GENERAL DESCRIPTION

RhombusMF902—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 VCC GND		DESCRIPTION			
	1	Red			Positive Power Supply			
	2	Black			GNE	GND		
	3	Brown	TXD [*]		Serial data output			
Г	STX (02 HFX) DATA (10 Decimal) CR		LF	FTX (03 HFX)				

STX (02 HEX)	DATA (10 D	Decimal) C	CR	LF	ETX (03 HEX)		
4	Yellow	GND		GND			

* Baud Rate: 9600, N, 8, 1

CHARACTERISTICS

Absolute Maximum Ratings

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	15	V
Operating Temp.	T _{OPR}	0~+7	
Storage Temp.	T _{STR}	-55~+12	

Electrical and Mechanical Specification

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	10	12	15	V
Current Supply	I _C		80	12	mA
Operation Freq.	F _{RE}		13.56		MHZ
Effective Distance*	DIS	0	50	75	mm
Decoding Time	T _{DEC}		12	20	ms

Under $T_A{=}\,25\,^\circ\!\mathrm{C}\,,~VCC{=}\,{+}12V$ 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.