            |                    | 4.85                                           | FHACB1C2V684□4LJZ0 | HACB3B684□ |
|          | 0.82     |                 |      | 27.6 |      |                    | 26.3                          |            |                    | 5.32                                           | FHACB1C2V824□4LJZ0 | HACB3B824□ |
|          | 1.0      | 52.7            |      | 27.0 | 25.7 |                    | 47.5                          |            |                    | 4.60                                           | FHACB1C2V105□ULWZ0 | HACB3B105□ |
| 4.60     |          |                 |      |      |      | FHACB1C2V105□ULWZ0 |                               | HACB3B105□ |                    |                                                |                    |            |
| 1600     | 0.0047   | 19.7            | 8.8  | 8.5  | 15.0 | 0.8                | 1.32                          | 450        | FHACB162V472□KLDZ0 | HACB3C472□                                     |                    |            |
|          | 0.0056   |                 | 9.3  | 9.0  |      |                    | 1.58                          |            | FHACB162V562□KLDZ0 | HACB3C562□                                     |                    |            |
|          | 0.0068   |                 | 10.0 | 9.6  |      |                    | 1.93                          |            | FHACB162V682□KLDZ0 | HACB3C682□                                     |                    |            |
|          | 0.0082   |                 | 10.7 | 10.2 |      |                    | 2.12                          |            | FHACB162V822□KLDZ0 | HACB3C822□                                     |                    |            |
|          | 0.01     |                 | 11.5 | 11.0 |      |                    | 2.34                          |            | FHACB162V103□KLDZ0 | HACB3C103□                                     |                    |            |
|          | 0.012    |                 | 12.3 | 11.8 |      |                    | 2.56                          |            | FHACB162V123□KLDZ0 | HACB3C123□                                     |                    |            |
|          | 0.015    |                 | 13.5 | 12.9 |      |                    | 2.86                          |            | FHACB162V153□KLDZ0 | HACB3C153□                                     |                    |            |
|          | 0.018    |                 | 14.6 | 13.9 |      |                    | 3.14                          |            | FHACB162V183□KLDZ0 | HACB3C183□                                     |                    |            |
|          | 0.022    |                 | 15.8 | 15.1 |      |                    | 3.47                          |            | FHACB162V223□KLDZ0 | HACB3C223□                                     |                    |            |
|          | 0.027    | 22.7            | 13.0 | 12.4 | 17.5 |                    | 2.61                          |            | FHACB162V273□1LHZ0 | HACB3C273□                                     |                    |            |
|          | 0.033    |                 | 14.0 | 13.4 |      |                    | 2.88                          |            | FHACB162V333□1LHZ0 | HACB3C333□                                     |                    |            |
|          | 0.039    |                 | 15.1 | 14.4 |      |                    | 3.13                          |            | FHACB162V393□1LHZ0 | HACB3C393□                                     |                    |            |
|          | 0.047    |                 | 16.4 | 15.6 |      |                    | 3.44                          |            | FHACB162V473□1LHZ0 | HACB3C473□                                     |                    |            |
|          | 0.056    |                 | 17.6 | 16.8 |      |                    | 3.75                          |            | FHACB162V563□1LHZ0 | HACB3C563□                                     |                    |            |
|          | 0.068    |                 | 19.1 | 18.2 |      |                    | 4.14                          |            | FHACB162V683□1LHZ0 | HACB3C683□                                     |                    |            |
|          | 0.082    | 27.7            | 17.4 | 16.6 | 22.5 |                    | 3.38                          |            | FHACB162V823□2LEZ0 | HACB3C823□                                     |                    |            |
|          | 0.1      |                 | 19.0 | 18.1 |      |                    | 3.73                          |            | FHACB162V104□2LEZ0 | HACB3C104□                                     |                    |            |
|          | 0.12     |                 | 20.6 | 19.6 |      |                    | 4.09                          |            | FHACB162V124□2LEZ0 | HACB3C124□                                     |                    |            |
|          | 0.15     |                 | 22.8 | 21.8 |      |                    | 4.56                          |            | FHACB162V154□2LEZ0 | HACB3C154□                                     |                    |            |
|          | 0.18     |                 | 24.7 | 23.6 |      |                    | 5.00                          |            | FHACB162V184□2LEZ0 | HACB3C184□                                     |                    |            |
|          | 0.22     |                 | 27.2 | 25.9 |      |                    | 5.53                          |            | FHACB162V224□2LEZ0 | HACB3C224□                                     |                    |            |
|          | 0.27     |                 | 42.7 | 23.4 |      |                    | 22.3                          |            | 37.5               | 3.62                                           | FHACB162V274□4LJZ0 | HACB3C274□ |
|          | 0.33     |                 |      | 25.9 |      |                    | 24.7                          |            |                    | 4.41                                           | FHACB162V334□4LJZ0 | HACB3C334□ |
|          | 0.39     |                 |      | 27.9 |      |                    | 26.6                          |            |                    | 26.6                                           | 37.5               | 4.84       |
| 4.84     |          |                 |      |      |      | FHACB162V394□4LJZ0 |                               | HACB3C394□ |                    |                                                |                    |            |

(1)The symbol "□" is Capacitance tolerance code. (J : ±5%, H : ±3%)

(2)The maximum ripple current : +85°C max., 100kHz, sine wave

(3)WV(Vac) : 50Hz or 60Hz, sine wave



### ◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |                    |            | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|----------|----------|-----------------|------|------|--------------------|------------|-------------------------------|----------|--------------------|------------------------------------------------|
|          |          | W               | H    | T    | F                  | φd         |                               |          |                    |                                                |
| 2000     | 0.001    | 19.7            | 8.3  | 8.1  | 15.0               | 0.8        | 0.28                          | 450      | FHACB202V102□KLDZ0 | HACB3D102□                                     |
|          | 0.0012   |                 | 9.0  | 8.6  |                    |            | 0.34                          |          | FHACB202V122□KLDZ0 | HACB3D122□                                     |
|          | 0.0015   |                 | 9.6  | 9.2  |                    |            | 0.42                          |          | FHACB202V152□KLDZ0 | HACB3D152□                                     |
|          | 0.0018   |                 | 9.3  | 9.0  |                    |            | 0.51                          |          | FHACB202V182□KLDZ0 | HACB3D182□                                     |
|          | 0.0022   |                 | 10.0 | 9.6  |                    |            | 0.62                          |          | FHACB202V222□KLDZ0 | HACB3D222□                                     |
|          | 0.0027   |                 | 8.5  | 8.2  |                    |            | 0.76                          |          | FHACB202V272□KLDZ0 | HACB3D272□                                     |
|          | 0.0033   |                 | 9.1  | 8.7  |                    |            | 0.93                          |          | FHACB202V332□KLDZ0 | HACB3D332□                                     |
|          | 0.0039   |                 | 9.6  | 9.2  |                    |            | 1.10                          |          | FHACB202V392□KLDZ0 | HACB3D392□                                     |
|          | 0.0047   |                 | 10.2 | 9.8  |                    |            | 1.33                          |          | FHACB202V472□KLDZ0 | HACB3D472□                                     |
|          | 0.0056   |                 | 11.0 | 10.5 |                    |            | 1.53                          |          | FHACB202V562□KLDZ0 | HACB3D562□                                     |
|          | 0.0068   |                 | 11.8 | 11.3 |                    |            | 1.92                          |          | FHACB202V682□KLDZ0 | HACB3D682□                                     |
|          | 0.0082   |                 | 12.7 | 12.1 |                    |            | 2.32                          |          | FHACB202V822□KLDZ0 | HACB3D822□                                     |
|          | 0.01     |                 | 13.7 | 13.1 |                    |            | 2.61                          |          | FHACB202V103□KLDZ0 | HACB3D103□                                     |
|          | 0.012    |                 | 14.8 | 14.1 |                    |            | 2.86                          |          | FHACB202V123□KLDZ0 | HACB3D123□                                     |
|          | 0.015    |                 | 16.3 | 15.5 |                    |            | 3.21                          |          | FHACB202V153□KLDZ0 | HACB3D153□                                     |
|          | 0.018    | 13.2            | 12.6 | 2.38 | FHACB202V183□1LHZ0 | HACB3D183□ |                               |          |                    |                                                |
|          | 0.022    | 14.3            | 13.6 | 2.63 | FHACB202V223□1LHZ0 | HACB3D223□ |                               |          |                    |                                                |
|          | 0.027    | 15.5            | 14.8 | 2.91 | FHACB202V273□1LHZ0 | HACB3D273□ |                               |          |                    |                                                |
|          | 0.033    | 17.0            | 16.2 | 3.22 | FHACB202V333□1LHZ0 | HACB3D333□ |                               |          |                    |                                                |
|          | 0.039    | 18.3            | 17.4 | 3.50 | FHACB202V393□1LHZ0 | HACB3D393□ |                               |          |                    |                                                |
|          | 0.047    | 19.8            | 18.8 | 3.84 | FHACB202V473□1LHZ0 | HACB3D473□ |                               |          |                    |                                                |
|          | 0.056    | 17.9            | 17.0 | 3.12 | FHACB202V563□2LEZ0 | HACB3D563□ |                               |          |                    |                                                |
|          | 0.068    | 19.4            | 18.5 | 3.44 | FHACB202V683□2LEZ0 | HACB3D683□ |                               |          |                    |                                                |
|          | 0.082    | 21.2            | 20.2 | 3.78 | FHACB202V823□2LEZ0 | HACB3D823□ |                               |          |                    |                                                |
|          | 0.1      | 23.2            | 22.1 | 4.17 | FHACB202V104□2LEZ0 | HACB3D104□ |                               |          |                    |                                                |
|          | 0.12     | 25.3            | 24.1 | 4.56 | FHACB202V124□2LEZ0 | HACB3D124□ |                               |          |                    |                                                |
|          | 0.15     | 27.9            | 26.6 | 5.11 | FHACB202V154□2LEZ0 | HACB3D154□ |                               |          |                    |                                                |
|          | 0.18     | 22.1            | 21.1 | 3.17 | FHACB202V184□4LJZ0 | HACB3D184□ |                               |          |                    |                                                |
|          | 0.22     | 24.5            | 23.4 | 3.56 | FHACB202V224□4LJZ0 | HACB3D224□ |                               |          |                    |                                                |
|          | 0.27     | 26.5            | 25.3 | 3.89 | FHACB202V274□4LJZ0 | HACB3D274□ |                               |          |                    |                                                |

(1)The symbol "□" is Capacitance tolerance code. (J : ±5%, H : ±3%)

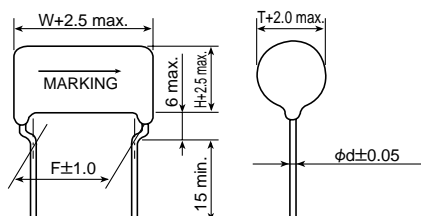
| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |                    |            |     | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|----------|----------|-----------------|------|--------------------|------------|-----|-------------------------------|----------|--------------------|------------------------------------------------|
|          |          | W               | H    | T                  | F          | φd  |                               |          |                    |                                                |
| 3150     | 0.0047   | 34.7            | 12.0 | 11.5               | 30.0       | 1.0 | 1.68                          | 920      | FHACB3B2V472□LLQZ0 | HACB3F472□                                     |
|          | 0.0056   |                 | 12.9 | 12.3               |            |     | 1.84                          |          | FHACB3B2V562□LLQZ0 | HACB3F562□                                     |
|          | 0.0068   |                 | 13.9 | 13.3               |            |     | 2.02                          |          | FHACB3B2V682□LLQZ0 | HACB3F682□                                     |
|          | 0.0082   |                 | 15.0 | 14.3               |            |     | 2.22                          |          | FHACB3B2V822□LLQZ0 | HACB3F822□                                     |
|          | 0.01     |                 | 16.3 | 15.5               |            |     | 2.45                          |          | FHACB3B2V103□LLQZ0 | HACB3F103□                                     |
|          | 0.012    |                 | 17.5 | 16.7               |            |     | 2.69                          |          | FHACB3B2V123□LLQZ0 | HACB3F123□                                     |
|          | 0.015    |                 | 19.3 | 18.4               |            |     | 3.00                          |          | FHACB3B2V153□LLQZ0 | HACB3F153□                                     |
|          | 0.018    |                 | 20.9 | 19.9               |            |     | 3.29                          |          | FHACB3B2V183□LLQZ0 | HACB3F183□                                     |
|          | 0.022    |                 | 22.9 | 21.9               |            |     | 3.64                          |          | FHACB3B2V223□LLQZ0 | HACB3F223□                                     |
|          | 0.027    |                 | 25.2 | 24.0               |            |     | 4.03                          |          | FHACB3B2V273□LLQZ0 | HACB3F273□                                     |
|          | 0.033    |                 | 27.5 | 26.2               |            |     | 4.46                          |          | FHACB3B2V333□LLQZ0 | HACB3F333□                                     |
|          | 0.0027   |                 | 12.7 | 12.1               |            |     | 1.51                          |          | FHACB402V272□LLQZ0 | HACB3G272□                                     |
|          | 0.0033   |                 | 13.7 | 13.1               |            |     | 1.67                          |          | FHACB402V332□LLQZ0 | HACB3G332□                                     |
| 0.0039   | 14.6     | 13.9            | 1.81 | FHACB402V392□LLQZ0 | HACB3G392□ |     |                               |          |                    |                                                |
| 0.0047   | 15.7     | 15.0            | 1.99 | FHACB402V472□LLQZ0 | HACB3G472□ |     |                               |          |                    |                                                |
| 0.0056   | 17.0     | 16.2            | 2.17 | FHACB402V562□LLQZ0 | HACB3G562□ |     |                               |          |                    |                                                |
| 0.0068   | 18.4     | 17.5            | 2.39 | FHACB402V682□LLQZ0 | HACB3G682□ |     |                               |          |                    |                                                |
| 0.0082   | 20.0     | 19.0            | 2.63 | FHACB402V822□LLQZ0 | HACB3G822□ |     |                               |          |                    |                                                |
| 0.01     | 21.8     | 20.7            | 2.90 | FHACB402V103□LLQZ0 | HACB3G103□ |     |                               |          |                    |                                                |
| 0.012    | 23.7     | 22.6            | 3.18 | FHACB402V123□LLQZ0 | HACB3G123□ |     |                               |          |                    |                                                |
| 0.015    | 26.2     | 25.0            | 3.55 | FHACB402V153□LLQZ0 | HACB3G153□ |     |                               |          |                    |                                                |
| 0.018    | 28.5     | 27.1            | 3.89 | FHACB402V183□LLQZ0 | HACB3G183□ |     |                               |          |                    |                                                |

(1)The symbol "□" is Capacitance tolerance code. (J : ±5%, K : ±10%)

(2)The maximum ripple current : +85°C max., 100kHz, sine wave

(3)WV(Vac) : 50Hz or 60Hz, sine wave

### ◆DIMENSIONS (mm)





# ELECTRONIC EQUIPMENT FILM CAPACITOR

## DADC Series



- It is excellent in coping with high current and in heat radiation.
- It can handle a frequency of above 100kHz.
- The amor is a powder molded flame resisting epoxy resin (correspond V-0).

### ◆ SPECIFICATIONS

| Items                                       | Characteristics                                                                                                                        |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Category temperature range                  | -40 to +105°C                                                                                                                          |
| Rated voltage range                         | 250 to 630V <sub>dc</sub>                                                                                                              |
| Capacitance tolerance                       | ±5% (J)                                                                                                                                |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                                              |
| Dissipation factor (tanδ)                   | No more than 0.05%                                                                                                                     |
| Insulation resistance (Terminal - Terminal) | No less than 50000MΩ : Equal or less than 1μF.<br>No less than 50000ΩF : More than 1μF.                                                |
|                                             | Rated voltage (V <sub>dc</sub> )    250    400    630                                                                                  |
|                                             | Measurement voltage (V <sub>dc</sub> )    100    100    500                                                                            |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 85°C.                               |
|                                             | Appearance    No serious degradation                                                                                                   |
|                                             | Insulation resistance (Terminal - Terminal)    No less than 25000MΩ : Equal or less than 1μF.<br>No less than 25000ΩF : More than 1μF. |
|                                             | Dissipation factor (tanδ)    No more than initial specification at 1kHz.                                                               |
|                                             | Capacitance change    Within ±3% of initial value.                                                                                     |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH.                            |
|                                             | Appearance    No serious degradation.                                                                                                  |
|                                             | Insulation resistance (Terminal - Terminal)    No less than 25000MΩ : Equal or less than 1μF.<br>No less than 25000ΩF : More than 1μF. |
|                                             | Dissipation factor (tanδ)    No more than initial specification at 1kHz.                                                               |
|                                             | Capacitance change    Within ±5% of initial value.                                                                                     |

### ◆ STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Dimensions (mm) |      |      |                    |                    | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|-----------------------|----------|-----------------|------|------|--------------------|--------------------|-------------------------------|----------|--------------------|------------------------------------------------|
|                       |          | W               | H    | T    | F                  | φd                 |                               |          |                    |                                                |
| 250                   | 0.01     | 15.5            | 11.0 | 7.0  | 7.5                | 0.8                | 0.78                          | 125      | FDADC251V103JGLBM0 | DADC2E103J-F2BM                                |
|                       | 0.012    |                 | 11.5 | 7.5  |                    |                    | 1.0                           |          | FDADC251V123JGLBM0 | DADC2E123J-F2BM                                |
|                       | 0.015    |                 | 13.0 | 8.5  |                    |                    | 1.2                           |          | FDADC251V153JGLBM0 | DADC2E153J-F2BM                                |
|                       | 0.018    |                 | 11.5 | 7.5  |                    |                    | 1.4                           |          | FDADC251V183JGLBM0 | DADC2E183J-F2BM                                |
|                       | 0.022    |                 | 12.0 | 6.0  |                    |                    | 1.7                           |          | FDADC251V223JGLBM0 | DADC2E223J-F2BM                                |
|                       | 0.027    |                 | 12.5 | 6.5  |                    |                    | 1.9                           |          | FDADC251V273JGLBM0 | DADC2E273J-F2BM                                |
|                       | 0.033    |                 | 13.0 | 7.0  |                    |                    | 2.2                           |          | FDADC251V333JGLBM0 | DADC2E333J-F2BM                                |
|                       | 0.039    |                 | 13.0 | 7.5  |                    |                    | 2.4                           |          | FDADC251V393JGLBM0 | DADC2E393J-F2BM                                |
|                       | 0.047    |                 | 15.5 | 7.5  |                    |                    | 2.6                           |          | FDADC251V473JGLBM0 | DADC2E473J-F2BM                                |
|                       | 0.056    |                 | 15.5 | 7.5  |                    |                    | 2.8                           |          | FDADC251V563JGLBM0 | DADC2E563J-F2BM                                |
|                       | 0.068    |                 | 12.0 | 6.5  |                    |                    | 2.9                           |          | FDADC251V683JGLBM0 | DADC2E683J-F2BM                                |
|                       | 0.082    |                 | 12.5 | 7.0  |                    |                    | 3.0                           |          | FDADC251V823JGLBM0 | DADC2E823J-F2BM                                |
|                       | 0.1      | 12.0            | 6.5  | 3.1  | FDADC251V104JDLBM0 | DADC2E104J-F2BM    |                               |          |                    |                                                |
|                       | 0.12     | 12.5            | 7.0  | 3.3  | FDADC251V124JDLBM0 | DADC2E124J-F2BM    |                               |          |                    |                                                |
|                       | 0.15     | 14.0            | 7.0  | 3.4  | FDADC251V154JDLBM0 | DADC2E154J-F2BM    |                               |          |                    |                                                |
|                       | 0.18     | 14.5            | 7.5  | 3.6  | FDADC251V184JDLBM0 | DADC2E184J-F2BM    |                               |          |                    |                                                |
|                       | 0.22     | 15.5            | 7.5  | 3.7  | FDADC251V224JDLBM0 | DADC2E224J-F2BM    |                               |          |                    |                                                |
|                       | 0.27     | 16.0            | 8.0  | 3.8  | FDADC251V274JDLBM0 | DADC2E274J-F2BM    |                               |          |                    |                                                |
|                       | 0.33     | 16.5            | 8.5  | 4.0  | FDADC251V334JDLBM0 | DADC2E334J-F2BM    |                               |          |                    |                                                |
|                       | 0.39     | 17.5            | 9.0  | 4.1  | FDADC251V394JDLBM0 | DADC2E394J-F2BM    |                               |          |                    |                                                |
|                       | 0.47     | 16.5            | 8.0  | 4.3  | FDADC251V474JNLBM0 | DADC2E474J-F2BM    |                               |          |                    |                                                |
|                       | 0.56     | 17.0            | 8.5  | 4.6  | FDADC251V564JNLBM0 | DADC2E564J-F2BM    |                               |          |                    |                                                |
|                       | 0.68     | 17.5            | 9.0  | 5.0  | FDADC251V684JNLBM0 | DADC2E684J-F2BM    |                               |          |                    |                                                |
|                       | 0.82     | 18.0            | 10.0 | 5.3  | FDADC251V824JNLBM0 | DADC2E824J-F2BM    |                               |          |                    |                                                |
|                       | 1.0      | 19.0            | 10.5 | 5.7  | FDADC251V105JNLBM0 | DADC2E105J-F2BM    |                               |          |                    |                                                |
|                       | 1.2      | 20.0            | 11.5 | 6.2  | FDADC251V125JNLBM0 | DADC2E125J-F2BM    |                               |          |                    |                                                |
|                       | 1.5      | 21.0            | 12.5 | 6.7  | FDADC251V155JNLBM0 | DADC2E155J-F2BM    |                               |          |                    |                                                |
|                       | 1.8      | 22.0            | 14.0 | 7.2  | FDADC251V185JNLBM0 | DADC2E185J-F2BM    |                               |          |                    |                                                |
|                       | 2.2      | 23.5            | 15.0 | 7.8  | FDADC251V225JNLBM0 | DADC2E225J-F2BM    |                               |          |                    |                                                |
|                       | 2.7      | 24.0            | 15.5 | 8.2  | FDADC251V275JELBM0 | DADC2E275J-F2BM    |                               |          |                    |                                                |
|                       | 3.3      | 24.5            | 16.5 | 8.7  | FDADC251V335JELBM0 | DADC2E335J-F2BM    |                               |          |                    |                                                |
|                       | 3.9      | 25.5            | 17.5 | 9.1  | FDADC251V395JFLEM0 | DADC2E395J-F2EM    |                               |          |                    |                                                |
| 4.7                   | 31.0     | 27.0            | 19.0 | 22.5 | 9.3                | FDADC251V475JFLEM0 | DADC2E475J-F2EM               |          |                    |                                                |

- (1) The maximum ripple current : +85°C max., 100kHz, sine wave  
 (2) WV(Vac) : 50Hz or 60Hz, sine wave

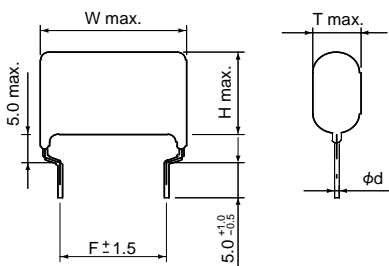
### ◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |                    |                    | Maximum ripple current (Arms) | WV (Vac)           | Part Number        | Previous Part Number (Just for your reference) |
|----------|----------|-----------------|------|------|--------------------|--------------------|-------------------------------|--------------------|--------------------|------------------------------------------------|
|          |          | W               | H    | T    | F                  | φd                 |                               |                    |                    |                                                |
| 400      | 0.01     | 15.5            | 11.0 | 7.0  | 7.5                | 0.8                | 1.5                           | 250                | FDADC401V103JGLBM0 | DADC2G103J-F2BM                                |
|          | 0.012    |                 | 11.5 | 7.5  |                    |                    | 1.7                           |                    | FDADC401V123JGLBM0 | DADC2G123J-F2BM                                |
|          | 0.015    |                 | 13.0 | 8.5  |                    |                    | 1.9                           |                    | FDADC401V153JGLBM0 | DADC2G153J-F2BM                                |
|          | 0.018    |                 | 11.5 | 7.5  |                    |                    | 2.0                           |                    | FDADC401V183JGLBM0 | DADC2G183J-F2BM                                |
|          | 0.022    |                 | 12.0 | 6.0  |                    |                    | 2.2                           |                    | FDADC401V223JGLBM0 | DADC2G223J-F2BM                                |
|          | 0.027    |                 | 12.5 | 6.5  |                    |                    | 2.4                           |                    | FDADC401V273JGLBM0 | DADC2G273J-F2BM                                |
|          | 0.033    |                 | 13.0 | 7.0  |                    |                    | 2.6                           |                    | FDADC401V333JGLBM0 | DADC2G333J-F2BM                                |
|          | 0.039    |                 | 13.0 | 6.0  |                    |                    | 2.7                           |                    | FDADC401V393JGLBM0 | DADC2G393J-F2BM                                |
|          | 0.047    |                 | 13.5 | 6.5  |                    |                    | 2.9                           |                    | FDADC401V473JGLBM0 | DADC2G473J-F2BM                                |
|          | 0.056    |                 | 14.0 | 6.5  |                    |                    | 3.1                           |                    | FDADC401V563JGLBM0 | DADC2G563J-F2BM                                |
|          | 0.068    | 17.5            | 13.5 | 6.5  | 3.2                | FDADC401V683JDLBM0 | DADC2G683J-F2BM               |                    |                    |                                                |
|          | 0.082    |                 | 14.0 | 7.0  | 3.4                | FDADC401V823JDLBM0 | DADC2G823J-F2BM               |                    |                    |                                                |
|          | 0.1      |                 | 14.5 | 7.5  | 3.6                | FDADC401V104JDLBM0 | DADC2G104J-F2BM               |                    |                    |                                                |
|          | 0.12     |                 | 15.0 | 8.0  | 3.9                | FDADC401V124JDLBM0 | DADC2G124J-F2BM               |                    |                    |                                                |
|          | 0.15     |                 | 16.0 | 8.5  | 4.3                | FDADC401V154JDLBM0 | DADC2G154J-F2BM               |                    |                    |                                                |
|          | 0.18     |                 | 16.5 | 9.5  | 4.6                | FDADC401V184JDLBM0 | DADC2G184J-F2BM               |                    |                    |                                                |
|          | 0.22     |                 | 16.0 | 9.0  | 4.9                | FDADC401V224JHLBM0 | DADC2G224J-F2BM               |                    |                    |                                                |
|          | 0.27     |                 | 20.5 | 18.0 | 9.5                | 5.3                | FDADC401V274JHLBM0            |                    | DADC2G274J-F2BM    |                                                |
|          | 0.33     |                 |      | 19.0 | 10.5               | 5.6                | FDADC401V334JHLBM0            |                    | DADC2G334J-F2BM    |                                                |
|          | 0.39     |                 |      | 19.5 | 11.5               | 5.9                | FDADC401V394JHLBM0            |                    | DADC2G394J-F2BM    |                                                |
|          | 0.47     | 20.0            |      | 11.5 | 6.3                | FDADC401V474JNLBM0 | DADC2G474J-F2BM               |                    |                    |                                                |
|          | 0.56     | 21.0            |      | 13.0 | 6.6                | FDADC401V564JNLBM0 | DADC2G564J-F2BM               |                    |                    |                                                |
|          | 0.68     | 21.0            |      | 13.0 | 6.9                | FDADC401V684JELBM0 | DADC2G684J-F2BM               |                    |                    |                                                |
|          | 0.82     | 22.5            |      | 14.0 | 7.2                | FDADC401V824JELBM0 | DADC2G824J-F2BM               |                    |                    |                                                |
|          | 1.0      | 25.5            |      | 23.5 | 15.5               | 7.5                | FDADC401V105JELBM0            |                    | DADC2G105J-F2BM    |                                                |
|          | 1.2      |                 |      | 25.0 | 16.5               | 8.0                | FDADC401V125JELBM0            |                    | DADC2G125J-F2BM    |                                                |
|          | 1.5      |                 |      | 26.5 | 18.5               | 8.5                | FDADC401V155JELBM0            |                    | DADC2G155J-F2BM    |                                                |
|          | 1.8      |                 | 26.0 | 17.5 | 8.9                | FDADC401V185JFLEM0 | DADC2G185J-F2EM               |                    |                    |                                                |
| 2.2      | 31.0     |                 | 27.5 | 19.5 | 9.3                | FDADC401V225JFLEM0 | DADC2G225J-F2EM               |                    |                    |                                                |
| 0.01     |          |                 | 15.5 | 11.0 | 7.0                | 1.8                | 300                           | FDADC631V103JGLBM0 | DADC2J103J-F2BM    |                                                |
| 0.012    | 11.5     |                 |      | 7.5  | 2.0                | FDADC631V123JGLBM0 |                               | DADC2J123J-F2BM    |                    |                                                |
| 0.015    | 13.0     |                 |      | 8.5  | 2.1                | FDADC631V153JGLBM0 |                               | DADC2J153J-F2BM    |                    |                                                |
| 0.018    | 11.5     |                 |      | 7.5  | 2.2                | FDADC631V183JGLBM0 |                               | DADC2J183J-F2BM    |                    |                                                |
| 0.022    | 16.0     |                 |      | 12.5 | 7.0                | 2.3                |                               | FDADC631V223JGLBM0 | DADC2J223J-F2BM    |                                                |
| 0.027    |          | 12.5            |      | 7.0  | 2.5                | FDADC631V273JGLBM0 |                               | DADC2J273J-F2BM    |                    |                                                |
| 0.033    |          | 13.0            |      | 7.5  | 2.6                | FDADC631V333JGLBM0 |                               | DADC2J333J-F2BM    |                    |                                                |
| 0.039    |          | 12.5            |      | 7.0  | 2.7                | FDADC631V393JHLBM0 |                               | DADC2J393J-F2BM    |                    |                                                |
| 0.047    |          | 12.5            |      | 7.0  | 2.8                | FDADC631V473JHLBM0 |                               | DADC2J473J-F2BM    |                    |                                                |
| 0.056    |          | 13.0            |      | 7.5  | 3.1                | FDADC631V563JHLBM0 |                               | DADC2J563J-F2BM    |                    |                                                |
| 0.068    |          | 13.5            | 8.0  | 3.4  | FDADC631V683JHLBM0 | DADC2J683J-F2BM    |                               |                    |                    |                                                |
| 0.082    |          | 14.0            | 8.5  | 3.6  | FDADC631V823JHLBM0 | DADC2J823J-F2BM    |                               |                    |                    |                                                |
| 0.1      |          | 20.5            | 16.0 | 8.5  | 3.9                | FDADC631V104JHLBM0 |                               | DADC2J104J-F2BM    |                    |                                                |
| 0.12     |          |                 | 16.5 | 9.5  | 4.3                | FDADC631V124JHLBM0 |                               | DADC2J124J-F2BM    |                    |                                                |
| 0.15     | 17.5     |                 | 10.5 | 4.7  | FDADC631V154JHLBM0 | DADC2J154J-F2BM    |                               |                    |                    |                                                |
| 0.18     | 18.5     |                 | 11.0 | 5.1  | FDADC631V184JHLBM0 | DADC2J184J-F2BM    |                               |                    |                    |                                                |
| 0.22     | 21.0     |                 | 11.5 | 5.5  | FDADC631V224JHLBM0 | DADC2J224J-F2BM    |                               |                    |                    |                                                |
| 0.27     | 22.5     |                 | 13.0 | 5.9  | FDADC631V274JHLBM0 | DADC2J274J-F2BM    |                               |                    |                    |                                                |
| 0.33     | 18.5     |                 | 11.5 | 6.3  | FDADC631V334JPLNM0 | DADC2J334J-F2NM    |                               |                    |                    |                                                |
| 0.39     | 19.5     |                 | 12.5 | 6.7  | FDADC631V394JPLNM0 | DADC2J394J-F2NM    |                               |                    |                    |                                                |
| 0.47     | 29.0     |                 | 20.5 | 13.5 | 7.2                | FDADC631V474JPLNM0 |                               | DADC2J474J-F2NM    |                    |                                                |
| 0.56     |          |                 | 22.5 | 14.0 | 7.6                | FDADC631V564JPLNM0 |                               | DADC2J564J-F2NM    |                    |                                                |
| 0.68     |          | 23.5            | 15.0 | 8.1  | FDADC631V684JPLNM0 | DADC2J684J-F2NM    |                               |                    |                    |                                                |
| 0.82     |          | 23.0            | 14.5 | 8.6  | FDADC631V824JRLPM0 | DADC2J824J-F2PM    |                               |                    |                    |                                                |
| 1.0      |          | 36.0            | 24.0 | 15.5 | 9.1                | FDADC631V105JRLPM0 |                               | DADC2J105J-F2PM    |                    |                                                |
| 1.2      |          |                 | 25.5 | 17.0 | 9.3                | FDADC631V125JRLPM0 |                               | DADC2J125J-F2PM    |                    |                                                |

(1)The maximum ripple current : +85°C max., 100kHz, sine wave

(2)WV(Vac) : 50Hz or 60Hz, sine wave

### ◆DIMENSIONS (mm)





# ELECTRONIC EQUIPMENT FILM CAPACITOR

## DLDA Series



- It is excellent in coping with high current and in heat radiation.
- For high current, it is made to cope with current up to 25Ampere.
- As a countermeasure against high voltage along with high current, it is made to withstand a high voltage of up to 1800VH.

### ◆ SPECIFICATIONS

| Items                                       | Characteristics                                                                                             |                                             |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Category temperature range                  | -40 to +105°C                                                                                               |                                             |
| Rated voltage range                         | 800 to 1800VH                                                                                               |                                             |
| Capacitance tolerance                       | ±3% (J)                                                                                                     |                                             |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                   |                                             |
| Dissipation factor (tanδ)                   | No more than 0.1%                                                                                           |                                             |
| Insulation resistance (Terminal - Terminal) | No less than 50000MΩ at 500V <sub>dc</sub>                                                                  |                                             |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 85°C.    |                                             |
|                                             | Appearance                                                                                                  | No serious degradation                      |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 25000MΩ                        |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than initial specification at 1kHz. |
|                                             | Capacitance change                                                                                          | Within ±3% of initial value.                |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH. |                                             |
|                                             | Appearance                                                                                                  | No serious degradation.                     |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 25000MΩ                        |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than initial specification at 1kHz. |
|                                             | Capacitance change                                                                                          | Within ±5% of initial value.                |

### ◆ STANDARD RATINGS

| WV (VH)                     | Cap (μF) | Dimensions (mm) |      |                    |                    |                 | TYPE | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|-----------------------------|----------|-----------------|------|--------------------|--------------------|-----------------|------|-------------------------------|----------|--------------------|------------------------------------------------|
|                             |          | W               | H    | T                  | F                  | φd              |      |                               |          |                    |                                                |
| 800 (1000V <sub>ac</sub> )  | 0.001    | 16.0            | 14.0 | 7.0                | 7.5                | 0.8             | B    | 0.21                          | 350      | FDLDA801V102HGLBM0 | DLDA2K102H-F2BM                                |
|                             | 0.0012   |                 | 14.0 | 7.0                |                    |                 |      | 0.32                          |          | FDLDA801V122HGLBM0 | DLDA2K122H-F2BM                                |
|                             | 0.0015   |                 | 14.0 | 7.0                |                    |                 |      | 0.42                          |          | FDLDA801V152HGLBM0 | DLDA2K152H-F2BM                                |
|                             | 0.0018   |                 | 14.0 | 7.0                |                    |                 |      | 0.52                          |          | FDLDA801V182HGLBM0 | DLDA2K182H-F2BM                                |
|                             | 0.0022   |                 | 11.0 | 6.0                |                    |                 |      | 0.62                          |          | FDLDA801V222HGLBM0 | DLDA2K222H-F2BM                                |
|                             | 0.0027   |                 | 11.0 | 6.5                |                    |                 |      | 0.72                          |          | FDLDA801V272HGLBM0 | DLDA2K272H-F2BM                                |
|                             | 0.0033   |                 | 11.5 | 7.0                |                    |                 |      | 0.83                          |          | FDLDA801V332HGLBM0 | DLDA2K332H-F2BM                                |
|                             | 0.0039   |                 | 11.0 | 6.0                |                    |                 |      | 0.93                          |          | FDLDA801V392HGLBM0 | DLDA2K392H-F2BM                                |
|                             | 0.0047   |                 | 11.0 | 6.5                |                    |                 |      | 1.0                           |          | FDLDA801V472HGLBM0 | DLDA2K472H-F2BM                                |
|                             | 0.0056   |                 | 11.5 | 7.0                |                    |                 |      | 1.2                           |          | FDLDA801V562HGLBM0 | DLDA2K562H-F2BM                                |
|                             | 0.0068   | 13.0            | 8.0  | 1.3                | FDLDA801V682HGLBM0 | DLDA2K682H-F2BM |      |                               |          |                    |                                                |
|                             | 0.0082   | 13.5            | 8.5  | 1.5                | FDLDA801V822HGLBM0 | DLDA2K822H-F2BM |      |                               |          |                    |                                                |
|                             | 0.01     | 11.0            | 6.5  | 1.7                | FDLDA801V103HGLBM0 | DLDA2K103H-F2BM |      |                               |          |                    |                                                |
|                             | 0.012    | 11.0            | 6.5  | 1.9                | FDLDA801V123HGLBM0 | DLDA2K123H-F2BM |      |                               |          |                    |                                                |
|                             | 0.015    | 11.5            | 7.0  | 2.1                | FDLDA801V153HGLBM0 | DLDA2K153H-F2BM |      |                               |          |                    |                                                |
|                             | 0.018    | 13.0            | 8.0  | 2.4                | FDLDA801V183HGLBM0 | DLDA2K183H-F2BM |      |                               |          |                    |                                                |
|                             | 0.022    | 14.5            | 8.5  | 2.6                | FDLDA801V223HGLBM0 | DLDA2K223H-F2BM |      |                               |          |                    |                                                |
|                             | 0.027    | 15.5            | 9.5  | 2.8                | FDLDA801V273HGLBM0 | DLDA2K273H-F2BM |      |                               |          |                    |                                                |
|                             | 0.033    | 16.0            | 10.0 | 3.1                | FDLDA801V333HGLBM0 | DLDA2K333H-F2BM |      |                               |          |                    |                                                |
|                             | 0.039    | 17.0            | 10.5 | 3.3                | FDLDA801V393HGLBM0 | DLDA2K393H-F2BM |      |                               |          |                    |                                                |
| 0.047                       | 15.5     | 9.5             | 3.5  | FDLDA801V473HGLBM0 | DLDA2K473H-F2BM    |                 |      |                               |          |                    |                                                |
| 0.056                       | 16.0     | 10.0            | 4.0  | FDLDA801V563HGLBM0 | DLDA2K563H-F2BM    |                 |      |                               |          |                    |                                                |
| 0.068                       | 16.5     | 11.0            | 4.5  | FDLDA801V683HGLBM0 | DLDA2K683H-F2BM    |                 |      |                               |          |                    |                                                |
| 0.082                       | 17.5     | 11.5            | 5.0  | FDLDA801V823HGLBM0 | DLDA2K823H-F2BM    |                 |      |                               |          |                    |                                                |
| 0.10                        | 18.5     | 12.5            | 5.4  | FDLDA801V104HGLBM0 | DLDA2K104H-F2BM    |                 |      |                               |          |                    |                                                |
| 1000 (1250V <sub>ac</sub> ) | 0.001    | 18.0            | 12.0 | 6.5                | 15.0               | 0.8             | A    | 0.28                          | 450      | FDLDA102V102HDFDM0 | DLDA3A102H-F7DM                                |
|                             | 0.0012   |                 | 12.5 | 6.5                |                    |                 |      | 0.41                          |          | FDLDA102V122HDFDM0 | DLDA3A122H-F7DM                                |
|                             | 0.0015   |                 | 13.0 | 7.0                |                    |                 |      | 0.54                          |          | FDLDA102V152HDFDM0 | DLDA3A152H-F7DM                                |
|                             | 0.0018   |                 | 12.5 | 7.0                |                    |                 |      | 0.67                          |          | FDLDA102V182HDFDM0 | DLDA3A182H-F7DM                                |
|                             | 0.0022   |                 | 13.0 | 7.5                |                    |                 |      | 0.80                          |          | FDLDA102V222HDFDM0 | DLDA3A222H-F7DM                                |
|                             | 0.0027   |                 | 11.0 | 6.0                |                    |                 |      | 0.93                          |          | FDLDA102V272HDFDM0 | DLDA3A272H-F7DM                                |
|                             | 0.0033   |                 | 11.0 | 6.5                |                    |                 |      | 1.0                           |          | FDLDA102V332HDFDM0 | DLDA3A332H-F7DM                                |
|                             | 0.0039   |                 | 11.5 | 7.0                |                    |                 |      | 1.1                           |          | FDLDA102V392HDFDM0 | DLDA3A392H-F7DM                                |
|                             | 0.0047   |                 | 10.5 | 5.5                |                    |                 |      | 1.3                           |          | FDLDA102V472HDFDM0 | DLDA3A472H-F7DM                                |

(1) The maximum ripple current : +85°C max., 100kHz, sine wave

(2) WV(V<sub>ac</sub>) : 50Hz or 60Hz, sine wave



# ELECTRONIC EQUIPMENT FILM CAPACITOR

**DLDA** Series

## ◆STANDARD RATINGS

| WV (VH)                        | Cap (μF) | Dimensions (mm) |      |                    |                    |                    | TYPE            | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |
|--------------------------------|----------|-----------------|------|--------------------|--------------------|--------------------|-----------------|-------------------------------|----------|--------------------|------------------------------------------------|
|                                |          | W               | H    | T                  | F                  | φd                 |                 |                               |          |                    |                                                |
| 1000<br>(1250V <sub>dc</sub> ) | 0.0056   | 18.0            | 11.0 | 6.0                | 15.0               | 0.8                | A               | 1.6                           | 450      | FDLDA102V562HDFDM0 | DLDA3A562H-F7DM                                |
|                                | 0.0068   |                 | 11.5 | 6.5                |                    |                    |                 | FDLDA102V682HDFDM0            |          | DLDA3A682H-F7DM    |                                                |
|                                | 0.0082   |                 | 13.0 | 7.5                |                    |                    |                 | FDLDA102V822HDFDM0            |          | DLDA3A822H-F7DM    |                                                |
|                                | 0.01     |                 | 13.5 | 8.0                |                    |                    |                 | FDLDA102V103HDFDM0            |          | DLDA3A103H-F7DM    |                                                |
|                                | 0.012    |                 | 15.0 | 9.0                |                    |                    |                 | FDLDA102V123HDFDM0            |          | DLDA3A123H-F7DM    |                                                |
|                                | 0.015    |                 | 16.0 | 9.5                |                    |                    |                 | FDLDA102V153HDFDM0            |          | DLDA3A153H-F7DM    |                                                |
|                                | 0.018    |                 | 16.5 | 10.5               |                    |                    |                 | FDLDA102V183HDFDM0            |          | DLDA3A183H-F7DM    |                                                |
|                                | 0.022    |                 | 17.5 | 11.5               |                    |                    |                 | FDLDA102V223HDFDM0            |          | DLDA3A223H-F7DM    |                                                |
|                                | 0.027    | 19.5            | 12.5 | FDLDA102V273HDFDM0 | DLDA3A273H-F7DM    |                    |                 |                               |          |                    |                                                |
|                                | 0.033    | 16.5            | 10.5 | B                  | 4.3                | FDLDA102V333HNLDM0 | DLDA3A333H-F2DM |                               |          |                    |                                                |
|                                | 0.039    | 17.5            | 11.0 |                    | 4.9                | FDLDA102V393HNLDM0 | DLDA3A393H-F2DM |                               |          |                    |                                                |
|                                | 0.047    | 19.5            | 12.0 |                    | 5.5                | FDLDA102V473HNLDM0 | DLDA3A473H-F2DM |                               |          |                    |                                                |
|                                | 0.056    | 20.5            | 13.0 |                    | 6.1                | FDLDA102V563HNLDM0 | DLDA3A563H-F2DM |                               |          |                    |                                                |
|                                | 0.068    | 21.5            | 14.5 |                    | 6.7                | FDLDA102V683HNLDM0 | DLDA3A683H-F2DM |                               |          |                    |                                                |
|                                | 0.001    | 12.0            | 6.5  |                    | 0.35               | FDLDA1C2V102HDFDM0 | DLDA3B102H-F7DM |                               |          |                    |                                                |
|                                | 0.0012   | 12.5            | 6.5  |                    | 0.51               | FDLDA1C2V122HDFDM0 | DLDA3B122H-F7DM |                               |          |                    |                                                |
| 0.0015                         | 13.0     | 7.0             | 0.67 |                    | FDLDA1C2V152HDFDM0 | DLDA3B152H-F7DM    |                 |                               |          |                    |                                                |
| 0.0018                         | 12.5     | 7.0             | 0.84 | FDLDA1C2V182HDFDM0 | DLDA3B182H-F7DM    |                    |                 |                               |          |                    |                                                |
| 0.0022                         | 13.0     | 7.5             | 1.0  | FDLDA1C2V222HDFDM0 | DLDA3B222H-F7DM    |                    |                 |                               |          |                    |                                                |
| 0.0027                         | 13.5     | 8.0             | 1.1  | FDLDA1C2V272HDFDM0 | DLDA3B272H-F7DM    |                    |                 |                               |          |                    |                                                |
| 0.0033                         | 14.0     | 8.5             | 1.3  | FDLDA1C2V332HDFDM0 | DLDA3B332H-F7DM    |                    |                 |                               |          |                    |                                                |
| 0.0039                         | 14.5     | 9.0             | 1.4  | FDLDA1C2V392HDFDM0 | DLDA3B392H-F7DM    |                    |                 |                               |          |                    |                                                |
| 0.0047                         | 14.0     | 7.0             | 1.6  | FDLDA1C2V472HNLDM0 | DLDA3B472H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.0056                         | 14.5     | 7.5             | 2.1  | FDLDA1C2V562HNLDM0 | DLDA3B562H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.0068                         | 15.5     | 8.0             | 2.5  | FDLDA1C2V682HNLDM0 | DLDA3B682H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.0082                         | 16.0     | 8.5             | 3.0  | FDLDA1C2V822HNLDM0 | DLDA3B822H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.01                           | 16.5     | 9.0             | 3.5  | FDLDA1C2V103HNLDM0 | DLDA3B103H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.012                          | 17.0     | 10.0            | 3.9  | FDLDA1C2V123HNLDM0 | DLDA3B123H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.015                          | 18.0     | 11.0            | 4.3  | FDLDA1C2V153HNLDM0 | DLDA3B153H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.018                          | 19.0     | 12.0            | 4.7  | FDLDA1C2V183HNLDM0 | DLDA3B183H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.022                          | 19.0     | 11.5            | 5.1  | FDLDA1C2V223HELDM0 | DLDA3B223H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.027                          | 20.0     | 12.5            | 5.6  | FDLDA1C2V273HELDM0 | DLDA3B273H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.033                          | 21.0     | 14.0            | 6.0  | FDLDA1C2V333HELDM0 | DLDA3B333H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.039                          | 22.0     | 15.0            | 6.5  | FDLDA1C2V393HELDM0 | DLDA3B393H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.047                          | 23.5     | 16.5            | 7.1  | FDLDA1C2V473HELDM0 | DLDA3B473H-F2DM    |                    |                 |                               |          |                    |                                                |
| 0.056                          | 25.0     | 17.5            | 7.7  | FDLDA1C2V563HELDM0 | DLDA3B563H-F2DM    |                    |                 |                               |          |                    |                                                |
| 1250<br>(1600V <sub>dc</sub> ) | 0.001    | 18.0            | 12.0 | 6.5                | 15.0               | 0.8                | A               | 0.39                          | 630      | FDLDA152V102HDFDM0 | DLDA3L102H-F7DM                                |
|                                | 0.0012   |                 | 12.5 | 6.5                |                    |                    |                 | 0.54                          |          | FDLDA152V122HDFDM0 | DLDA3L122H-F7DM                                |
|                                | 0.0015   |                 | 13.0 | 7.0                |                    |                    |                 | 0.69                          |          | FDLDA152V152HDFDM0 | DLDA3L152H-F7DM                                |
|                                | 0.0018   |                 | 13.5 | 7.5                |                    |                    |                 | 0.85                          |          | FDLDA152V182HDFDM0 | DLDA3L182H-F7DM                                |
|                                | 0.0022   |                 | 14.0 | 8.0                |                    |                    |                 | 1.0                           |          | FDLDA152V222HDFDM0 | DLDA3L222H-F7DM                                |
|                                | 0.0027   |                 | 14.5 | 9.0                |                    |                    |                 | 1.1                           |          | FDLDA152V272HDFDM0 | DLDA3L272H-F7DM                                |
|                                | 0.0033   |                 | 14.0 | 7.0                |                    |                    |                 | 1.3                           |          | FDLDA152V332HNLDM0 | DLDA3L332H-F2DM                                |
|                                | 0.0039   |                 | 14.0 | 7.5                |                    |                    |                 | 1.6                           |          | FDLDA152V392HNLDM0 | DLDA3L392H-F2DM                                |
|                                | 0.0047   | 15.0            | 8.0  | 1.9                | FDLDA152V472HNLDM0 | DLDA3L472H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.0056   | 16.0            | 8.5  | 2.3                | FDLDA152V562HNLDM0 | DLDA3L562H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.0068   | 16.5            | 9.5  | 2.6                | FDLDA152V682HNLDM0 | DLDA3L682H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.0082   | 17.0            | 10.0 | 3.3                | FDLDA152V822HNLDM0 | DLDA3L822H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.01     | 18.0            | 11.0 | 3.9                | FDLDA152V103HNLDM0 | DLDA3L103H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.012    | 19.0            | 11.5 | 4.6                | FDLDA152V123HNLDM0 | DLDA3L123H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.015    | 20.0            | 13.0 | 5.2                | FDLDA152V153HNLDM0 | DLDA3L153H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.018    | 21.5            | 13.5 | 5.9                | FDLDA152V183HNLDM0 | DLDA3L183H-F2DM    |                 |                               |          |                    |                                                |
| 1500<br>(2000V <sub>dc</sub> ) | 0.001    | 18.0            | 12.0 | 6.5                | 15.0               | 0.8                | A               | 0.39                          | 630      | FDLDA152V102HDFDM0 | DLDA3L102H-F7DM                                |
|                                | 0.0012   |                 | 12.5 | 6.5                |                    |                    |                 | 0.54                          |          | FDLDA152V122HDFDM0 | DLDA3L122H-F7DM                                |
|                                | 0.0015   |                 | 13.0 | 7.0                |                    |                    |                 | 0.69                          |          | FDLDA152V152HDFDM0 | DLDA3L152H-F7DM                                |
|                                | 0.0018   |                 | 13.5 | 7.5                |                    |                    |                 | 0.85                          |          | FDLDA152V182HDFDM0 | DLDA3L182H-F7DM                                |
|                                | 0.0022   |                 | 14.0 | 8.0                |                    |                    |                 | 1.0                           |          | FDLDA152V222HDFDM0 | DLDA3L222H-F7DM                                |
|                                | 0.0027   |                 | 14.5 | 9.0                |                    |                    |                 | 1.1                           |          | FDLDA152V272HDFDM0 | DLDA3L272H-F7DM                                |
|                                | 0.0033   |                 | 14.0 | 7.0                |                    |                    |                 | 1.3                           |          | FDLDA152V332HNLDM0 | DLDA3L332H-F2DM                                |
|                                | 0.0039   |                 | 14.0 | 7.5                |                    |                    |                 | 1.6                           |          | FDLDA152V392HNLDM0 | DLDA3L392H-F2DM                                |
|                                | 0.0047   | 15.0            | 8.0  | 1.9                | FDLDA152V472HNLDM0 | DLDA3L472H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.0056   | 16.0            | 8.5  | 2.3                | FDLDA152V562HNLDM0 | DLDA3L562H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.0068   | 16.5            | 9.5  | 2.6                | FDLDA152V682HNLDM0 | DLDA3L682H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.0082   | 17.0            | 10.0 | 3.3                | FDLDA152V822HNLDM0 | DLDA3L822H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.01     | 18.0            | 11.0 | 3.9                | FDLDA152V103HNLDM0 | DLDA3L103H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.012    | 19.0            | 11.5 | 4.6                | FDLDA152V123HNLDM0 | DLDA3L123H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.015    | 20.0            | 13.0 | 5.2                | FDLDA152V153HNLDM0 | DLDA3L153H-F2DM    |                 |                               |          |                    |                                                |
|                                | 0.018    | 21.5            | 13.5 | 5.9                | FDLDA152V183HNLDM0 | DLDA3L183H-F2DM    |                 |                               |          |                    |                                                |

(1)The maximum ripple current : +85°C max., 100kHz, sine wave

(2)WV(Vac) : 50Hz or 60Hz, sine wave

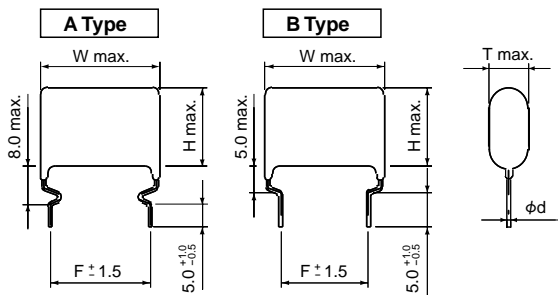
◆STANDARD RATINGS

| WV (VH)                        | Cap (μF) | Dimensions (mm) |      |      |                   |                 | TYPE | Maximum ripple current (Arms) | WV (Vac) | Part Number       | Previous Part Number (Just for your reference) |
|--------------------------------|----------|-----------------|------|------|-------------------|-----------------|------|-------------------------------|----------|-------------------|------------------------------------------------|
|                                |          | W               | H    | T    | F                 | φd              |      |                               |          |                   |                                                |
| 1800<br>(2000V <sub>ac</sub> ) | 0.001    | 22.5            | 11.0 | 6.5  | 15.0              | 0.8             | B    | 0.44                          | 710      | FDLDA182V102HNLD0 | DLDA3S102H-F2DM                                |
|                                | 0.0012   |                 | 11.5 | 7.0  |                   |                 |      | 0.61                          |          | FDLDA182V122HNLD0 | DLDA3S122H-F2DM                                |
|                                | 0.0015   |                 | 13.0 | 8.0  |                   |                 |      | 0.78                          |          | FDLDA182V152HNLD0 | DLDA3S152H-F2DM                                |
|                                | 0.0018   |                 | 13.5 | 8.5  |                   |                 |      | 1.0                           |          | FDLDA182V182HNLD0 | DLDA3S182H-F2DM                                |
|                                | 0.0022   |                 | 13.0 | 8.0  |                   |                 |      | 1.1                           |          | FDLDA182V222HNLD0 | DLDA3S222H-F2DM                                |
|                                | 0.0027   |                 | 15.0 | 8.5  |                   |                 |      | 1.3                           |          | FDLDA182V272HNLD0 | DLDA3S272H-F2DM                                |
|                                | 0.0033   |                 | 15.5 | 9.0  |                   |                 |      | 1.4                           |          | FDLDA182V332HNLD0 | DLDA3S332H-F2DM                                |
|                                | 0.0039   |                 | 16.0 | 10.0 |                   |                 |      | 1.8                           |          | FDLDA182V392HNLD0 | DLDA3S392H-F2DM                                |
|                                | 0.0047   |                 | 17.0 | 10.5 |                   |                 |      | 2.2                           |          | FDLDA182V472HNLD0 | DLDA3S472H-F2DM                                |
|                                | 0.0056   |                 | 18.5 | 11.5 |                   |                 |      | 2.6                           |          | FDLDA182V562HNLD0 | DLDA3S562H-F2DM                                |
|                                | 0.0068   |                 | 19.5 | 12.5 |                   |                 |      | 3.0                           |          | FDLDA182V682HNLD0 | DLDA3S682H-F2DM                                |
|                                | 0.0082   |                 | 20.5 | 13.5 |                   |                 |      | 3.7                           |          | FDLDA182V822HNLD0 | DLDA3S822H-F2DM                                |
|                                | 0.01     | 22.0            | 15.0 | 4.4  | FDLDA182V103HNLD0 | DLDA3S103H-F2DM |      |                               |          |                   |                                                |
|                                | 0.012    | 21.0            | 14.0 | 5.3  | FDLDA182V123HELD0 | DLDA3S123H-F2DM |      |                               |          |                   |                                                |
|                                | 0.015    | 22.5            | 15.5 | 6.1  | FDLDA182V153HELD0 | DLDA3S153H-F2DM |      |                               |          |                   |                                                |
|                                | 0.018    | 24.0            | 16.5 | 6.4  | FDLDA182V183HELD0 | DLDA3S183H-F2DM |      |                               |          |                   |                                                |

(1)The maximum ripple current : +85°C max., 100kHz, sine wave

(2)WV(Vac) : 50Hz or 60Hz, sine wave

◆DIMENSIONS (mm)





# ELECTRONIC EQUIPMENT FILM CAPACITOR

## DTD-Z Series

- Maximum operating temperature 105°C.
- Stacked type.
- Very small type.



### ◆ SPECIFICATIONS

| Items                                       | Characteristics                                                                                             |                                                  |    |     |     |     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----|-----|-----|-----|
| Category temperature range                  | -40 to +105°C                                                                                               |                                                  |    |     |     |     |
| Rated voltage range                         | 35 to 250V <sub>dc</sub>                                                                                    |                                                  |    |     |     |     |
| Capacitance tolerance                       | ±10% (K)                                                                                                    |                                                  |    |     |     |     |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                   |                                                  |    |     |     |     |
| Dissipation factor (tanδ)                   | Not more than 1.0% at 1kHz.                                                                                 |                                                  |    |     |     |     |
| Insulation resistance (Terminal - Terminal) | No less than 9000MΩ : Equal or less than 0.33μF.                                                            |                                                  |    |     |     |     |
|                                             | No less than 3000ΩF : More than 0.33μF.                                                                     |                                                  |    |     |     |     |
|                                             | Rated voltage (V <sub>dc</sub> )                                                                            | 35                                               | 50 | 100 | 160 | 250 |
|                                             | Measurement voltage (V <sub>dc</sub> )                                                                      | 10                                               | 50 | 100 | 100 | 100 |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 85°C.    |                                                  |    |     |     |     |
|                                             | Appearance                                                                                                  | No serious degradation                           |    |     |     |     |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 3000MΩ : Equal or less than 0.33μF. |    |     |     |     |
|                                             |                                                                                                             | No less than 1000ΩF : More than 0.33μF.          |    |     |     |     |
|                                             | Dissipation factor (tanδ)                                                                                   | Not more than 1.1% at 1kHz.                      |    |     |     |     |
| Capacitance change                          | Within ±7% of initial value.                                                                                |                                                  |    |     |     |     |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH. |                                                  |    |     |     |     |
|                                             | Appearance                                                                                                  | No serious degradation.                          |    |     |     |     |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 3000MΩ : Equal or less than 0.33μF. |    |     |     |     |
|                                             |                                                                                                             | No less than 1000ΩF : More than 0.33μF.          |    |     |     |     |
|                                             | Dissipation factor (tanδ)                                                                                   | Not more than 1.1% at 1kHz.                      |    |     |     |     |
| Capacitance change                          | Within ±10% of initial value.                                                                               |                                                  |    |     |     |     |

### ◆ STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Dimensions (mm) |      |                    |             |     | Maximum ripple current (Arms) | WV (V <sub>ac</sub> ) | Part Number        | Previous Part Number (Just for your reference) |                    |                    |                   |             |
|-----------------------|----------|-----------------|------|--------------------|-------------|-----|-------------------------------|-----------------------|--------------------|------------------------------------------------|--------------------|--------------------|-------------------|-------------|
|                       |          | W               | H    | T                  | P           | φd  |                               |                       |                    |                                                |                    |                    |                   |             |
| 35                    | 3.3      | 16.0            | 10.0 | 6.7                | 12.5        | 0.8 | 2.5                           | 14                    | FDTDZ350V335KGAGZ0 | DTDG1V335KZ                                    |                    |                    |                   |             |
|                       | 4.7      |                 | 12.5 | 7.2                |             |     | 3.1                           |                       | FDTDZ350V475KGAGZ0 | DTDG1V475KZ                                    |                    |                    |                   |             |
|                       | 6.8      |                 | 9.1  | 3.8                |             |     | FDTDZ350V685KGAGZ0            |                       | DTDG1V685KZ        |                                                |                    |                    |                   |             |
|                       | 10       |                 | 15.0 | 9.5                |             |     | 4.1                           |                       | FDTDZ350V106KGAGZ0 | DTDG1V106KZ                                    |                    |                    |                   |             |
|                       | 15       |                 | 11.1 | 4.5                |             |     | FDTDZ350V156KGAGZ0            |                       | DTDG1V156KZ        |                                                |                    |                    |                   |             |
|                       | 20       |                 | 20.0 | 13.0               |             |     | 5.0                           |                       | FDTDZ350V206KGAGZ0 | DTDG1V206KZ                                    |                    |                    |                   |             |
|                       | 0.1      |                 | 5.0  | 4.4                |             |     | 0.19                          |                       | FDTDZ500U104KAAAZ0 | DTDA1H104KZ                                    |                    |                    |                   |             |
| 0.15                  | 7.0      | 4.3             | 0.26 | FDTDZ500U154KAAAZ0 | DTDA1H154KZ |     |                               |                       |                    |                                                |                    |                    |                   |             |
| 50                    | 0.22     | 7.5             | 10.0 | 4.9                | 5.0         | 0.6 | 0.40                          | 16                    | FDTDZ500U224KAAAZ0 | DTDA1H224KZ                                    |                    |                    |                   |             |
|                       | 0.33     |                 |      |                    |             |     |                               |                       | 4.2                | 0.33                                           | FDTDZ500U334KAAAZ0 | DTDA1H334KZ        |                   |             |
|                       | 0.47     |                 |      |                    |             |     |                               |                       | 5.8                | 0.57                                           | FDTDZ500U474KAAAZ0 | DTDA1H474KZ        |                   |             |
|                       | 0.68     |                 |      |                    |             |     |                               |                       | 6.5                | 0.73                                           | FDTDZ500U684KAAAZ0 | DTDA1H684KZ        |                   |             |
|                       | 1.0      |                 |      |                    |             |     |                               |                       | 7.7                | 0.90                                           | FDTDZ500U105KAAAZ0 | DTDA1H105KZ        |                   |             |
|                       | 0.33     |                 |      |                    |             |     |                               |                       | 7.0                | 4.3                                            | 0.40               | FDTDZ500U334KBABZ0 | DTDB1H334KZ       |             |
|                       | 0.47     |                 |      |                    |             |     |                               |                       | 4.1                | 0.57                                           | FDTDZ500U474KBABZ0 | DTDB1H474KZ        |                   |             |
|                       | 10.5     | 0.68            | 10.5 | 10.0               | 5.0         | 7.5 | 0.6                           | 0.90                  | 16                 | FDTDZ500U684KBABZ0                             | DTDB1H684KZ        |                    |                   |             |
|                       |          | 1.0             |      |                    |             |     |                               |                       |                    | 6.2                                            | 1.2                | FDTDZ500U105KBABZ0 | DTDB1H105KZ       |             |
|                       |          | 1.5             |      |                    |             |     |                               |                       |                    | 6.6                                            | 1.6                | FDTDZ500U155KBABZ0 | DTDB1H155KZ       |             |
|                       |          | 2.2             |      |                    |             |     |                               |                       |                    | 8.8                                            | 1.6                | FDTDZ500U225KBABZ0 | DTDB1H225KZ       |             |
|                       |          | 3.3             |      |                    |             |     |                               |                       |                    | 15.0                                           | 1.9                | FDTDZ500U335KBABZ0 | DTDB1H335KZ       |             |
|                       |          | 0.47            |      |                    |             |     |                               |                       |                    | 7.0                                            | 4.4                | 0.57               | FDTDZ500U474KACZ0 | DTDC1H474KZ |
|                       |          | 0.68            |      |                    |             |     |                               |                       |                    | 4.2                                            | 0.73               | FDTDZ500U684KACZ0  | DTDC1H684KZ       |             |
|                       |          | 1.0             |      |                    |             |     |                               |                       |                    | 10.0                                           | 5.1                | 0.90               | FDTDZ500U105KACZ0 | DTDC1H105KZ |
|                       |          | 1.5             |      |                    |             |     |                               |                       |                    | 6.2                                            | 1.2                | FDTDZ500U155KACZ0  | DTDC1H155KZ       |             |
|                       |          | 2.2             |      |                    |             |     |                               |                       |                    | 6.7                                            | 1.6                | FDTDZ500U225KACZ0  | DTDC1H225KZ       |             |
| 17.5                  | 3.3      | 12.5            | 10.0 | 8.8                | 10.0        | 0.6 | 1.9                           | 16                    | FDTDZ500U335KACZ0  | DTDC1H335KZ                                    |                    |                    |                   |             |
|                       | 4.7      |                 |      |                    |             |     |                               |                       | 15.0               | 10.2                                           | 2.2                | FDTDZ500U475KACZ0  | DTDC1H475KZ       |             |
|                       | 6.8      |                 |      |                    |             |     |                               |                       | 20.0               | 10.6                                           | 3.1                | FDTDZ500U685KACZ0  | DTDC1H685KZ       |             |
|                       | 0.68     | 17.5            | 10.0 | 4.0                | 15.0        | 0.6 | 0.73                          | 16                    | FDTDZ500U684KDADZ0 | DTDD1H684KZ                                    |                    |                    |                   |             |
|                       | 1.0      |                 |      |                    |             |     |                               |                       | 4.2                | 0.90                                           | FDTDZ500U105KDADZ0 | DTDD1H105KZ        |                   |             |
|                       | 1.5      |                 |      |                    |             |     |                               |                       | 4.9                | 1.2                                            | FDTDZ500U155KDADZ0 | DTDD1H155KZ        |                   |             |
|                       | 2.2      |                 |      |                    |             |     |                               |                       | 5.8                | 1.6                                            | FDTDZ500U225KDADZ0 | DTDD1H225KZ        |                   |             |
|                       | 3.3      |                 |      |                    |             |     |                               |                       | 12.5               | 6.4                                            | 1.9                | FDTDZ500U335KDADZ0 | DTDD1H335KZ       |             |
|                       | 4.7      |                 |      |                    |             |     |                               |                       | 15.0               | 6.9                                            | 2.2                | FDTDZ500U475KDADZ0 | DTDD1H475KZ       |             |
|                       | 6.8      |                 |      |                    |             |     |                               |                       | 9.3                | 3.1                                            | FDTDZ500U685KDADZ0 | DTDD1H685KZ        |                   |             |
|                       | 10       |                 |      |                    |             |     |                               |                       | 20.0               | 10.0                                           | 4.1                | FDTDZ500U106KDADZ0 | DTDD1H106KZ       |             |

- (1) The maximum ripple current : +85°C max., 100kHz, sine wave  
(2) WV(V<sub>ac</sub>) : 50Hz or 60Hz, sine wave





# ELECTRONIC EQUIPMENT FILM CAPACITOR

**DTD-Z** Series

## ◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |      |                    | Maximum ripple current (Arms) | WV (Vac)           | Part Number        | Previous Part Number (Just for your reference) |             |    |                    |             |
|----------|----------|-----------------|------|------|------|--------------------|-------------------------------|--------------------|--------------------|------------------------------------------------|-------------|----|--------------------|-------------|
|          |          | W               | H    | T    | P    | φd                 |                               |                    |                    |                                                |             |    |                    |             |
| 50       | 4.7      | 25.0            | 12.5 | 5.8  | 22.5 | 0.8                | 2.2                           | 16                 | FDTDZ500U475KEAEZ0 | DTDE1H475KZ                                    |             |    |                    |             |
|          | 6.8      |                 |      | 7.5  |      |                    | 3.1                           |                    | FDTDZ500U685KEAEZ0 | DTDE1H685KZ                                    |             |    |                    |             |
|          | 10       |                 | 8.8  | 4.1  |      |                    | FDTDZ500U106KEAEZ0            |                    | DTDE1H106KZ        |                                                |             |    |                    |             |
|          | 15       |                 | 20.0 | 9.1  |      |                    | 5.0                           |                    | FDTDZ500U156KEAEZ0 | DTDE1H156KZ                                    |             |    |                    |             |
|          | 22       |                 |      | 11.9 |      |                    | 5.0                           |                    | FDTDZ500U226KEAEZ0 | DTDE1H226KZ                                    |             |    |                    |             |
| 100      | 0.033    | 7.5             | 5.0  | 4.0  | 5.0  | 0.5                | 0.10                          | 44                 | FDTDZ101U333KAAAZ0 | DTDA2A333KZ                                    |             |    |                    |             |
|          | 0.047    |                 |      | 4.0  |      |                    | 0.13                          |                    | FDTDZ101U473KAAAZ0 | DTDA2A473KZ                                    |             |    |                    |             |
|          | 0.068    |                 |      | 4.1  |      |                    | 0.15                          |                    | FDTDZ101U683KAAAZ0 | DTDA2A683KZ                                    |             |    |                    |             |
|          | 0.1      |                 | 7.0  | 4.6  |      |                    | 0.22                          |                    | FDTDZ101U104KAAAZ0 | DTDA2A104KZ                                    |             |    |                    |             |
|          | 0.15     |                 |      | 5.2  |      |                    | 0.29                          |                    | FDTDZ101U154KAAAZ0 | DTDA2A154KZ                                    |             |    |                    |             |
|          | 0.22     |                 |      | 5.1  |      |                    | 0.39                          |                    | FDTDZ101U224KAAAZ0 | DTDA2A224KZ                                    |             |    |                    |             |
|          | 0.33     |                 | 10.0 | 6.3  |      |                    | 0.50                          |                    | FDTDZ101U334KAAAZ0 | DTDA2A334KZ                                    |             |    |                    |             |
|          | 0.47     |                 |      | 7.8  |      |                    | 0.60                          |                    | FDTDZ101U474KAAAZ0 | DTDA2A474KZ                                    |             |    |                    |             |
|          | 0.68     |                 |      | 8.4  |      |                    | 0.75                          |                    | FDTDZ101U684KAAAZ0 | DTDA2A684KZ                                    |             |    |                    |             |
|          | 0.1      |                 | 10.5 | 7.0  |      |                    | 4.0                           |                    | 7.5                | 0.5                                            | 0.22        | 44 | FDTDZ101U104KBABZ0 | DTDB2A104KZ |
|          | 0.15     |                 |      |      |      |                    | 4.0                           |                    |                    |                                                | 0.29        |    | FDTDZ101U154KBABZ0 | DTDB2A154KZ |
|          | 0.22     |                 |      |      |      |                    | 4.6                           |                    |                    |                                                | 0.39        |    | FDTDZ101U224KBABZ0 | DTDB2A224KZ |
|          | 0.33     | 10.0            |      | 4.6  | 0.50 | FDTDZ101U334KBABZ0 | DTDB2A334KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 0.47     |                 |      | 5.5  | 0.60 | FDTDZ101U474KBABZ0 | DTDB2A474KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 0.68     |                 |      | 6.7  | 0.75 | FDTDZ101U684KBABZ0 | DTDB2A684KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 1.0      | 12.5            |      | 7.4  | 0.90 | FDTDZ101U105KBABZ0 | DTDB2A105KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 1.5      |                 |      | 9.7  | 1.2  | FDTDZ101U155KBABZ0 | DTDB2A155KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 2.2      |                 |      | 10.1 | 1.6  | FDTDZ101U225KBABZ0 | DTDB2A225KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 0.15     | 12.5            |      | 7.0  | 4.1  | 10.0               | 0.6                           | 0.29               |                    |                                                | 44          |    | FDTDZ101U154KCACZ0 | DTDC2A154KZ |
|          | 0.22     |                 |      |      | 4.1  |                    |                               | 0.39               |                    |                                                |             |    | FDTDZ101U224KCACZ0 | DTDC2A224KZ |
|          | 0.33     |                 |      |      | 4.7  |                    |                               | 0.50               |                    |                                                |             |    | FDTDZ101U334KCACZ0 | DTDC2A334KZ |
|          | 0.47     |                 | 10.0 | 4.6  | 0.60 |                    |                               | FDTDZ101U474KCACZ0 | DTDC2A474KZ        |                                                |             |    |                    |             |
|          | 0.68     |                 |      | 5.5  | 0.75 |                    |                               | FDTDZ101U684KCACZ0 | DTDC2A684KZ        |                                                |             |    |                    |             |
|          | 1.0      |                 |      | 6.8  | 0.90 |                    |                               | FDTDZ101U105KCACZ0 | DTDC2A105KZ        |                                                |             |    |                    |             |
|          | 1.5      |                 | 12.5 | 7.5  | 1.2  |                    |                               | FDTDZ101U155KCACZ0 | DTDC2A155KZ        |                                                |             |    |                    |             |
|          | 2.2      |                 |      | 9.8  | 1.6  |                    |                               | FDTDZ101U225KCACZ0 | DTDC2A225KZ        |                                                |             |    |                    |             |
|          | 3.3      |                 |      | 11.5 | 1.9  |                    |                               | FDTDZ101U335KCACZ0 | DTDC2A335KZ        |                                                |             |    |                    |             |
|          | 4.7      |                 | 17.5 | 20.0 | 11.8 |                    |                               | 15.0               | 0.6                | 2.2                                            |             | 44 | FDTDZ101U475KCACZ0 | DTDC2A475KZ |
|          | 0.47     |                 |      |      | 4.2  |                    |                               |                    |                    | 0.60                                           |             |    | FDTDZ101U474KDADZ0 | DTDD2A474KZ |
|          | 0.68     |                 |      |      | 4.2  |                    |                               |                    |                    | 0.75                                           |             |    | FDTDZ101U684KDADZ0 | DTDD2A684KZ |
|          | 1.0      | 10.0            |      | 5.0  | 0.90 | FDTDZ101U105KDADZ0 | DTDD2A105KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 1.5      |                 |      | 6.2  | 1.2  | FDTDZ101U155KDADZ0 | DTDD2A155KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 2.2      |                 |      | 7.9  | 1.6  | FDTDZ101U225KDADZ0 | DTDD2A225KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 3.3      | 12.5            |      | 8.7  | 1.9  | FDTDZ101U335KDADZ0 | DTDD2A335KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 4.7      |                 |      | 9.7  | 2.2  | FDTDZ101U475KDADZ0 | DTDD2A475KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 6.8      |                 |      | 10.1 | 3.1  | FDTDZ101U685KDADZ0 | DTDD2A685KZ                   |                    |                    |                                                |             |    |                    |             |
|          | 3.3      | 25.0            |      | 12.5 | 6.4  | 22.5               | 0.8                           |                    |                    | 1.9                                            | 44          |    | FDTDZ101U335KEAEZ0 | DTDE2A335KZ |
|          | 4.7      |                 |      |      | 8.0  |                    |                               |                    |                    | 2.2                                            |             |    | FDTDZ101U475KEAEZ0 | DTDE2A475KZ |
|          | 6.8      |                 |      | 9.0  | 3.1  |                    |                               |                    |                    | FDTDZ101U685KEAEZ0                             |             |    | DTDE2A685KZ        |             |
|          | 10       |                 | 20.0 | 9.5  | 3.9  |                    |                               | FDTDZ101U106KEAEZ0 | DTDE2A106KZ        |                                                |             |    |                    |             |
|          | 15       |                 |      | 12.9 | 4.8  |                    |                               | FDTDZ101U156KEAEZ0 | DTDE2A156KZ        |                                                |             |    |                    |             |
|          | 160      | 0.022           | 7.5  | 5.0  | 4.0  | 5.0                | 0.5                           | 0.11               | 63                 | FDTDZ161U223KAAAZ0                             | DTDA2C223KZ |    |                    |             |
| 0.033    |          | 4.0             |      |      | 0.13 |                    |                               | FDTDZ161U333KAAAZ0 |                    | DTDA2C333KZ                                    |             |    |                    |             |
| 0.047    |          | 4.3             |      |      | 0.17 |                    |                               | FDTDZ161U473KAAAZ0 |                    | DTDA2C473KZ                                    |             |    |                    |             |
| 0.068    |          | 7.0             |      | 4.5  | 0.21 |                    |                               | FDTDZ161U683KAAAZ0 |                    | DTDA2C683KZ                                    |             |    |                    |             |
| 0.1      |          |                 |      | 5.5  | 0.25 |                    |                               | FDTDZ161U104KAAAZ0 |                    | DTDA2C104KZ                                    |             |    |                    |             |
| 0.15     |          |                 |      | 5.4  | 0.36 |                    |                               | FDTDZ161U154KAAAZ0 |                    | DTDA2C154KZ                                    |             |    |                    |             |
| 0.22     |          | 10.0            |      | 6.7  | 0.48 |                    |                               | FDTDZ161U224KAAAZ0 |                    | DTDA2C224KZ                                    |             |    |                    |             |
| 0.33     |          |                 |      | 7.4  | 0.59 |                    |                               | FDTDZ161U334KAAAZ0 |                    | DTDA2C334KZ                                    |             |    |                    |             |
| 0.47     |          |                 |      | 9.5  | 0.70 |                    |                               | FDTDZ161U474KAAAZ0 |                    | DTDA2C474KZ                                    |             |    |                    |             |

(1)The maximum ripple current : +85°C max., 100kHz, sine wave

(2)WV(Vac) : 50Hz or 60Hz, sine wave





# ELECTRONIC EQUIPMENT FILM CAPACITOR

**DTD-Z** Series

## ◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Dimensions (mm) |       |                    |                    |                   | Maximum ripple current (Arms) | WV (Vac) | Part Number        | Previous Part Number (Just for your reference) |             |
|----------|----------|-----------------|-------|--------------------|--------------------|-------------------|-------------------------------|----------|--------------------|------------------------------------------------|-------------|
|          |          | W               | H     | T                  | P                  | φd                |                               |          |                    |                                                |             |
| 160      | 0.047    | 10.5            | 7.0   | 4.0                | 7.5                | 0.5               | 0.17                          | 63       | FDTDZ161U473KBABZ0 | DTDB2C473KZ                                    |             |
|          | 0.068    |                 |       | 4.2                |                    |                   | 0.21                          |          | FDTDZ161U683KBABZ0 | DTDB2C683KZ                                    |             |
|          | 0.1      |                 |       | 4.2                |                    |                   | 0.25                          |          | FDTDZ161U104KBABZ0 | DTDB2C104KZ                                    |             |
|          | 0.15     |                 |       | 5.0                |                    |                   | 0.36                          |          | FDTDZ161U154KBABZ0 | DTDB2C154KZ                                    |             |
|          | 0.22     |                 |       | 4.5                |                    |                   | 0.48                          |          | FDTDZ161U224KBABZ0 | DTDB2C224KZ                                    |             |
|          | 0.33     |                 |       | 6.1                |                    |                   | 0.59                          |          | FDTDZ161U334KBABZ0 | DTDB2C334KZ                                    |             |
|          | 0.47     |                 | 7.5   | 0.70               | FDTDZ161U474KBABZ0 | DTDB2C474KZ       |                               |          |                    |                                                |             |
|          | 0.68     |                 | 8.0   | 1.0                | FDTDZ161U684KBABZ0 | DTDB2C684KZ       |                               |          |                    |                                                |             |
|          | 1.0      |                 | 9.1   | 1.2                | FDTDZ161U105KBABZ0 | DTDB2C105KZ       |                               |          |                    |                                                |             |
|          | 0.068    |                 | 4.0   | 0.21               | FDTDZ161U683KCACZ0 | DTDC2C683KZ       |                               |          |                    |                                                |             |
|          | 0.1      |                 | 4.2   | 0.25               | FDTDZ161U104KCACZ0 | DTDC2C104KZ       |                               |          |                    |                                                |             |
|          | 0.15     |                 | 4.3   | 0.36               | FDTDZ161U154KCACZ0 | DTDC2C154KZ       |                               |          |                    |                                                |             |
|          | 0.22     | 4.2             | 0.48  | FDTDZ161U224KCACZ0 | DTDC2C224KZ        |                   |                               |          |                    |                                                |             |
|          | 0.33     | 5.0             | 0.59  | FDTDZ161U334KCACZ0 | DTDC2C334KZ        |                   |                               |          |                    |                                                |             |
|          | 0.47     | 6.0             | 0.70  | FDTDZ161U474KCACZ0 | DTDC2C474KZ        |                   |                               |          |                    |                                                |             |
|          | 0.68     | 7.5             | 1.0   | FDTDZ161U684KCACZ0 | DTDC2C684KZ        |                   |                               |          |                    |                                                |             |
|          | 1.0      | 8.2             | 1.2   | FDTDZ161U105KCACZ0 | DTDC2C105KZ        |                   |                               |          |                    |                                                |             |
|          | 1.5      | 9.5             | 1.9   | FDTDZ161U155KCACZ0 | DTDC2C155KZ        |                   |                               |          |                    |                                                |             |
|          | 2.2      | 9.9             | 2.6   | FDTDZ161U225KCACZ0 | DTDC2C225KZ        |                   |                               |          |                    |                                                |             |
|          | 0.22     | 4.2             | 0.48  | FDTDZ161U224KDADZ0 | DTDD2C224KZ        |                   |                               |          |                    |                                                |             |
|          | 0.33     | 4.5             | 0.59  | FDTDZ161U334KDADZ0 | DTDD2C334KZ        |                   |                               |          |                    |                                                |             |
|          | 0.47     | 4.5             | 0.70  | FDTDZ161U474KDADZ0 | DTDD2C474KZ        |                   |                               |          |                    |                                                |             |
|          | 0.68     | 5.4             | 1.0   | FDTDZ161U684KDADZ0 | DTDD2C684KZ        |                   |                               |          |                    |                                                |             |
|          | 1.0      | 6.7             | 1.2   | FDTDZ161U105KDADZ0 | DTDD2C105KZ        |                   |                               |          |                    |                                                |             |
|          | 1.5      | 7.4             | 1.9   | FDTDZ161U155KDADZ0 | DTDD2C155KZ        |                   |                               |          |                    |                                                |             |
|          | 2.2      | 9.6             | 2.6   | FDTDZ161U225KDADZ0 | DTDD2C225KZ        |                   |                               |          |                    |                                                |             |
|          | 3.3      | 11.1            | 3.3   | FDTDZ161U335KDADZ0 | DTDD2C335KZ        |                   |                               |          |                    |                                                |             |
|          | 4.7      | 11.5            | 4.0   | FDTDZ161U475KDADZ0 | DTDD2C475KZ        |                   |                               |          |                    |                                                |             |
|          | 1.0      | 6.0             | 1.2   | FDTDZ161U105KEAEZ0 | DTDE2C105KZ        |                   |                               |          |                    |                                                |             |
|          | 1.5      | 6.0             | 1.9   | FDTDZ161U155KEAEZ0 | DTDE2C155KZ        |                   |                               |          |                    |                                                |             |
|          | 2.2      | 6.9             | 2.6   | FDTDZ161U225KEAEZ0 | DTDE2C225KZ        |                   |                               |          |                    |                                                |             |
|          | 3.3      | 9.1             | 3.3   | FDTDZ161U335KEAEZ0 | DTDE2C335KZ        |                   |                               |          |                    |                                                |             |
|          | 4.7      | 10.1            | 4.0   | FDTDZ161U475KEAEZ0 | DTDE2C475KZ        |                   |                               |          |                    |                                                |             |
|          | 6.8      | 10.6            | 4.5   | FDTDZ161U685KEAEZ0 | DTDE2C685KZ        |                   |                               |          |                    |                                                |             |
|          | 10       | 14.1            | 5.0   | FDTDZ161U106KEAEZ0 | DTDE2C106KZ        |                   |                               |          |                    |                                                |             |
|          | 250      | 0.0015          | 7.5   | 5.0                | 4.0                | 5.0               | 0.5                           | 0.020    | 125                | FDTDZ251U152KAAA0                              | DTDA2E152KZ |
|          |          | 0.0022          |       |                    | 4.0                |                   |                               | 0.026    |                    | FDTDZ251U222KAAA0                              | DTDA2E222KZ |
|          |          | 0.0033          |       |                    | 4.0                |                   |                               | 0.032    |                    | FDTDZ251U332KAAA0                              | DTDA2E332KZ |
|          |          | 0.0047          |       |                    | 4.0                |                   |                               | 0.038    |                    | FDTDZ251U472KAAA0                              | DTDA2E472KZ |
|          |          | 0.0068          |       |                    | 4.0                |                   |                               | 0.05     |                    | FDTDZ251U682KAAA0                              | DTDA2E682KZ |
|          |          | 0.01            |       |                    | 4.0                |                   |                               | 0.07     |                    | FDTDZ251U103KAAA0                              | DTDA2E103KZ |
|          |          | 0.015           |       | 4.0                | 0.09               | FDTDZ251U153KAAA0 | DTDA2E153KZ                   |          |                    |                                                |             |
|          |          | 0.022           |       | 4.0                | 0.11               | FDTDZ251U223KAAA0 | DTDA2E223KZ                   |          |                    |                                                |             |
|          |          | 0.033           |       | 4.0                | 0.16               | FDTDZ251U333KAAA0 | DTDA2E333KZ                   |          |                    |                                                |             |
|          |          | 0.047           |       | 4.5                | 0.20               | FDTDZ251U473KAAA0 | DTDA2E473KZ                   |          |                    |                                                |             |
|          |          | 0.068           |       | 5.3                | 0.25               | FDTDZ251U683KAAA0 | DTDA2E683KZ                   |          |                    |                                                |             |
|          |          | 0.1             |       | 5.3                | 0.30               | FDTDZ251U104KAAA0 | DTDA2E104KZ                   |          |                    |                                                |             |
|          |          | 0.15            | 6.6   | 0.45               | FDTDZ251U154KAAA0  | DTDA2E154KZ       |                               |          |                    |                                                |             |
| 0.22     |          | 7.1             | 0.60  | FDTDZ251U224KAAA0  | DTDA2E224KZ        |                   |                               |          |                    |                                                |             |
| 0.0047   |          | 4.0             | 0.038 | FDTDZ251U472KBABZ0 | DTDB2E472KZ        |                   |                               |          |                    |                                                |             |
| 0.0068   |          | 4.0             | 0.05  | FDTDZ251U682KBABZ0 | DTDB2E682KZ        |                   |                               |          |                    |                                                |             |
| 0.01     |          | 4.0             | 0.07  | FDTDZ251U103KBABZ0 | DTDB2E103KZ        |                   |                               |          |                    |                                                |             |
| 0.015    |          | 4.0             | 0.09  | FDTDZ251U153KBABZ0 | DTDB2E153KZ        |                   |                               |          |                    |                                                |             |
| 0.022    |          | 4.0             | 0.11  | FDTDZ251U223KBABZ0 | DTDB2E223KZ        |                   |                               |          |                    |                                                |             |
| 0.033    |          | 4.0             | 0.16  | FDTDZ251U333KBABZ0 | DTDB2E333KZ        |                   |                               |          |                    |                                                |             |
| 0.047    |          | 4.0             | 0.20  | FDTDZ251U473KBABZ0 | DTDB2E473KZ        |                   |                               |          |                    |                                                |             |
| 0.068    |          | 4.1             | 0.25  | FDTDZ251U683KBABZ0 | DTDB2E683KZ        |                   |                               |          |                    |                                                |             |
| 0.1      |          | 4.9             | 0.30  | FDTDZ251U104KBABZ0 | DTDB2E104KZ        |                   |                               |          |                    |                                                |             |
| 0.15     |          | 4.7             | 0.45  | FDTDZ251U154KBABZ0 | DTDB2E154KZ        |                   |                               |          |                    |                                                |             |
| 0.22     |          | 5.7             | 0.60  | FDTDZ251U224KBABZ0 | DTDB2E224KZ        |                   |                               |          |                    |                                                |             |
| 0.33     |          | 7.4             | 0.75  | FDTDZ251U334KBABZ0 | DTDB2E334KZ        |                   |                               |          |                    |                                                |             |
| 0.47     |          | 7.8             | 0.90  | FDTDZ251U474KBABZ0 | DTDB2E474KZ        |                   |                               |          |                    |                                                |             |
| 0.68     |          | 8.8             | 1.5   | FDTDZ251U684KBABZ0 | DTDB2E684KZ        |                   |                               |          |                    |                                                |             |

(1) The maximum ripple current : +85°C max., 100kHz, sine wave

(2) WV(Vac) : 50Hz or 60Hz, sine wave

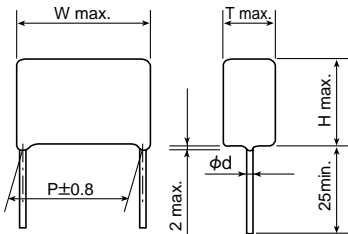
◆STANDARD RATINGS

| WV<br>(Vdc) | Cap<br>( $\mu$ F) | Dimensions (mm) |      |      |      |                    | Maximum<br>ripple current<br>(Arms) | WV<br>(Vac) | Part Number        | Previous Part Number<br>(Just for your reference) |     |     |                    |             |
|-------------|-------------------|-----------------|------|------|------|--------------------|-------------------------------------|-------------|--------------------|---------------------------------------------------|-----|-----|--------------------|-------------|
|             |                   | W               | H    | T    | P    | $\phi$ d           |                                     |             |                    |                                                   |     |     |                    |             |
| 250         | 0.047             | 12.5            | 7.0  | 4.0  | 10.0 | 0.6                | 0.20                                | 125         | FDTDZ251U473KCACZ0 | DTDC2E473KZ                                       |     |     |                    |             |
|             | 0.068             |                 |      | 4.0  |      |                    | 0.25                                |             | FDTDZ251U683KCACZ0 | DTDC2E683KZ                                       |     |     |                    |             |
|             | 0.1               |                 |      | 4.3  |      |                    | 0.30                                |             | FDTDZ251U104KCACZ0 | DTDC2E104KZ                                       |     |     |                    |             |
|             | 0.15              |                 | 5.2  | 0.45 |      |                    | FDTDZ251U154KCACZ0                  |             | DTDC2E154KZ        |                                                   |     |     |                    |             |
|             | 0.22              |                 | 5.1  | 0.60 |      |                    | FDTDZ251U224KCACZ0                  |             | DTDC2E224KZ        |                                                   |     |     |                    |             |
|             | 0.33              |                 | 6.3  | 0.75 |      |                    | FDTDZ251U334KCACZ0                  |             | DTDC2E334KZ        |                                                   |     |     |                    |             |
|             | 0.47              |                 | 7.8  | 0.90 |      |                    | FDTDZ251U474KCACZ0                  |             | DTDC2E474KZ        |                                                   |     |     |                    |             |
|             | 0.68              |                 | 8.4  | 1.5  |      |                    | FDTDZ251U684KCACZ0                  |             | DTDC2E684KZ        |                                                   |     |     |                    |             |
|             | 1.0               |                 | 9.6  | 2.1  |      |                    | FDTDZ251U105KCACZ0                  |             | DTDC2E105KZ        |                                                   |     |     |                    |             |
|             | 1.5               |                 | 10.2 | 2.6  |      |                    | FDTDZ251U155KCACZ0                  |             | DTDC2E155KZ        |                                                   |     |     |                    |             |
|             | 0.15              | 17.5            | 10.0 | 4.0  | 15.0 | 0.6                | 0.45                                | 125         | FDTDZ251U154KDADZ0 | DTDD2E154KZ                                       |     |     |                    |             |
|             | 0.22              |                 |      | 4.0  |      |                    | 0.60                                |             | FDTDZ251U224KDADZ0 | DTDD2E224KZ                                       |     |     |                    |             |
|             | 0.33              |                 |      | 4.6  |      |                    | 0.75                                |             | FDTDZ251U334KDADZ0 | DTDD2E334KZ                                       |     |     |                    |             |
|             | 0.47              |                 |      | 5.5  |      |                    | 0.90                                |             | FDTDZ251U474KDADZ0 | DTDD2E474KZ                                       |     |     |                    |             |
|             | 0.68              |                 |      | 6.8  |      |                    | 1.5                                 |             | FDTDZ251U684KDADZ0 | DTDD2E684KZ                                       |     |     |                    |             |
|             | 1.0               |                 |      | 7.4  |      |                    | 2.1                                 |             | FDTDZ251U105KDADZ0 | DTDD2E105KZ                                       |     |     |                    |             |
|             | 1.5               |                 | 8.5  | 2.6  |      |                    | FDTDZ251U155KDADZ0                  |             | DTDD2E155KZ        |                                                   |     |     |                    |             |
|             | 2.2               |                 | 8.9  | 3.2  |      |                    | FDTDZ251U225KDADZ0                  |             | DTDD2E225KZ        |                                                   |     |     |                    |             |
|             | 0.68              |                 | 25.0 | 12.5 |      |                    | 4.6                                 |             | 22.5               | 0.8                                               | 1.5 | 125 | FDTDZ251U684KEAEZ0 | DTDE2E684KZ |
|             | 1.0               |                 |      |      |      |                    | 5.6                                 |             |                    |                                                   | 2.1 |     | FDTDZ251U105KEAEZ0 | DTDE2E105KZ |
|             | 1.5               | 7.1             |      |      | 2.6  | FDTDZ251U155KEAEZ0 | DTDE2E155KZ                         |             |                    |                                                   |     |     |                    |             |
|             | 2.2               | 7.9             |      |      | 3.2  | FDTDZ251U225KEAEZ0 | DTDE2E225KZ                         |             |                    |                                                   |     |     |                    |             |
|             | 3.3               | 8.5             |      |      | 3.8  | FDTDZ251U335KEAEZ0 | DTDE2E335KZ                         |             |                    |                                                   |     |     |                    |             |

(1)The maximum ripple current : +85°C max., 100kHz, sine wave

(2)WV(Vac) : 50Hz or 60Hz, sine wave

◆DIMENSIONS (mm)





# ELECTRONIC EQUIPMENT FILM CAPACITOR

## DFDD Series



- A highly reliable capacitor for general applications using a metallized polyethylene terephthalate film as dielectric.
- Non-inductive structure made by special metal spraying process.
- The amor is a powder molded flame resisting epoxy resin (correspond V-0).

### ◆ SPECIFICATIONS

| Items                                       | Characteristics                                                                                             |                                                  |     |     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----|-----|
| Category temperature range                  | -40 to +105°C                                                                                               |                                                  |     |     |
| Rated voltage range                         | 250 to 630V <sub>dc</sub>                                                                                   |                                                  |     |     |
| Capacitance tolerance                       | ±10% (K)                                                                                                    |                                                  |     |     |
| Voltage proof (Terminal - Terminal)         | No degradation, at 150% of rated voltage shall be applied for 60 seconds.                                   |                                                  |     |     |
| Dissipation factor (tanδ)                   | No more than 1.0%                                                                                           |                                                  |     |     |
| Insulation resistance (Terminal - Terminal) | No less than 9000MΩ : Equal or less than 0.33μF.                                                            |                                                  |     |     |
|                                             | No less than 3000ΩF : More than 0.33μF.                                                                     |                                                  |     |     |
|                                             | Rated voltage (V <sub>dc</sub> )                                                                            | 250                                              | 400 | 630 |
|                                             | Measurement voltage (V <sub>dc</sub> )                                                                      | 100                                              | 100 | 500 |
| Endurance                                   | The following specifications shall be satisfied, after 1000hrs with applying rated voltage×125% at 85°C.    |                                                  |     |     |
|                                             | Appearance                                                                                                  | No serious degradation                           |     |     |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 4500MΩ : Equal or less than 0.33μF. |     |     |
|                                             |                                                                                                             | No less than 1500ΩF : More than 0.33μF.          |     |     |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than 1.1%.                               |     |     |
| Capacitance change                          | Within ±5% of initial value.                                                                                |                                                  |     |     |
| Loading under damp heat                     | The following specifications shall be satisfied, after 500hrs with applying rated voltage at 40°C 90~95%RH. |                                                  |     |     |
|                                             | Appearance                                                                                                  | No serious degradation.                          |     |     |
|                                             | Insulation resistance (Terminal - Terminal)                                                                 | No less than 4500MΩ : Equal or less than 0.33μF. |     |     |
|                                             |                                                                                                             | No less than 1500ΩF : More than 0.33μF.          |     |     |
|                                             | Dissipation factor (tanδ)                                                                                   | No more than 1.1%.                               |     |     |
| Capacitance change                          | Within ±5% of initial value.                                                                                |                                                  |     |     |

### ◆ STANDARD RATINGS (LEAD STYLE : FORMING)

| WV (V <sub>dc</sub> ) | Cap (μF) | Dimensions (mm) |      |      |                  |                  | TYPE           | Maximum ripple current (Arms) | WV (Vac) | Part Number      | Previous Part Number (Just for your reference) |
|-----------------------|----------|-----------------|------|------|------------------|------------------|----------------|-------------------------------|----------|------------------|------------------------------------------------|
|                       |          | W               | H    | T    | F                | φd               |                |                               |          |                  |                                                |
| 250                   | 0.01     | 10.8            | 7.4  | 4.3  | 7.5              | 0.6              | A              | 0.42                          | 125      | DFD251U103KBFBM0 | DFD2E103K-F7BM                                 |
|                       | 0.015    |                 | 7.5  | 4.4  |                  |                  |                | 0.43                          |          | DFD251U153KBFBM0 | DFD2E153K-F7BM                                 |
|                       | 0.022    |                 | 7.5  | 4.4  |                  |                  |                | 0.43                          |          | DFD251U223KBFBM0 | DFD2E223K-F7BM                                 |
|                       | 0.033    |                 | 7.5  | 4.5  |                  |                  |                | 0.43                          |          | DFD251U333KBFBM0 | DFD2E333K-F7BM                                 |
|                       | 0.047    |                 | 7.5  | 4.5  |                  |                  |                | 0.43                          |          | DFD251U473KBFBM0 | DFD2E473K-F7BM                                 |
|                       | 0.068    |                 | 7.5  | 4.5  |                  |                  |                | 0.45                          |          | DFD251U683KBFBM0 | DFD2E683K-F7BM                                 |
|                       | 0.1      | 13.0            | 8.4  | 5.8  | 10.0             | 0.8              | B              | 0.46                          |          | DFD251U104KBFBM0 | DFD2E104K-F7BM                                 |
|                       | 0.15     |                 | 10.5 | 6.0  |                  |                  |                | 0.62                          |          | DFD251U154KBFBM0 | DFD2E154K-F7BM                                 |
|                       | 0.22     |                 | 10.3 | 5.5  |                  |                  |                | 0.78                          |          | DFD251U224KCFBM0 | DFD2E224K-F7CM                                 |
|                       | 0.33     |                 | 12.0 | 6.5  |                  |                  |                | 0.94                          |          | DFD251U334KCFBM0 | DFD2E334K-F7CM                                 |
|                       | 0.47     |                 | 12.5 | 5.3  |                  |                  |                | 1.1                           |          | DFD251U474KDLBM0 | DFD2E474K-F2CM                                 |
|                       | 0.68     |                 | 15.0 | 7.0  |                  |                  |                | 1.4                           |          | DFD251U684KDLBM0 | DFD2E684K-F2CM                                 |
|                       | 1.0      |                 | 15.0 | 7.4  |                  |                  |                | 1.8                           |          | DFD251U105KDLBM0 | DFD2E105K-F2CM                                 |
|                       | 1.5      |                 | 17.0 | 9.0  |                  |                  |                | 2.2                           |          | DFD251U155KDLBM0 | DFD2E155K-F2CM                                 |
| 2.2                   | 26.0     | 17.0            | 8.5  | 15.0 | 2.7              | DFD251U225KELDM0 | DFD2E225K-F2DM |                               |          |                  |                                                |
| 400                   | 0.01     | 10.8            | 7.8  | 4.4  | 7.5              | 0.6              | A              | 0.42                          | 125      | DFD401U103KBFBM0 | DFD2G103K-F7BM                                 |
|                       | 0.015    |                 | 7.8  | 4.4  |                  |                  |                | 0.43                          |          | DFD401U153KBFBM0 | DFD2G153K-F7BM                                 |
|                       | 0.022    |                 | 7.8  | 4.4  |                  |                  |                | 0.43                          |          | DFD401U223KBFBM0 | DFD2G223K-F7BM                                 |
|                       | 0.033    |                 | 9.0  | 5.5  |                  |                  |                | 0.43                          |          | DFD401U333KBFBM0 | DFD2G333K-F7BM                                 |
|                       | 0.047    |                 | 8.5  | 5.0  |                  |                  |                | 0.43                          |          | DFD401U473KCFBM0 | DFD2G473K-F7CM                                 |
|                       | 0.068    |                 | 10.5 | 5.5  |                  |                  |                | 0.46                          |          | DFD401U683KCFBM0 | DFD2G683K-F7CM                                 |
|                       | 0.1      | 12.0            | 6.5  | 0.48 | DFD401U104KCFBM0 | DFD2G104K-F7CM   |                |                               |          |                  |                                                |
|                       | 0.15     | 12.5            | 5.0  | 0.67 | DFD401U154KDLBM0 | DFD2G154K-F2CM   |                |                               |          |                  |                                                |
|                       | 0.22     | 13.0            | 6.0  | 0.86 | DFD401U224KDLBM0 | DFD2G224K-F2CM   |                |                               |          |                  |                                                |
|                       | 0.33     | 15.0            | 7.0  | 1.0  | DFD401U334KDLBM0 | DFD2G334K-F2CM   |                |                               |          |                  |                                                |
|                       | 0.47     | 17.0            | 8.0  | 1.2  | DFD401U474KDLBM0 | DFD2G474K-F2CM   |                |                               |          |                  |                                                |
|                       | 0.68     | 16.5            | 7.0  | 1.7  | DFD401U684KELDM0 | DFD2G684K-F2DM   |                |                               |          |                  |                                                |
|                       | 1.0      | 18.0            | 8.5  | 2.2  | DFD401U105KELDM0 | DFD2G105K-F2DM   |                |                               |          |                  |                                                |
|                       | 1.5      | 20.0            | 10.5 | 2.9  | DFD401U155KELDM0 | DFD2G155K-F2DM   |                |                               |          |                  |                                                |

- (1) The maximum ripple current : +85°C max., 100kHz, sine wave  
 (2) WV(V<sub>ac</sub>) : 50Hz or 60Hz, sine wave

### ◆STANDARD RATINGS (LEAD STYLE : FORMING)

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |      |     | TYPE | Maximum ripple current (Arms) | WV (Vac) | Part Number     | Previous Part Number (Just for your reference) |
|----------|----------|-----------------|------|------|------|-----|------|-------------------------------|----------|-----------------|------------------------------------------------|
|          |          | W               | H    | T    | F    | φd  |      |                               |          |                 |                                                |
| 630      | 0.01     | 13.0            | 7.5  | 4.5  | 10.0 | 0.6 | A    | 0.45                          | 250      | DFD631U103KCFM0 | DFD2J103K-F7CM                                 |
|          | 0.015    |                 | 8.0  | 5.0  |      |     |      | 0.45                          |          | DFD631U153KCFM0 | DFD2J153K-F7CM                                 |
|          | 0.022    |                 | 10.5 | 5.5  |      |     |      | 0.45                          |          | DFD631U223KCFM0 | DFD2J223K-F7CM                                 |
|          | 0.033    |                 | 12.0 | 6.0  |      |     |      | 0.45                          |          | DFD631U333KCFM0 | DFD2J333K-F7CM                                 |
|          | 0.047    |                 | 13.5 | 6.5  |      |     |      | 0.45                          |          | DFD631U473KCFM0 | DFD2J473K-F7CM                                 |
|          | 0.068    | 18.0            | 11.0 | 6.0  | 15.0 | 0.8 | B    | 0.49                          |          | DFD631U683KDLF0 | DFD2J683K-F2CM                                 |
|          | 0.1      |                 | 14.0 | 6.5  |      |     |      | 0.53                          |          | DFD631U104KDLF0 | DFD2J104K-F2CM                                 |
|          | 0.15     |                 | 15.5 | 7.5  |      |     |      | 0.67                          |          | DFD631U154KDLF0 | DFD2J154K-F2CM                                 |
|          | 0.22     |                 | 16.5 | 9.0  |      |     |      | 0.81                          |          | DFD631U224KDLF0 | DFD2J224K-F2CM                                 |
|          | 0.33     |                 | 17.0 | 8.0  |      |     |      | 1.1                           |          | DFD631U334KELF0 | DFD2J334K-F2DM                                 |
|          | 0.47     | 26.0            | 18.5 | 9.5  | 22.5 | 0.8 | B    | 1.5                           |          | DFD631U474KELF0 | DFD2J474K-F2DM                                 |
|          | 0.68     |                 | 21.0 | 11.5 |      |     |      | 2.1                           |          | DFD631U684KELF0 | DFD2J684K-F2DM                                 |

### ◆STANDARD RATINGS (LEAD STYLE : STRAIGHT)

| WV (Vdc) | Cap (μF) | Dimensions (mm) |      |      |      |                 | TYPE      | Maximum ripple current (Arms) | WV (Vac)         | Part Number      | Previous Part Number (Just for your reference) |
|----------|----------|-----------------|------|------|------|-----------------|-----------|-------------------------------|------------------|------------------|------------------------------------------------|
|          |          | W               | H    | T    | F    | φd              |           |                               |                  |                  |                                                |
| 250      | 0.01     | 10.8            | 7.4  | 4.3  | 7.5  | 0.6             | C         | 0.42                          | 125              | DFD251U103KBABZ0 | DFD2E103K                                      |
|          | 0.015    |                 | 7.5  | 4.4  |      |                 |           | 0.43                          |                  | DFD251U153KBABZ0 | DFD2E153K                                      |
|          | 0.022    |                 | 7.5  | 4.4  |      |                 |           | 0.43                          |                  | DFD251U223KBABZ0 | DFD2E223K                                      |
|          | 0.033    |                 | 7.5  | 4.5  |      |                 |           | 0.43                          |                  | DFD251U333KBABZ0 | DFD2E333K                                      |
|          | 0.047    |                 | 7.5  | 4.5  |      |                 |           | 0.43                          |                  | DFD251U473KBABZ0 | DFD2E473K                                      |
|          | 0.068    | 13.0            | 7.5  | 4.5  | 10.0 | 0.6             | C         | 0.45                          |                  | DFD251U683KBABZ0 | DFD2E683K                                      |
|          | 0.1      |                 | 8.4  | 5.8  |      |                 |           | 0.46                          |                  | DFD251U104KBABZ0 | DFD2E104K                                      |
|          | 0.15     |                 | 10.5 | 6.0  |      |                 |           | 0.62                          |                  | DFD251U154KBABZ0 | DFD2E154K                                      |
|          | 0.22     |                 | 10.3 | 5.5  |      |                 |           | 0.78                          |                  | DFD251U224KACZ0  | DFD2E224K                                      |
|          | 0.33     |                 | 12.0 | 6.5  |      |                 |           | 0.94                          |                  | DFD251U334KACZ0  | DFD2E334K                                      |
|          | 0.47     | 18.0            | 12.5 | 5.3  | 15.0 | 0.8             | C         | 1.1                           |                  | DFD251U474KDADZ0 | DFD2E474K                                      |
|          | 0.68     |                 | 15.0 | 7.0  |      |                 |           | 1.4                           |                  | DFD251U684KDADZ0 | DFD2E684K                                      |
|          | 1.0      |                 | 15.0 | 7.4  |      |                 |           | 1.8                           |                  | DFD251U105KDADZ0 | DFD2E105K                                      |
|          | 1.5      |                 | 17.0 | 9.0  |      |                 |           | 2.2                           |                  | DFD251U155KDADZ0 | DFD2E155K                                      |
| 2.2      | 17.0     |                 | 8.5  | 2.7  |      |                 |           | DFD251U225KEAEZ0              | DFD2E225K        |                  |                                                |
| 400      | 0.01     | 10.8            | 7.8  | 4.4  | 7.5  | 0.6             | C         | 0.42                          | 125              | DFD401U103KBABZ0 | DFD2G103K                                      |
|          | 0.015    |                 | 7.8  | 4.4  |      |                 |           | 0.43                          |                  | DFD401U153KBABZ0 | DFD2G153K                                      |
|          | 0.022    |                 | 7.8  | 4.4  |      |                 |           | 0.43                          |                  | DFD401U223KBABZ0 | DFD2G223K                                      |
|          | 0.033    |                 | 9.0  | 5.5  |      |                 |           | 0.43                          |                  | DFD401U333KBABZ0 | DFD2G333K                                      |
|          | 0.047    |                 | 8.5  | 5.0  |      |                 |           | 0.43                          |                  | DFD401U473KACZ0  | DFD2G473K                                      |
|          | 0.068    | 13.0            | 10.5 | 5.5  | 10.0 | 0.6             | C         | 0.46                          |                  | DFD401U683KACZ0  | DFD2G683K                                      |
|          | 0.1      |                 | 12.0 | 6.5  |      |                 |           | 0.48                          |                  | DFD401U104KACZ0  | DFD2G104K                                      |
|          | 0.15     |                 | 12.5 | 5.0  |      |                 |           | 0.67                          |                  | DFD401U154KDADZ0 | DFD2G154K                                      |
|          | 0.22     |                 | 13.0 | 6.0  |      |                 |           | 0.86                          |                  | DFD401U224KDADZ0 | DFD2G224K                                      |
|          | 0.33     |                 | 15.0 | 7.0  |      |                 |           | 1.0                           |                  | DFD401U334KDADZ0 | DFD2G334K                                      |
|          | 0.47     | 18.0            | 17.0 | 8.0  | 15.0 | 0.8             | C         | 1.2                           |                  | DFD401U474KDADZ0 | DFD2G474K                                      |
|          | 0.68     |                 | 16.5 | 7.0  |      |                 |           | 1.7                           |                  | DFD401U684KEAEZ0 | DFD2G684K                                      |
|          | 1.0      |                 | 18.0 | 8.5  |      |                 |           | 2.2                           |                  | DFD401U105KEAEZ0 | DFD2G105K                                      |
|          | 1.5      |                 | 20.0 | 10.5 |      |                 |           | 2.9                           |                  | DFD401U155KEAEZ0 | DFD2G155K                                      |
| 630      | 0.01     |                 | 13.0 | 7.5  |      |                 |           | 4.5                           | 10.0             | 0.6              | C                                              |
|          | 0.015    | 8.0             |      | 5.0  | 0.45 | DFD631U153KACZ0 | DFD2J153K |                               |                  |                  |                                                |
|          | 0.022    | 10.5            |      | 5.5  | 0.45 | DFD631U223KACZ0 | DFD2J223K |                               |                  |                  |                                                |
|          | 0.033    | 12.0            |      | 6.0  | 0.45 | DFD631U333KACZ0 | DFD2J333K |                               |                  |                  |                                                |
|          | 0.047    | 13.5            |      | 6.5  | 0.45 | DFD631U473KACZ0 | DFD2J473K |                               |                  |                  |                                                |
|          | 0.068    | 18.0            | 11.0 | 6.0  | 15.0 | 0.8             | C         | 0.49                          | DFD631U683KDADZ0 | DFD2J683K        |                                                |
|          | 0.1      |                 | 14.0 | 6.5  |      |                 |           | 0.53                          | DFD631U104KDADZ0 | DFD2J104K        |                                                |
|          | 0.15     |                 | 15.5 | 7.5  |      |                 |           | 0.67                          | DFD631U154KDADZ0 | DFD2J154K        |                                                |
|          | 0.22     |                 | 16.5 | 9.0  |      |                 |           | 0.81                          | DFD631U224KDADZ0 | DFD2J224K        |                                                |
|          | 0.33     |                 | 17.0 | 8.0  |      |                 |           | 1.1                           | DFD631U334KEAEZ0 | DFD2J334K        |                                                |
|          | 0.47     | 26.0            | 18.5 | 9.5  | 22.5 | 0.8             | C         | 1.5                           | DFD631U474KEAEZ0 | DFD2J474K        |                                                |
|          | 0.68     |                 | 21.0 | 11.5 |      |                 |           | 2.1                           | DFD631U684KEAEZ0 | DFD2J684K        |                                                |

(1)The maximum ripple current : +85°C max., 100kHz, sine wave

(2)WV(Vac) : 50Hz or 60Hz, sine wave

### ◆DIMENSIONS (mm)

