

GENERAL DESCRIPTION

125KHZ-RhombusEM202-D transceiver unit is designed for reading code from uem4100 compatible read-only tag 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 interactive toy and production control systems etc.

FEATURES

- Built-in transceiver antenna;
- Maximum effective distance up to 80mm;
- Less than 100ms decoding time;
- Low power dissipation with wide range single power supply;
- RS232 interface;
- Support uem4100 compatible read only tags (64Bits, Manchester coding) ;
- 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*	RS232 Data Output
4	Yellow	GND	GND
STX (02 HEX)	DATA (10 HEX)	CR	LF
ETX (03 HEX)			

* Baud Rate: 9600, N, 8, 1

CHARACTERISTICS

Absolute Maximum Ratings

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	15	V
Operating Temp.	T _{OPR}	0~+70	°C
Storage Temp.	T _{STR}	-55~+125	°C

Electrical and Mechanical Specification

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	5	12	15	V
Current Supply	I _C		65	80	mA
Operation Freq.	F _{REQ}		125		KHZ
Effective Distance*	DIS	0	50	80	mm
Decoding Time	T _{DEC}		65	100	ms

Under T_A= 25°C , VCC= +5V 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.