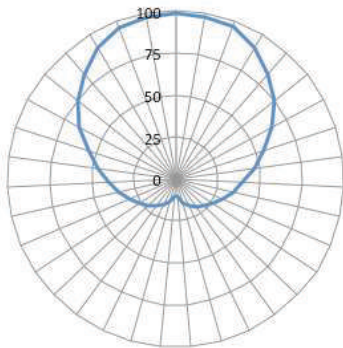




## ROSWELL

### Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 902-928 MHz (US);  
865-868 MHz (EU)
- **IC type (chip)**<sup>1</sup> Alien Higgs 9
- **Chip memory** 96 bits EPC; 48 bits TID;  
688 bits user memory
- **Read range** fixed<sup>2</sup> Up to 16.40 ft (5 m)
- **Read range** handheld<sup>2</sup> Up to 11.48 ft (3.50 m)
- **Polarization** Linear
- **Radiation pattern on metal**



### Key Features

- + **250°C:** withstand high temperatures
- + **180° readable:** wider read angles
- + **Aluminum case:** withstand high pressures, compression, chemicals
- + **Backplate:** secure mounting options
- + **IP68 rating:** for waterproof

### Applications

- **Oil & Gas valve / Wellhead management**
- **Food processing plants**
- **Automotive manufacturing**

### Environmental Specifications

#### Temperatures



- Operational -40°C to +85°C
- Survival -40°C to +250°C

#### Chemicals<sup>3</sup>



- 12h H<sub>2</sub>SO<sub>4</sub> (10% sulfuric acid)
- 12h HNO<sub>3</sub> (10% nitric acid)
- 12h H<sub>3</sub>PO<sub>4</sub> (20% phosphoric acid)
- 12h H<sub>2</sub>O<sub>2</sub> (25% hydrogen peroxide)

- **IP rating** IP68
- **Compression strength** 115 psi (793 kPa)
- **Shock** 3ft (1 m) to concrete/granite

- **Vibration** MIL-STD-810G
- **Warranty** 1 year

<sup>1</sup> The chip data retention is up to 50 years, based on chip operating under general environment conditions.

<sup>2</sup> Performance based on standard testing methodologies. Performance may vary depending on environmental factors and reader output power.

<sup>3</sup> The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.



## Physical Specifications

- **Material** Aluminum, High-performance engineered polymer
- **Dimensions (in)**<sup>1</sup> 1.89 x 1.10 x 0.53
- **Dimensions (mm)**<sup>1</sup> 48 x 28 x 13.50
- **Weight** 0.74 oz (21 g)

### Mounting Systems

- Welding
- Rivets
- Screws
- Cable tie

### Installation Instructions

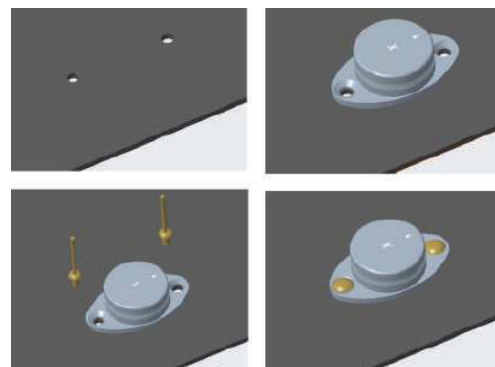
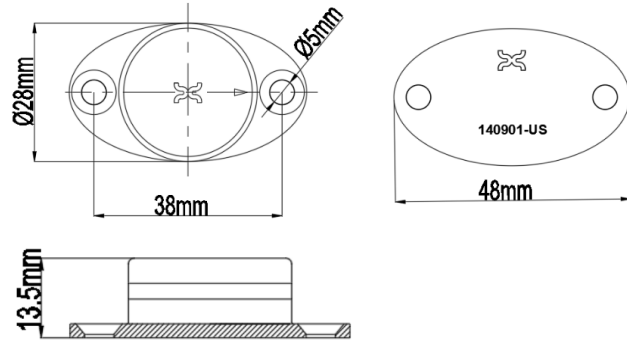
1. Position the tag in alignment with the metal surface's length, ensuring that the "X" symbol is parallel to the same direction.

2. Use M4 rivets for attachment:

- Drill two holes (ø 5) in the metal surface, pitch: 38 mm.
- Utilize M4 rivets in conjunction with a rivet gun to securely fasten the tag onto the metal surface.

3. Use M4 screws for attachment:

- Drill two holes (ø 3.20) in the metal surface, pitch: 38 mm.
- Perform a M4 thread tapping procedure.
- Utilize M4 screws to securely attach the tag to the metal surface.



<sup>1</sup> Tolerance: +/- 0.02; +/- 0.50

## Industry Compliance



## Order Information

ROSWELL US: X1114-US101-H9

ROSWELL EU: X1114-EU101-H9

### Customization Options

Encoding

Laser Marking

Printing

ATEX Certified Version

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