

**FXT0.2-SLI-R**

code: 4330 034 10231

13.56 MHz FERROXTAG METAL INLAY

FEATURES

- ISO/IEC 15693; ISO/IEC 18000-3 Complaint
- 13.56 MHz Operating Frequency
- 1024 Bit User Memory in 32 block x 4 bytes
- Unique Identifier 8 bytes
- Fast Simultaneous Identification (Anticollision)
- Data transfer up to 53kbits/sec

APPLICATIONS

- Metallic items identification
- Industrial applications
- Asset Tracking
- Metal pallets
- Gas cylinder
- Beer Kegs

DESCRIPTION

FerroxTag 13.56MHz metal inlay is complaint with the ISO/IES 15693 and ISO/IEC 18000-3 global open standards. This product offers a user accessible memory of 1024 bits, organized in 32 blocks of 4 bytes and an optimized command set.

Designed for metallic environments it is specially tuned at such a frequency that needs to be mounted on a metallic item in order to achieve the right 13.56Mhz operating frequency and best performance.

Each transponder has a factory programmed 8 bytes unique identifier. Prior to delivery, FerroxTag undergo complete and parametric testing, in order to provide high quality.

The inlay is protected with a thermo-shrink rubber.

SPECIFICATIONS

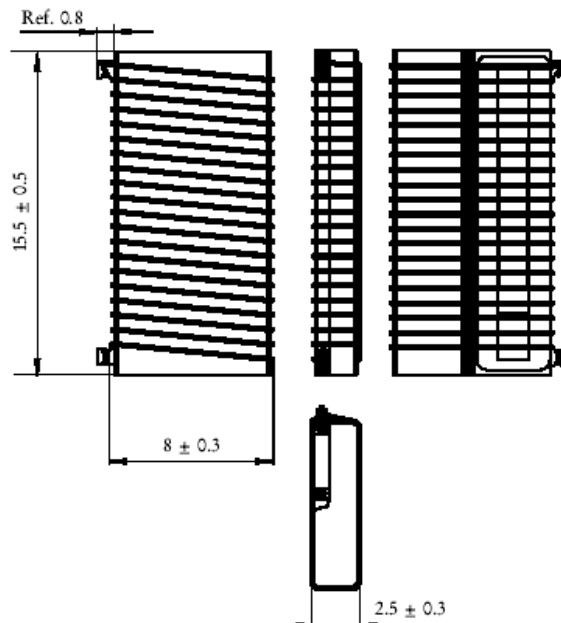
| | |
|--|--|
| PART NUMBER | FXT0.2-SLI-R |
| Supported Standard | ISO/IEC 15693; ISO/IEC 18000-3 |
| Passive Resonance Frequency (at the air) | 13 MHz \pm 300 KHz, shifts to 13.56 MHz when mounted with metal around |
| Unique identifier | 8 bytes |
| EEPROM memory | 1024 bits, 32 blocks x 4 bytes |
| User programmable memory | 28 blocks x 4 bytes |
| Typical programming cycles | 100,000 |
| Data retention time | 10 years |
| Data transfer | Up to 53 kbits/sec |
| Simultaneous Identification of Tags | Up to 50 tags per second (reader/antenna dependent) |
| Operating temperature | -25°C to +100°C |
| IC | NXP-ICODE SLI |
| Typical reading range | 30 cm (with a 4W reader power and a 30x30 cm antenna) |

MECHANICAL PROPERTIES

| | |
|---------------------|--|
| Dimensions | 15.5 x 8 x 2.5 mm, increased by rubber thickness |
| Weight | 1 gram |
| Case material | Thermo shrink rubber |
| Colour | Black |
| Storage temperature | -25°C to +100°C |

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**MEMORY ORGANIZATION**

The 1024 bit EEPROM memory is divided in 32 Blocks of 4 bytes. (1 Block = 32 bits).

The 64 bit unique identifier (UID=2 blocks) is programmed during the production process.

The next 2 blocks are for control (EAS= Electronic Article Surveillance, AFI= Application Family Identifier, DSFID= Data Storage Format Identifier) and write access conditions for the rest of the blocks.

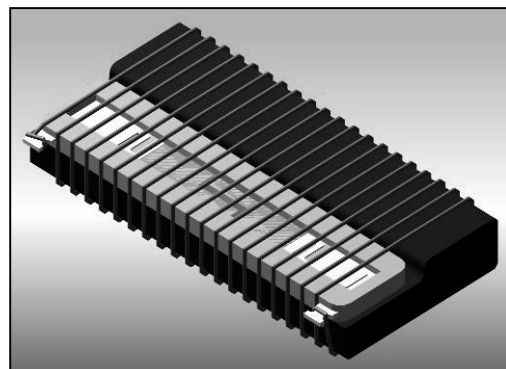
With read and write commands only blocks 0 to 27 can be addressed.

| | Byte 0 | Byte 1 | Byte 2 | Byte 3 |
|----------|-------------------------|--------|--------|--------|
| Block -4 | UID 0 | UID 1 | UID 2 | UID 3 |
| Block -3 | UID 4 | UID 5 | UID 6 | UID 7 |
| Block -2 | Control bytes | | | |
| Block -1 | Write access conditions | | | |
| Block 00 | R/W | R/W | R/W | R/W |
| Block 01 | R/W | R/W | R/W | R/W |
| Block 02 | R/W | R/W | R/W | R/W |
| | ... | ... | ... | ... |
| | ... | ... | ... | ... |
| Block 25 | R/W | R/W | R/W | R/W |
| Block 26 | R/W | R/W | R/W | R/W |
| Block 27 | R/W | R/W | R/W | R/W |

TAG INSTALLATION

It is recommended to install the tag on a corner of the metallic item to be identified, or in the closest position to the reader antenna.

The right way of installing the transponder is to put the part of the piece shown in the picture against the metallic item to be identified. Nevertheless, the tag does not need to be in close contact with the metal, the distance can vary from 0 to 3 mm.



For more data on Ferroxtag family, please visit our website www.ferroxtag.com



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DISCLAIMER

These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Ferroxcube customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ferroxcube for any damages resulting from such application.