

Dot XXS



Functional Specifications

| | |
|---------------------------------------|---|
| RF air protocol | EPC Global Class1Gen 2; ISO18000-6C |
| Operational frequency | UHF 902-928 MHz (US); 866-868 MHz (EU) |
| IC type | Alien Higgs-3 |
| Memory configuration | 96-EPC bits; 512-bit user memory |
| Functionality | Read / write (user programmed) |
| Memory – expected read / write cycles | 100,000 cycles at 77°F (25°C) |
| Data retention | Up to 50 years ¹ |
| Read rate | 400 tags per second for 96-EPC bit number |
| Warranty (limited) | 1 year |
| Applicable surface | Metal surfaces |
| Mounting methods | Epoxy, embedded |
| Weight | 0.006 oz (0.16 g) |

Performance Characteristics

| | |
|---|----------------------|
| Read range on metal (2W ERP) ² | Up to 1.6 ft (0.5 m) |
| Polarization | Linear |

Physical Specifications

| | |
|-------------|----------------------|
| Material | Ceramic |
| Paint color | Black |
| Logo color | Green (US) Grey (EU) |

¹ The chip data retention is based on chip operating under general environment conditions.

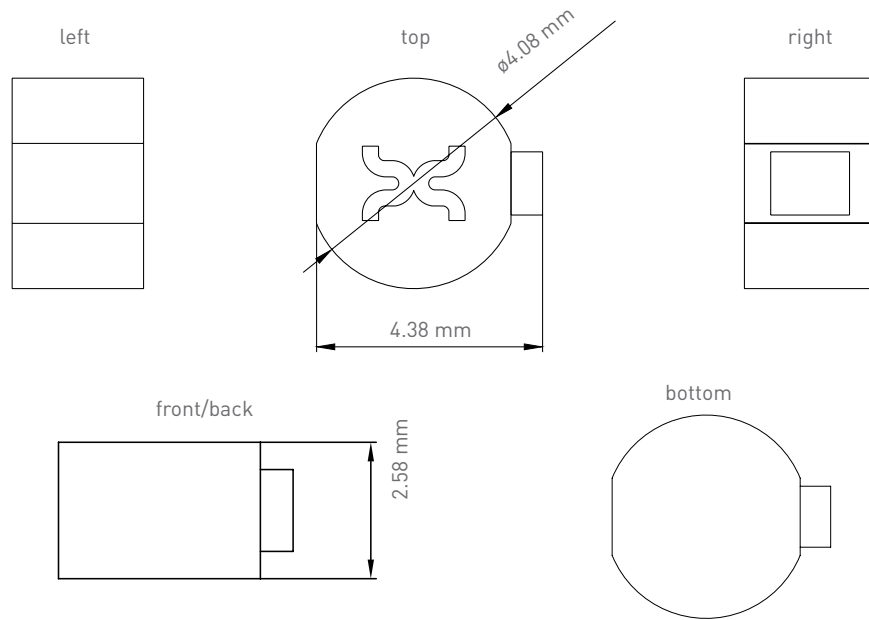
² Actual read range may vary based upon use case and attachment methods



Environmental and Industry Compliance

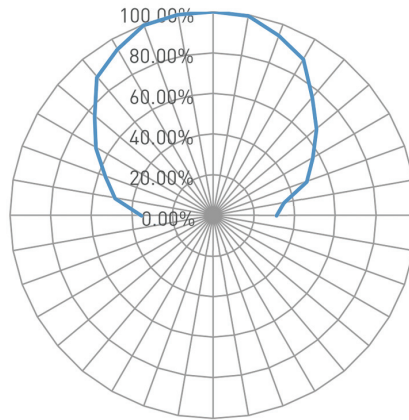
| | |
|-------------------------|--|
| Compression strength | Packaging dependent |
| IP classification | IP68 |
| Standard compliancy | RoHS (EU Directive 2002/95/EC) , CE (EU version) |
| Operational temperature | -40°F to +185°F (-40°C to +85°C) |
| Application temperature | -40°F to +302°F (-40°C to +150°C) |
| Humidity | |
| Operational humidity | 5%-95% non-condensing |
| Storage humidity | 5%-95% non-condensing |

Product Dimensions



| | |
|-----------------|-------------------------|
| Dimensions (mm) | $\phi 4.08 \times 2.58$ |
| tolerance | +/- 0.02 |
| Dimensions (in) | $\phi 0.16 \times 0.10$ |
| tolerance | +/- 0.008 |

Radiation Pattern and Polarization



Order information

X4302-US000-H3

Dot XXS US

X4302-EU000-H3

Dot XXS EU