

## RFO RTHT 0510 High Temperature MOM UHF RFID Tag

**+250°C**

DATA SHEET

### Product Description

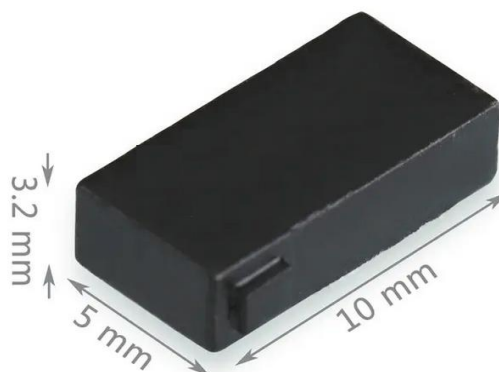
#### Main Features

The RFO-RTHT0510 RFID tag is a miniature, high-sensitivity UHF tag designed for precise asset tracking in space-constrained and challenging environments. Measuring only 5x10x3 mm, it combines compact size with reliable read performance and is suitable for high-temperature applications up to 250°C. Proton tags are ideal for embedded use, on-metal surfaces, and situations where traditional RFID tags are too large.

#### Key Features

- > Ultra-compact size (5 × 10 × 3 mm) for embedded applications
- > High-temperature resistant (up to 250°C)
- > Optimized for on-metal performance
- > High-sensitivity design for reliable long-range reads
- > Durable and robust for harsh environments
- > Passive UHF RFID technology

#### Product pictures



|  |   |  |
|--|---|--|
| <b>Article no:</b>   | Standard  | RFO RTHT0510   |
| <b>Typical Applications</b>  |   |  |
| <ul style="list-style-type: none"> <li>•Manufacturing</li> <li>•Security</li> <li>•Waste management</li> <li>•Logistics</li> </ul> | <ul style="list-style-type: none"> <li>•Health Care</li> <li>•Asset management</li> <li>•Food</li> <li>•Transportation</li> </ul> | <ul style="list-style-type: none"> <li>•Service Maintenance &amp; Diagnostics</li> <li>•Automotive</li> <li>•Retail &amp; POS</li> <li>•Home Automation</li> </ul> |

**Contact:**

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| Technical Specifications  |  | RFO RTHT0510 |
|---|--|--------------|
| Operation mode  | Passive (Battery less)                                 |              |
| Protocol  | EPC Class 1 Gen2                                       |              |
| ISO Standard  | ISO 18000-6C   |              |
| Operating Frequency   | 865-868MHz (EU)<br>902-928MHz (FCC)                    |              |
| Memory  | EPC: 128 Bit<br>User: 32 Bit<br>TID: 96 Bit            |              |
| IC Type   | Impinj R6-P  |              |
| Polarization  | Linear   |              |
| Read Range  | Up to 3.5 m (on metal) (depends on environment etc.)   |              |
| Environment Compatibility   | Optimized on metal                                     |              |
| Mechanical Specifications   |  |              |
| Material  | Ceramic  |              |
| Surface Materials   | Durable Paint  |              |
| Dimensions  | 5 x 10 x 3 mm  |              |
| Weight  | 1.1 g  |              |
| Attachment  | High performance epoxy resin / Industry grade adhesive |              |
| Color   | Black by default                                       |              |
| Environmental Specifications  |  |              |
| Ambient Temperature   | -30°C to +250°C  |              |
| Operating Temperature   | -30°C to +85°C   |              |
| Shock and Vibration   | MIL STD 810-F  |              |
| Certifications  | CE & RoHS approved / ATEX/IECEx certified              |              |
| IP Classification   | IP65   |              |
| Warranty  | 1 Year   |              |
| Customization Options   |  |              |
| Encoding<br>Pre-encoding based on customers' specification, including EPC, User memory and other requests<br>Appearance<br>Customized appearance design, including logo, barcode, text on the PET label etc |  |              |