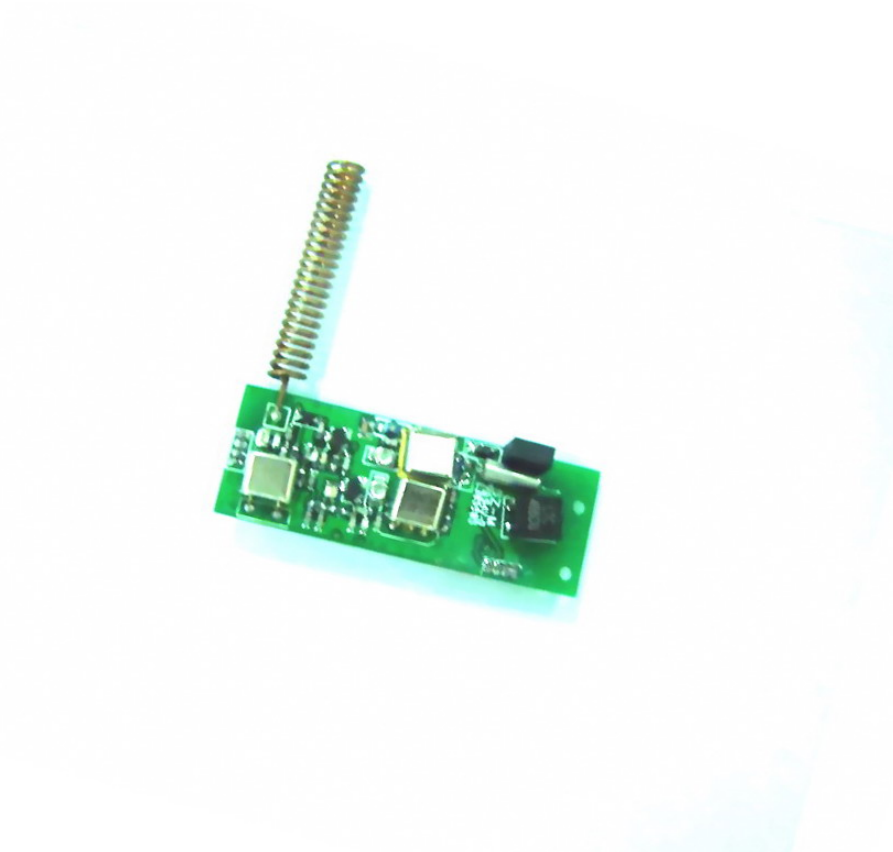


FC-203 RF Module User Manual



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I. Summary

FC-203 RF module is a UHF wireless data transceiver. The module uses the Japanese-made UHF chips and low-noise LSI circuit, so it is highly cost-effective with perfect antistatic-protect and high reliability.

II. Main Features

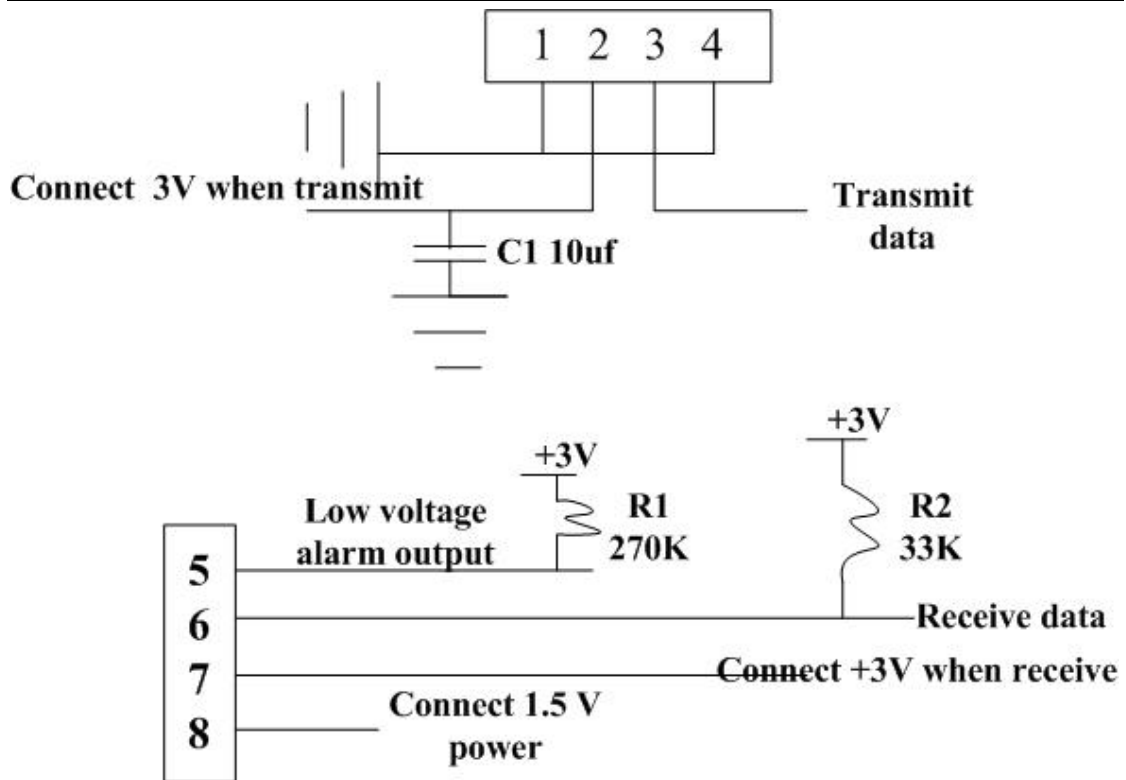
- (1) Sensitivity: -120dBm.
- (2) Its modulation is FSK with narrow bandwidth. It has good anti-jamming performance and can adapt to various environments.
- (3) It has good shield, the installation environment has less effect on its performance.
- (4) Good suppression capability of oscillator radiation. Multiple modules can work together (single transmitter and multiple receivers) without interference with each other and the effective receive distance won't be affected.
- (5) Using crystal local oscillator with stable performance, It can be used in wide temperature range.
- (6) It's easy to implement the interface with SCM direct interface.
- (7) It has good consistency with small volume.
- (8) The maximum transmit data rate can reach 400Hz~1.25KHz
- (9)

III. Limit rated value table:

Parameters	Description	Value	Unit
DC supply voltage	Vcc—Vss	3	V
Work temperature range	TOPR	-25—+85	°C
Store temperature range	TSTG	-60—+125	°C

IV. Pin Description:

Pin Number	Description	Pin Number	Description
1	GND	5	Low voltage alarm output (when voltage <1.1V,alarm)
2	TX VCC 3V	6	RX DATA
3	TX DATA	7	RX VCC 3V
4	GND	8	Connect 1.5Vpower



V. Electrical Specifications

Parameters	Sign	Status	Reference value			Unit
			Min	Standard	Max	
DC supply voltage	Vcc-Vss			3		V
Work frequency	Fc			433.92/315		MHz
Frequency stability				5ppm@-10 to +60	8ppm@-20 to +70	PPM
modulation				FSK		
Receive sensitivity		50 Ω antenna input directly BER3/1000,1.2kbps		-120		dBm
transmit power		50 Ω		15		mW
transmit current					40	mA
Maximum input unsaturated				0		dBm

power						
Receive band				± 4.5		KHz
Receive start time	Ton				5	ma
Receive current	IRC	RX			10mA	mA
Decoding output high voltage				3		V
Decoding input low voltage				2.5		V
Work temperature	TC		-25		70	°C
Tx to Rx switch time					5	ms
Rx to Tx switch time					5	ms
Standby current					50	uA