

## GENERAL DESCRIPTION

RhombusMF903—A 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

- New fashion beautiful design
- Built-in transceiver antenna;
- Maximum effective distance up to 50mm;
- Less than 200ms decoding time;
- Low power dissipation with single power supply;
- Wiegand26 interface;
- Support Mifare I compatible IC cards;
- Built-in bi-color LED and buzzer;

## INTERFACE DESCRIPTION

NUMBER	COLOR	SYMBOL	DESCRIPTION
1	Red	VCC	Positive Power Supply
2	Black	GND	GND
3	Green	WD0	Wiegand data 0 output
4	White	WD1	Wiegand data 1 output
5	Brown	HOLD	Wiegand Hold output
6	Blue	LED	Color of LED changing when connected to GND
7	Grey	BUZ	Buzzer ringing when connected to GND

## CHARACTERISTICS

### ● Absolute Maximum Ratings

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	15	V
Operating Temp.	T <sub>OPR</sub>	0~+70	°C
Storage Temp.	T <sub>STR</sub>	-55~+125	°C

### ● Electrical and Mechanical Specification

Under T<sub>A</sub>= 25°C, VCC= +12V unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	11	12	15	V
Current Supply	I <sub>C</sub>		70	110	mA
Operation Freq.	F <sub>RE</sub>		13.56		MHZ
Effective Distance	DIS	0	30	50	mm
Decoding Time	T <sub>DEC</sub>		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.