

## **Data Sheet**

## 12mm Wedge Transponder



## Specifications:

Part number	RI-TRP-R9WK	RI-TRP-W9WK
Functionality	Read Only	Read/Write
Memory (Bits)	64	80*
Memory (Pages)	1	1
Operating Frequency	134.2 kHz	
Modulation	FSK (Frequency Shift Keying) 134.2 kHz / 123.2 kHz	
Transmission Principle	HDX (Half Duplex)	
Power Source	Powered from the reader signal (batteryless)	
Typical Reading Range	≤ 20 cm**	
Typical Programming Range		30 % of specified reading range
Typical Reading Time	70 ms	
Typical Programming Time		309 ms
Typical Programming Cycles		100,000
Operating Temperature (Read)	-40 to +85°C	
Operating Temperature (Program)		-40 to +70°C
Storage Temperature	-40 to +100°C (+125°C for total 1000 hours, +175°C for total 5 minutes)	
Case Material	Plastic Compound, black	
Protection Class	IP 68	
EMC	Programmed code is not affected by normal electromagnetic interference or x-rays	
Signal Penetration	Transponder can be read through virtually all non-metallic material	
Mechanical Shock	IEC 68-2-27, Test Ea; 200 g, half sine, 3 ms, 3 axes, 6 shocks per axis	
Vibration	IEC 68-2-6, Test Fc; 20 g, 1 - 500 Hz, 3 axes, 24 hours per axis	
Dimensions	(12 mm x 6mm x 3mm) ± 0.05 mm	
Weight	0.4 g	

We recommend that you split each 80 bit page into 64 user programmable bits plus a 16 bit wide CRC CCITT Block Check Character as applied with TI-RFID LF readers.

For more information, contact the sales office or distributor nearest you. This contact information can be found on our web site at: <a href="http://www.ti-rfid.com">http://www.ti-rfid.com</a>

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<sup>\*\*</sup> Depending on RF regulation in country of use, the Reader Antenna configuration used, and the environmental conditions.