

## GENERAL DESCRIPTION

125KHz-RhombusEM202-C transceiver unit is designed for reading code from uem4100 compatible read-only tags 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 100mm;
- Less than 100ms decoding time;
- Low power dissipation with wide range single power supply;
- Support Wiegand26 and RSABA interface
- Support uem4100 compatible read only tags (64Bits, Manchester coding) ;
- Built-in bi-color LED and buzzer

## INTERFACE DESCRIPTION

NUMBER	COLOF	SYMBOL	DESCRIPTION
1	Red	VCC	Positive Power Supply
2	Blac	GND	GND
3	Gree	WD0 (DATA)	Wiegand Data 0 output or ABA output
4	Whit	WD1 (CLK)	Wiegand Data 1 output or ABA CLK output
5	Brown	HOLD (CP)	Wiegand hold output or card present in ABA
6	Yellow	SEL	Wiegand/ABA Format option Hang: Wiegand format Connected to GND:ABA format output
7	Blu	LED	The color of LED Changing when connected to GND
8	Gra	BUZ	The buzzer ringing when connected to GND

## CHARACTERISTICS

### Absolute Maximum Ratings

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	15	V
Operating Temp	T <sub>OPR</sub>	0~+70	°C
Storage Temp	T <sub>STR</sub>	-55~+125	°C

### Electrical and Mechanical Specification

Under T<sub>A</sub>= 25°C, VCC= +5V unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	5		15	V
Current Supply	I <sub>C</sub>		65	80	mA
Operation Freq.	F <sub>REQ</sub>	100	125	150	KHZ
Effective Distance*	DIS	0	100	150	mm
Decoding Time	T <sub>DEC</sub>		65	100	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.**