

## GENERAL DESCRIPTION

RhombusMF903—C 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 75mm;
- Less than 200ms decoding time;
- Low power dissipation with single power supply;
- ABA Track2 (8H) 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	DATA	Output as DATA in ABA
4	White	CLK	Output as CLK in ABA
5	Brown	C	Output as CARD PRESENT in ABA
6	Blue	LED	Input, internally pulled up to +5V. Connected to
7	Grey	BUZ	Input, internally pulled up to +5V. Connected to

## CHARACTERISTICS

- Absolute Maximum Ratings

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	15	V
Operating Temp.	T <sub>OPR</sub>	0~+7	°C
Storage Temp.	T <sub>STR</sub>	-55~+12	°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	10	12	15	V
Current Supply	I <sub>C</sub>		80	12	mA
Operation Freq.	F <sub>RE</sub>		13.56		MHZ
Effective Distance	DIS	0	50	75	mm
Decoding Time	T <sub>DEC</sub>		12	20	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.