## **GENERAL DESCRIPTION**

RhombusMF903—D 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;
- RS232 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	Brown	$TXD^{^{\mathtt{x}}}$	Serial data output		

STX (02 HEX)	DATA (10 D	Decimal )	CR	LF	ETX (03 HEX)
4	Yellow	GI	ND	GNE	)

<sup>\*</sup> Baud Rate: 9600, N, 8, 1

# **CHARACTERISTICS**

# . Absolute Maximum Ratings

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	15	<b>V</b>
Operating Temp.	T <sub>OPR</sub>	0~+7	
Storage Temp.	T <sub>STR</sub>	-55~+12	

## **Electrical and Mechanical Specification**

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ITEM	SYMBOL	MIN	TYP	MAX	UNIT			
Power Supply	VCC	10	12	15	V			
Current Supply	I <sub>C</sub>		80	12	mA			
Operation Freq.	$F_RE$		13.56		MHZ			
Effective Distance*	DIS	0	50	75	mm			
Decoding Time	T <sub>DEC</sub>		12	20	ms			

Under  $T_A$ = 25  $^{\circ}$ C , VCC= +12V unless specified

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.