

GENERAL DESCRIPTION

RhombusMF909—B transceiver unit is designed for reading the Serial Number of the Mifare I compatible IC cards and is a major component in RFID (Radio Frequency Identification) reader system. It can be applied in office/home security, personal identification, access control, anti-forgery and production control systems etc.

FEATURES

- Built-in transceiver antenna;
- Maximum effective distance up to 50mm;
- Less than 200ms decoding time;
- Low power dissipation with single power supply;
- RS485 interface and other format optional;
- Support Mifare I compatible IC cards and Mifare LITE;
- Built-in bi-color LED and buzzer;
- Beautiful shell designed.

INTERFACE DESCRIPTION

NUMBER	COLOR	SYMBOL	DESCRIPTION
1	Red	VCC	Positive Power Supply
2	Black	GND	GND
3	Green	R ⁺	R ⁺ output in RS485 interface
4	White	R ⁻	R ⁻ output in RS485 interface

CHARACTERISTICS

- Absolute Maximum Ratings

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	15	V
Operating Temp.	T _{OPR}	0~+70	°C
Storage Temp.	T _{STR}	-55~+125	°C

- Electrical and Mechanical Specification

Under T_A= 25°C, VCC= +12V unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	11	12	15	V
Current Supply	I _C		70	110	mA
Operation Freq.	F _{RE}		13.56		MHZ
Effective Distance*	DIS	0	30	50	mm
Decoding Time	T _{DEC}		120	200	ms

Effective Distance depends on tags and operating environment.

Note: Rhombus' products must work with linear regulated power supply, and other kinds of power supply are prohibited.