

**Data Sheet** 

## **50mm Glass Transponder**





| Part Number                          | RI-TRP-W9TB  |
|--------------------------------------|--|
| Functionality                        | Read / Write   |
| Memory (Bits)                        | 80 *   |
| Memory (Pages)                       | 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                | ≤ 165 cm **  |
| Typical Programming Range            | 30 % of specified reading range  |
| Typical Reading Time                 | 70 ms  |
| Typical Programming Time             | 309 ms   |
| Typical Programming Cycles (at 25°C) | 100 000  |
| Operating Temperature                | -25 to + 70°C  |
| Storage Temperature                  | -40 to +85°C   |
| Case Material                        | Glass  |
| Protection Class                     | Hermetically sealed  |
| 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; 30 g, half sine, 6 ms, 2 axis, 6 shocks/axis               |
| Vibration                            | IEC 68-2-6, Test Fc; 20-60 Hz: 0.35mm ampl.                                      |
|                                      | 60-500 Hz: 5 g, 2axis, 10 cycles/axis, 1 oct/min                                 |
| Dimensions                           | $\varnothing$ 16 mm $\pm$ 0.5 mm x 50 mm $\pm$ 0.5 mm                            |
| Weight                               | approx. 20 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 is done by TI-RFID readers.

\*\* 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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