

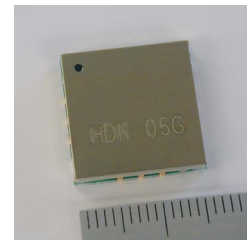


Low Power RF Transceiver Module

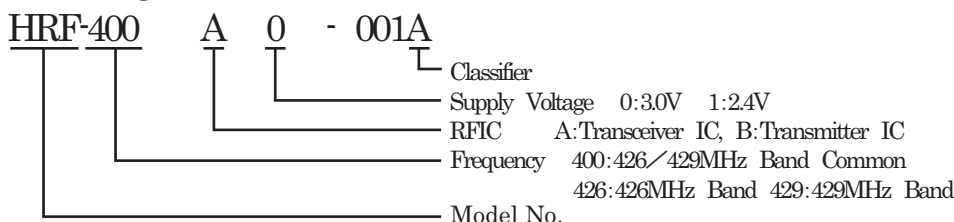
Model No. HRF is compact transceiver module for embedded device. It conforms to ARIB STD-T67 standard, featuring high sensitivity, high performance and high quality. It can be easily-used by embedding remote control system, abnormal sensing system, remote control system, etc. Moreover, custom module by combining various sensors as sensing system can be accommodated.

■ Features

- Super miniature size 16mm×16mm×3mm
- High Sensitivity -118dBm or less
- Built-in serial communication function
- Surface Mount Design (reflow available)
- * Japan Technical Regulations Conformity Certification can be obtained by simply attaching antenna.



■ Product Designation & List



Tx/Rx	SAW	Amp	Frequency		Supply Voltage	
					3.0V	2.4V
Transceiver	Yes	Yes	429MHz Band	429MHz Band only	HRF-429A0-001D	HRF-429A1-003A
			426MHz Band	426MHz Band only	HRF-426A0-001E	HRF-426A1-003B
Receiver only	No	No	400MHz Band	426MHz Band 429MHz Band Common	HRF-400A0-001F	HRF-400A1-003C
		Yes			HRF-400A0-001H	HRF-400A1-003G
Transmitter only		No			HRF-400A0-001G	-
					HRF-400B0-004A	HRF-400B1-004B

■ Specification (Reference)

【Transmitter/Receiver Common】

at 25°C

Item	Rating	Unit	Remarks
Radio Frequency	426MHz Band・429MHz Band	MHz	RCR STD-30, ARIB STD-T67
Modulation Method	FSK		
Transmission Speed	2400	bps	
Operating Temperature Range	-30 ~ 75	°C	
Storage Temperature Range	-40 ~ 85	°C	
Supply Voltage	3.0±0.15/2.4±0.12	V	
Current Consumption (Receiving)	23 Typ.	mA	
Current Consumption (Transmitting)	31 Typ.	mA	At +10dBm Transmission

【Transmitter】

Item	Rating	Unit	Remarks
Transmit Output Power	+10 Max.	dBm	
Frequency Deviation	Within±4	ppm	
Occupied Bandwidth	Within 8.5	KHz	
Spurious Emission Strength	-26 or less	dBm	
Adjacent Ch Leakage Power	-40 or less	dB	

【Receiver】

Item	Rating	Unit	Remarks
Receiver Sensitivity	-118 or less	dBm	BER=1% ※ -114dBm or less without AMP
Collateral Emission Strength	-54 or less	dBm	