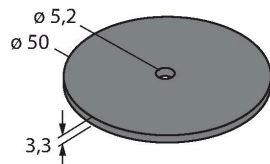


TW-R50-B128

Tag – HF



Features

- The tags must undergo adequate stress tests within the proposed temperature processes before deployment.
- The following stress test was performed on this tag:
 - Cyclic temperature stress: 5 min at -40 °C – 5 min at 90 °C
 - Number of tested cycles: 100, transition period: 30 seconds
 - Continuous load: 140 °C for 100 hours
- This successfully performed test does not imply suitability for a specific application, but merely serves as proof of the basic usability.
- EEPROM, memory 128 byte
- Not for direct mounting on metal

Technical data

Type	TW-R50-B128
Ident. no.	6900504
Data transfer	Inductive coupling
Technology	HF (13.56 MHz)
Operating frequency	13.56 MHz
Memory type	EEPROM
Chip	NXP I-Code SLI-X
Memory	128 Byte
Memory	Read/Write
Freely usable memory	112 Byte
Number of read operations	unlimited
Number of write operations	10 ⁵
Typical read time	2 ms/Byte
Typical write time	3 ms/Byte
Radio communication and protocol standards	ISO 15693 NFC Typ 5
Minimum distance to metal	10 mm
Temperature during read/write access	-40...+85 °C
Temperature outside detection range	-45...+85 °C
	140 °C, 1x100 h
Design	Hard tag, R50
Diameter	50 mm +/- 0.5 mm
Internal diameter	5.2 mm +/- 0.3 mm
Housing height	3.3 mm +/- 0.5 mm
Housing material	Plastic, PA6
Active area material	Plastic, PA6, black
Protection class	IP69K
Packaging unit	1

Functional principle

The HF read/write heads operating at a frequency of 13.56 MHz, form a transmission zone the size of which (0...500 mm) varies, depending on the combination of read/write head and tag.

The read/write distances mentioned here only represent standard values measured under laboratory conditions and free from any influences caused by materials.

The read/write distances of tags suitable for mounting in/on metal were determined in/on metal.

Attainable distances may vary by up to 30 % due to component tolerances, mounting conditions, ambient conditions and material qualities (especially when mounted in metal)

Testing of the application under real operating conditions is therefore essential, especially with read/write on-the-fly!

Technical data

Remark to product

Not suitable for direct mounting on metal
