

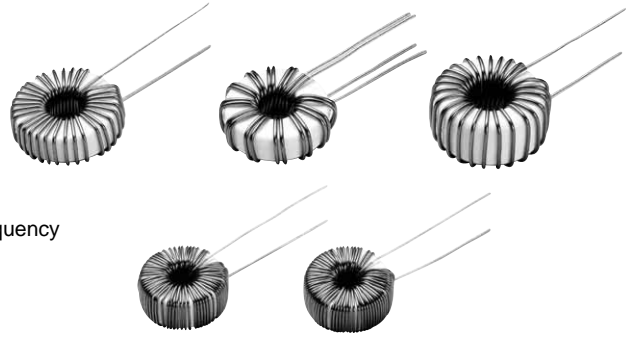
## TM Series

### ◆ MAJOR USES

- Output choke coils for Switching Mode Power Supply
- Choke coils for DC-DC converter
- Normal mode choke coils for noise control

### ◆ FEATURES

- Great reduction of core loss enabling low temperature rise at high frequency
- Miniaturization and reduction of DC resistance
- Low leakage flux due to gap-less structure
- Excellent frequency and temperature features



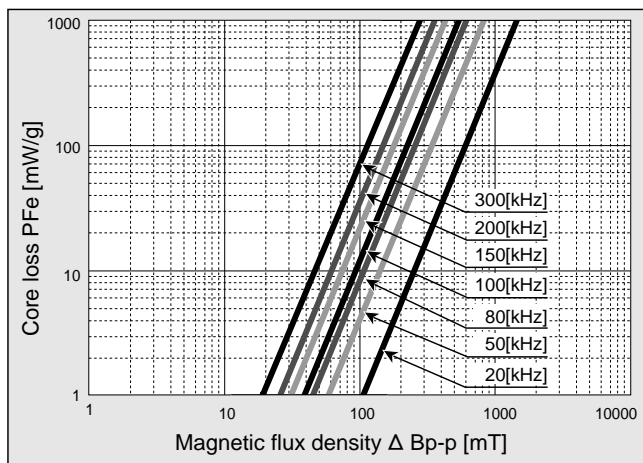
### ◆ CORE STANDARD SPECIFICATIONS

Core Part No. (Old Core Part No.)	Abbreviation	Cross Sectional Area cm <sup>2</sup>	Magnetic Path Length cm	Outside Dimensions			Inductance Coefficient AL Value		
				Outer Diameter mm	Width mm	Height mm	I <sub>dc</sub> =0[A] μH	Rated Current* μH	Rated Current Ampere Turn [AT]
LPT100805N (T100805N)	NS	0.08	2.84	13.0	6.0	6.5	0.100	0.063	70
LPT130805N (T130805N)	N1	0.13	3.44	16.0	5.8	7.4	0.120	0.070	75
LPT150905N (T150905N)	N2	0.14	3.85	17.2	7.3	6.4	0.118	0.063	100
LPT211205N (T211205N)	N5	0.21	5.26	23.2	10.2	6.9	0.126	0.060	155
LPT160910N (T160910N)	NU	0.29	3.92	18.0	7.3	11.9	0.260	0.115	120
LPT191210N (T191210N)	NP	0.33	4.95	21.9	9.8	11.8	0.212	0.095	160
LPT221310N (T221310N)	N6	0.40	5.50	24.7	10.5	12.0	0.229	0.112	160
LPT271510N (T271510N)	N7	0.53	6.60	29.7	12.5	12.3	0.253	0.120	200
LPT322010N (T322010N)	N9	0.56	8.25	35.2	17.5	12.3	0.211	0.090	280

\*200[kHz], ±25% (LPT100805N : 100[kHz], ±25%)

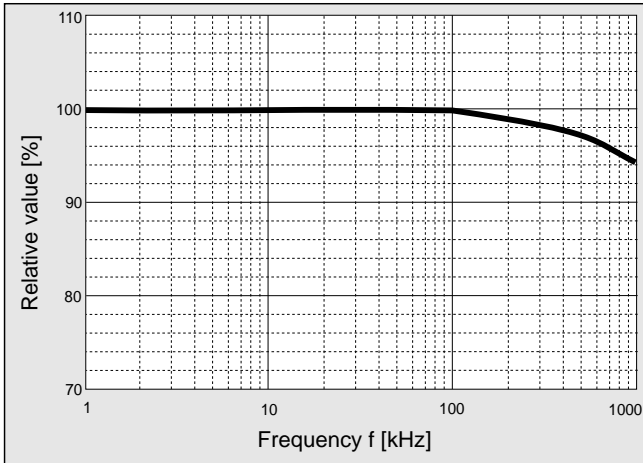
### ◆ CORE LOSS CHARACTERISTICS

● TM choke



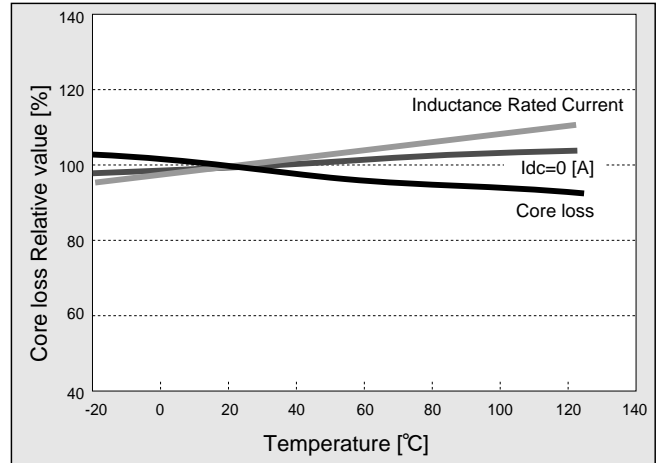
◆FREQUENCY - INDUCTANCE CHARACTERISTICS

●TM choke

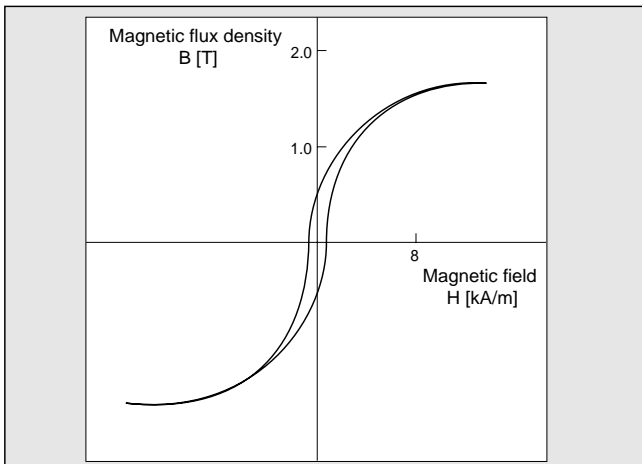


◆TEMPERATURE DEPENDENCE  
- INDUCTANCE AND CORE LOSS

●Frequency : 200[kHz]

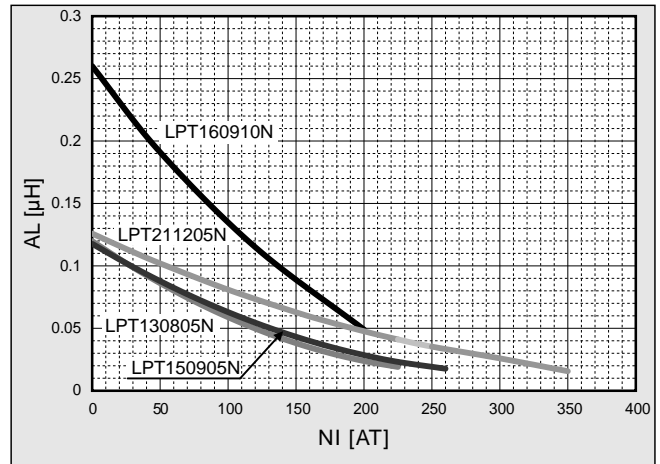


◆B-H CURVE



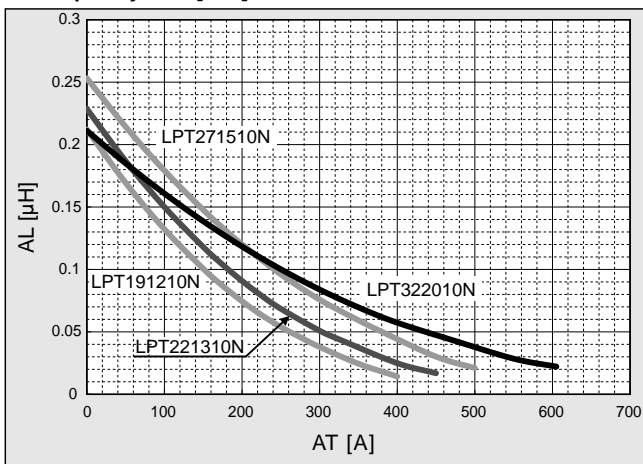
◆D.C. BIAS CHARACTERISTICS AL-AT(1)

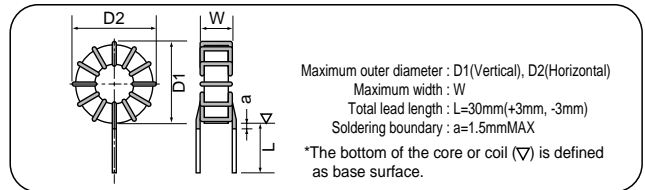
●Frequency : 200[kHz]



◆D.C. BIAS CHARACTERISTICS AL-AT(2)

●Frequency : 200[kHz]





## ◆ COIL STANDARD SPECIFICATIONS

Coil Part No. (Old Coil Part No.)	Rated Current A	Inductance <sup>*1</sup> (200kHz) <sup>*2</sup>		D.C.R. mΩ (max)	Winding <sup>*3</sup> mmφ×lines-turns	Outside Dimensions		
		0[A] μH	Rating μH			D1 mm	D2 mm	W mm
LBTM001201NS-V00 (TM01201NS)	1	260	200	120	0.5×1P-51T	16.0	16.0	11.0
LBTM002800NS-V00 (TM02800NS)	2	113	80	60	0.6×1P-35T	16.5	16.5	11.0
LBTM003270NS-V00 (TM03270NS)	3	40	27	20	0.8×1P-20T	16.5	17.0	11.5
LBTM005100NS-V00 (TM05100NS)	5	14	10	9	1.0×1P-12T	17.0	17.5	11.5
● LBTM001201N1-V00 (TM01201N1)	1	290	200	150	0.5×1P-49T	18.5	19.0	10.5
● LBTM001251N1-V00 (TM01251N1)	1	400	250	170	0.5×1P-58T	18.5	19.0	11.0
● LBTM001301N1-V00 (TM01301N1)	1	430	300	170	0.5×1P-60T	18.5	19.0	11.0
● LBTM002101N1-V00 (TM02101N1)	2	160	100	70	0.6×1P-37T	18.5	19.0	11.0
● LBTM003400N1-V00 (TM03400N1)	3	69	40	27	0.8×1P-24T	19.0	19.5	11.0
● LBTM004250N1-V00 (TM04250N1)	4	43	25	18	0.9×1P-19T	19.0	19.5	11.5
● LBTM005150N1-V00 (TM05150N1)	5	23	15	11	1.0×1P-14T	19.5	20.0	11.5
● LBTM001401N2-V00 (TM01401N2)	1	580	400	210	0.5×1P-70T	19.5	20.0	11.0
● LBTM001501N2-V00 (TM01501N2)	1	770	500	230	0.5×1P-81T	20.0	20.5	11.0
● LBTM002151N2-V00 (TM02151N2)	2	240	150	89	0.6×1P-45T	20.0	20.5	10.5
● LBTM002201N2-V00 (TM02201N2)	2	360	200	110	0.6×1P-55T	20.0	20.5	11.0
● LBTM002211N2-V00 (TM02211N2)	2	400	210	110	0.6×1P-58T	20.5	21.0	11.5
● LBTM003700N2-V00 (TM03700N2)	3	110	70	36	0.8×1P-31T	20.5	21.0	11.5
● LBTM004450N2-V00 (TM04450N2)	4	74	45	24	0.9×1P-25T	21.0	21.5	11.5
● LBTM004500N2-V00 (TM04500N2)	4	92	50	24	0.9×1P-28T	21.0	21.5	11.5
● LBTM005300N2-V00 (TM05300N2)	5	52	30	17	1.0×1P-21T	21.0	21.5	12.0
● LBTM006200N2-V00 (TM06200N2)	6	34	20	11	0.8×2P-17T	21.0	21.5	12.0

\*1 Rated inductance tolerance : ±25%, the inductance at current 0[A] indicates the reference value.

\*2 LBTM001201NS-V00, LBTM002800NS-V00, LBTM003270NS-V00, LBTM005100NS-V00 : 100kHz

\*3 The number of turns indicates the reference value.

The specification of the inductance takes precedence over that of the number of turns.

There is a horizontal putting type in all items in the above list."V" changes into "H" in last the third digit of the name of items.

There is a type with the length putting seat in ● item in the above list."V" changes into "D" in last the third digit of the name of items.

There are the type with the length putting seat and the horizontal putting seat in ◎ item.

The type with the length putting seat is "V" changes into "B" in last the third digit of the name of items.

\*Order the auxiliary pins separately if they are required for the pedestal.

Please select them according to the situation.

**◆COIL STANDARD SPECIFICATIONS**

Coil Part No. (Old Coil Part No.)	Rated Current A	Inductance <sup>*1</sup> (200kHz) <sup>*2</sup>		D.C.R. mΩ (max)	Winding <sup>*3</sup> mmφ×lines-turns	Outside Dimensions		
		0[A] μH	Rating μH			D1 mm	D2 mm	W mm
LBTM001132N5-V00 (TM01132N5)	1	2100	1300	400	0.5×1P-127T	26.0	26.0	12.0
LBTM003800N5-V00 (TM03800N5)	3	120	80	41	0.8×1P-30T	26.5	26.5	11.0
LBTM003171N5-V00 (TM03171N5)	3	290	170	59	0.8×1P-48T	26.5	26.5	12.0
LBTM005750N5-V00 (TM05750N5)	5	150	75	27	1.0×1P-35T	27.0	27.0	13.5
LBTM006450N5-V00 (TM06450N5)	6	85	45	18	0.8×2P-26T	27.0	27.0	13.0
LBTM008250N5-V00 (TM08250N5)	8	45	25	11	0.9×2P-19T	27.0	27.0	13.5
LBTM010160N5-V00 (TM10160N5)	10	28	16	7	1.1×2P-15T	28.0	28.0	14.0
LBTM015080N5-V00 (TM15080N5)	15	15	8	4	1.1×3P-11T	27.5	27.5	14.5
● LBTM002351NU-V00 (TM02351NU)	2	650	350	135	0.6×1P-52T	22.0	22.0	16.5
● LBTM003131NU-V00 (TM03131NU)	3	217	130	44	0.8×1P-30T	22.5	22.5	17.0
● LBTM005500NU-V00 (TM05500NU)	5	87	50	19	1.0×1P-19T	22.5	22.5	16.5
● LBTM008170NU-V00 (TM08170NU)	8	29	17	7	0.9×2P-11T	22.5	22.5	16.5
● LBTM002621NP-V00 (TM02621NP)	2	1200	620	150	0.7×1P-76T	24.5	24.5	16.5
● LBTM003291NP-V00 (TM03291NP)	3	550	290	76	0.8×1P-51T	24.5	24.5	16.0
● LBTM004161NP-V00 (TM04161NP)	4	320	160	46	0.9×1P-39T	25.0	25.0	16.5
● LBTM005101NP-V00 (TM05101NP)	5	190	100	29	1.0×1P-30T	25.0	25.0	16.5
● LBTM006700NP-V00 (TM06700NP)	6	130	70	19	0.8×2P-25T	24.5	24.5	16.0
● LBTM008400NP-V00 (TM08400NP)	8	77	40	12	0.9×2P-19T	25.0	25.0	16.5
● LBTM010270NP-V00 (TM10270NP)	10	54	27	7	1.1×2P-16T	26.0	26.0	17.0
● LBTM015120NP-V00 (TM15120NP)	15	26	12	4	1.1×3P-11T	26.0	26.0	17.5

**◆ COIL STANDARD SPECIFICATIONS**

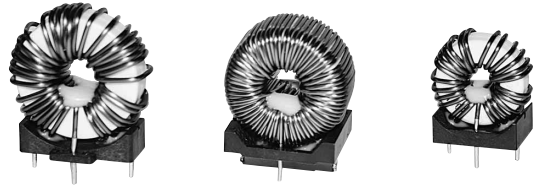
Coil Part No. (Old Coil Part No.)	Rated Current A	Inductance <sup>*1</sup> (200kHz) <sup>*2</sup>		D.C.R. mΩ (max)	Winding <sup>*3</sup> mmφ×lines-turns	Outside Dimensions		
		0[A] μH	Rating μH			D1 mm	D2 mm	W mm
LBTM002701N6-V00 (TM02701N6)	2	1200	700	150	0.7×1P-73T	27.5	28.0	16.5
LBTM003181N6-V00 (TM03181N6)	3	260	180	50	0.8×1P-33T	27.5	28.0	15.0
LBTM003351N6-V00 (TM03351N6)	3	640	350	82	0.8×1P-53T	27.5	28.0	16.5
LBTM004101N6-V00 (TM04101N6)	4	140	100	33	0.9×1P-25T	27.5	28.0	16.0
LBTM004201N6-V00 (TM04201N6)	4	370	200	48	0.9×1P-40T	28.0	28.5	16.5
LBTM005131N6-V00 (TM05131N6)	5	250	130	34	1.0×1P-33T	28.5	29.0	17.0
LBTM006850N6-V00 (TM06850N6)	6	170	85	22	0.8×2P-27T	28.0	28.5	17.0
LBTM008450N6-V00 (TM08450N6)	8	83	45	13	0.9×2P-19T	28.0	28.5	17.0
LBTM010300N6-V00 (TM10300N6)	10	51	30	7	1.1×2P-15T	29.0	29.5	17.5
LBTM015160N6-V00 (TM15160N6)	15	33	16	5	1.1×3P-12T	28.5	29.0	18.5
LBTM020100N6-V00 (TM20100N6)	20	23	10	4	1.3×3P-10T	29.5	30.0	19.0
LBTM002901N7-V00 (TM02901N7)	2	1500	900	240	0.6×1P-73T	32.0	32.5	15.5
LBTM002112N7-V00 (TM02112N7)	2	1800	1100	190	0.7×1P-85T	32.5	33.0	16.5
LBTM003481N7-V00 (TM03481N7)	3	820	480	94	0.8×1P-57T	32.5	33.0	16.5
LBTM005141N7-V00 (TM05141N7)	5	240	140	34	1.0×1P-31T	33.0	33.5	16.0
LBTM005211N7-V00 (TM05211N7)	5	390	210	42	1.0×1P-39T	33.0	33.5	17.5
LBTM010300N7-V00 (TM10300N7)	10	45	30	7	1.6×1P-13T	35.5	36.0	18.5
LBTM010500N7-V00 (TM10500N7)	10	100	50	11	1.1×2P-20T	34.0	34.5	18.0
LBTM015260N7-V00 (TM15260N7)	15	57	26	6	1.1×3P-15T	33.5	34.0	18.0
LBTM025100N7-V00 (TM25100N7)	25	25	10	3	1.6×2P-10T	35.5	36.0	19.0
LBTM003501N9-V00 (TM03501N9)	3	840	500	120	0.8×1P-63T	38.5	39.0	18.5
LBTM005281N9-V00 (TM05281N9)	5	530	280	61	1.0×1P-50T	39.5	40.0	19.0
LBTM005301N9-V00 (TM05301N9)	5	550	300	62	1.0×1P-51T	39.5	40.0	19.0
LBTM010600N9-V00 (TM10600N9)	10	110	60	12	1.6×1P-23T	41.5	42.0	20.0
LBTM010800N9-V00 (TM10800N9)	10	170	80	15	1.1×2P-28T	41.0	41.5	20.5
LBTM015400N9-V00 (TM15400N9)	15	93	40	8	1.1×3P-21T	39.5	40.0	20.0
LBTM020130N9-V00 (TM20130N9)	20	21	13	4	1.3×3P-10T	41.0	41.5	19.5
LBTM020200N9-V00 (TM20200N9)	20	41	20	5	1.3×3P-14T	40.5	41.0	20.5

◆MAJOR USES

- Output choke coils for Switching Mode Power Supply
- Choke coils for DC-DC converter
- Normal mode choke coils for noise control

◆FEATURES

- Excellent ANTI-VIBRATION DEVICE. Insulation for substrate
- Miniaturization and reduction of DC resistance
- Low leakage flux due to gap-less structure
- Excellent frequency and temperature features
- Pb free



◆CORE STANDARD SPECIFICATIONS

Coil Part No. (Old Coil Part No.)	Rated Current A	Inductance (200kHz) <sup>*1</sup>		D.C.R. mΩ (max)	Winding <sup>*2</sup> mmφXlines-turns	Outside Dimensions			
		0[A] μH	Rating μH			D1 mm	D2 mm	W mm	Dimensions
LBTM2R2171N2-Y0E (TM02201N2ZDGPBF)	2.2	400	170	96	0.7×1P-58T	24.5	21.5	12.5	Fig-1
LBTM005750N5-Y0E (TM05750N5DGPBF)	5	150	75	27	1.0×1P-35T	31.0	28.5	15.0	Fig-2
LBTM005131NPAY0E (TM05131NPZDGPBF)	5	410	130	40	1.1×1P-44T	28.5	26.5	18.0	Fig-3

\*1 Rated inductance tolerance : ±25%, the inductance at current 0[A] indicates the reference value.

\*2 The number of turns indicates the reference value.

The specification of the inductance takes precedence over that of the number of turns.

◆OVERALL DIMENSIONS DIAGRAM

