



MICRO THIN RFID TAGS THAT WITHSTAND EXTREME ENVIRONMENTS

- ▣ **Durable** – resists moisture, oils, petroleum; tolerates mechanical vibration and shock
- ▣ **Thermally stable** – withstands exposure to temperatures from -40° F to 360° F (-40° to 160° C)
- ▣ **Surface printable** – enables tags scannable by both RFID and visual ID readers

HID Global Epoxy Tag RFID transponders are constructed for optimal performance under harsh conditions.

Epoxy housings protect advanced integrated chips, enabling the use of RFID technology to accelerate logistics speed while improving data accuracy in a broad spectrum of rugged industrial applications.

Epoxy Tag units are resistant to fuels, mineral oils, petroleum and salt mist. They repel moisture – even in high temperature, high pressure washes.

Unrelenting performance despite temperature fluctuations allows Epoxy Tag transponders to adapt to demanding applications. These tags can tolerate repeated autoclaving in medical applications, and plastic injection molding processes for permanent embedding into industrial components, equipment or containers.

Each micro thin Epoxy Tag device has a smooth surface, which may be imprinted with customized visual codes or artwork.

Epoxy Tag transponders may be adhered with glue, secured with screws, or embedded in a custom housing, depending on the application. Rectangular 3.3 in by 1.0 in (83 by 25 mm) UHF Epoxy Tag units include pre-drilled holes for mounting. Low frequency Epoxy Tag discs are available in 0.8 in (20 mm) diameter, and 1.2 in (30 mm) diameter with a pre-drilled hole for mounting.

In addition, HID Global can create a custom Epoxy Tag solution to fit any application requirements for chip type, dimensions or programming.

TECHNOLOGY HIGHLIGHTS:

- ▣ Operating frequencies
 - LF 125 kHz
 - UHF 865-956 MHz worldwide
- ▣ Withstands peak temperatures up to 360° F (160° C)
- ▣ Large, read-write memory
- ▣ Chemical and moisture resistant
- ▣ Printable surface

APPLICATION AREAS:

- **Automation and manufacturing**
 - Item/box tracking through production process
 - Electronic tool identification
- **Medical and health**
 - Sterilization validation
 - Equipment identification
- **Waste management/RTI**
 - Usage-based invoicing
 - Recycling incentive programs
 - Returnable transport items
 - Asset tracking and logistics



HID Global can create a custom tag solution to fit your application requirements for chip type, dimensions, programming and materials.



© 2014 HID Global Corporation/ASSA ABLOY AB. All rights reserved. HID, HID Global, the HID Blue Brick logo, the Chain Design and MIFARE are trademarks or registered trademarks of HID Global or its licensor(s)/supplier(s) in the US and other countries and may not be used without permission. All other trademarks, service marks, and product or service names are trademarks or registered trademarks of their respective owners.
2014-09-01-hid-rfid-il-epoxy-tag-family-ds-en PLT-00273

An ASSA ABLOY Group brand

SPECIFICATIONS

| Epoxy Tag | | | |
|--------------------------------------|--|----------------------------------|---|
| | 20 mm | 20 mm | 30 mm |
| Base Model Number | 624112 | 601112 | 601143 |
| ELECTRONIC | | | |
| Operating Frequency | 125kHz | | 865-956 MHz (Worldwide) |
| Chip Type | Hitag S | Unique | Higgs 3 |
| Memory | 2048 bit EEPROM | 64 bit read-only | 96 bit EPC + 64 bit TID + 512 bit user memory |
| Anti-collision | Yes | | Yes |
| Reading Distance | Dependent upon reader, environment and application | | |
| PHYSICAL | | | |
| Dimensions | Ø 0.79 x 0.04 in (Ø 20 x 1 mm) | Ø 1.18 x 0.04 in (Ø 30 x 1 mm) | 3.3 x 1.0 x 0.04 in (83 x 25 x 1 mm) |
| Mounting Method | Glue, screw-on, or encapsulate | | |
| Fixation Hole Size | None | Ø 0.13 in (Ø 3.2 mm) | Ø 0.12 in (Ø 3.0 mm) |
| Affixes To | Glass, plastic, wood | | |
| Housing Material | Epoxy | | |
| Color | Black | | |
| CHEMICAL AND MECHANICAL | | | |
| Water | IP67, 68° F (20° C), 3.3 ft (1 m) x 1 h | | IP69K, 176° F (80° C), 100 bar x 30 sec |
| Withstands Exposure To | Ethanol, fuel, mineral oils, petroleum | | Fuel B, mineral oil, petroleum, salt mist, vegetable oil |
| Environmental Test Conditions | 68° F (20° C), 100 h | | |
| Vibration | IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h] | | |
| Shock | IEC 68.2.29 [40 g, 18 ms, 6 axis, 2000 times] | | |
| THERMAL | | | |
| Storage | -40° to +185° F (-40° to +85° C), 1000 h | | |
| Operating | -13° to +185° F (-25° to +85° C) | -40° to +185° F (-40° to +85° C) | |
| Shock/Fatigue | -13° to +212° F (-25° to +100° C), 50 x 5 min with 20 sec transition | | -40° to +284° F (-40° to +140° C), 100 x 5 min with 30 sec transition |
| Peak | 284° F (140° C), 1 x 24 h | | 320° F (160° C), 24 h |
| OTHER | | | |
| Standards | ISO/IEC 18000-6C; EPC Global Class 1 Gen 2 | | |
| Options | Custom printed logo; custom size; self-adhesive; or alternative chips e.g. MIFARE® | | |
| Box Size | 1.000 pcs. | 500 pcs. | 1.000 pcs. |
| Warranty | 2 Years | | |