

12 mm Wedge Transponder

Digital Signature (DST)



Specifications:

Part Number		RI-TRP-B9WK-xx (xx= see REV table below)	
Functionality		Encryption	
Memory		88 bits	
Memory: Page 1		8 bits Password (user programmable and lockable)	
Page 2		8 bits Identification "ID" (user programmable and lockable)	
Page 3		32 bits Serial Number and Manufacturing Code (Factory programmed and locked)	
Page 4		40 bits Encryption Key (user programmable and lockable)	
Challenge		40 bits (random)	
Response		24 bits + 24 bits of SN with Cyclic Redundancy Check (CRC) on data	
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 Read Time		< 120 ms	
Reading Activation Field Strength @ 25 °C		132.5 dBμA / m	
Operating Temperature (Read)		-40 to +85°C	
Storage Temperature		-40 to +100°C (+175°C for 5 minutes)	
Case Material		Plastic	
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, 6 shocks per axis	
Vibration		IEC 68-2-6, Test Fc; 10 - 500 Hz, 1.65 mm peak to peak, 10 g, 4 hours per axis	
Dimensions		12.0 mm + 0.2 mm * 6.0 mm + 0.2 mm * 3.0 mm ± 0.05 mm	
Weight		0.4 g	
Packaging		Bulk (2000 units / Box)	
REV.	MFC	Serial Number (Hex) From	To
04	00,02,03,04,05	000000	FFFFFF

** Depending on RF regulation in country of use, the Reader Antenna configuration used, and the environmental conditions.

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

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