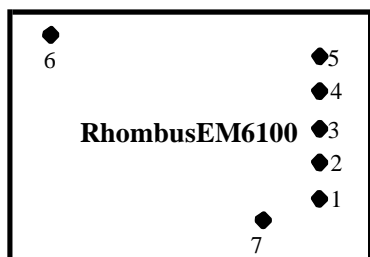## GENERAL DESCRIPTION

RhombusEM6100 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

- Connect pin for external transceiver antenna;
- Maximum effective distance up to 180mm;
- Less than 100ms decoding time;
- Low power dissipation with single power supply;
- Wiegand26 or user optional interface;
- Support uem4100 compatible read only tags(64Bits,Manchester coding);
- Small outline for embedded usage.

INTERFACE DESCRIPTION

NUMBER	SYMBOL	DESCRIPTION
1	VCC	Positive Power Supply
2	GND	GND
3	WD0	Output as DATA0
4	WD1	Output as DATA1
5	HOLD	Output as HOLD
6	ANTENNA1	Connecting external antenna
7	ANTENNA2	Connecting external antenna

CHARACTERISTICS

- Absolute Maximum Ratings

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

- Electrical and Mechanical Specification

Under T_A=25℃   VCC=5V unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	5		15	V
Current Supply	I_C		60	85	mA
Operation Freq.	F_{REQ}		125		KHZ
Effective Distance[*]	DIS	0	150	180	mm
Decoding Time	T_{DEC}		65	100	ms

Effective Distance depends on external antenna, power supply, tags and operating environment.

Note: Rhombus' products must work with linear regulated power supply, and other kinds of power supply are prohibited.