## **GENERAL DESCRIPTION**

RhombusMF909—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	V	CC	Positive Power Supply				
2	Black	GND		GND				
3	Brown	TXD <sup>*</sup>		Serial data output				
4	Yellow	GND		GND				
STX (02 HEX)	DATA (10 D	ecimal)	CR	LF	ETX (03 HEX)			

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

### **CHARACTERISTICS**

**Absolute Maximum Ratings** 

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ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	15	٧
Operating Temp.	T <sub>OPR</sub>	0~+7	
Storage Temp.	T <sub>STR</sub>	-55~+12	

# Electrical and Mechanical Specification

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.