

M-Heat Tag

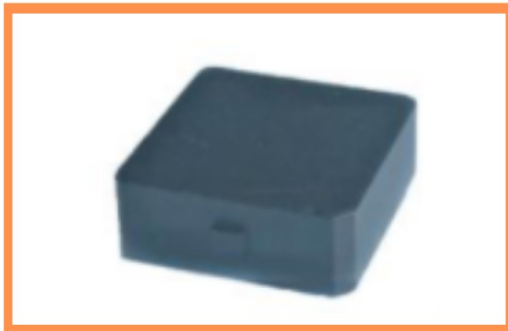
Data Sheet

FEATURES

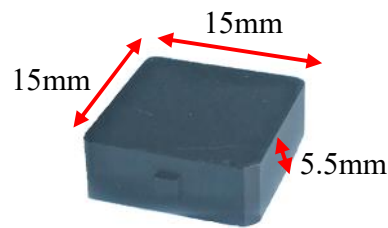
- High temperature resistance 250 °C / 482 °F
- Small in size 15x15x5.5mm
- Very good read range on metal/ into metal
- Extreme conditions
- Harsh environment

APPLICATIONS

- Automotive paint shop
- Bakery ovens
- Autoclaves
- Steel manufacturing
- Welding operations
- And many more

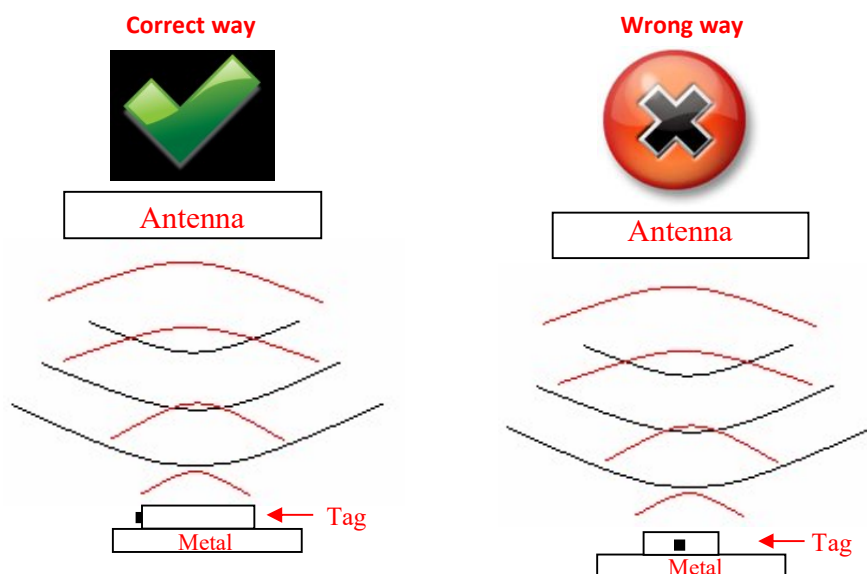


Chip Type:	Alien Higgs 3 EPC Class 1 Gen 2 ; ISO 18000 – 6C protocol compliant	
	EPC 96 bit extendable up to 480 bits	
	User Memory 512 bit	
	Data retention of 50 years	
Write endurance : 100,000 cycles at room temperature		
Mechanical:	Length	15 mm
	Width	15 mm
	Thickness	5.5 mm
	Material	Ceramic
	Encasing	Durable Paint
	Colour	Black
	Weight	6.5 g
Electrical:	Operating Frequency	865-868MHz, (902-928MHz also available on request)
	Operating mode	Passive (battery-less transponder)
Ingress Protection:	IP68	
Part Number:	31VV1	
Thermal:	Application Temp.	-40°C to +250°C (+250°C for 30min)
	Operating Temp.	-40°C to +85°C



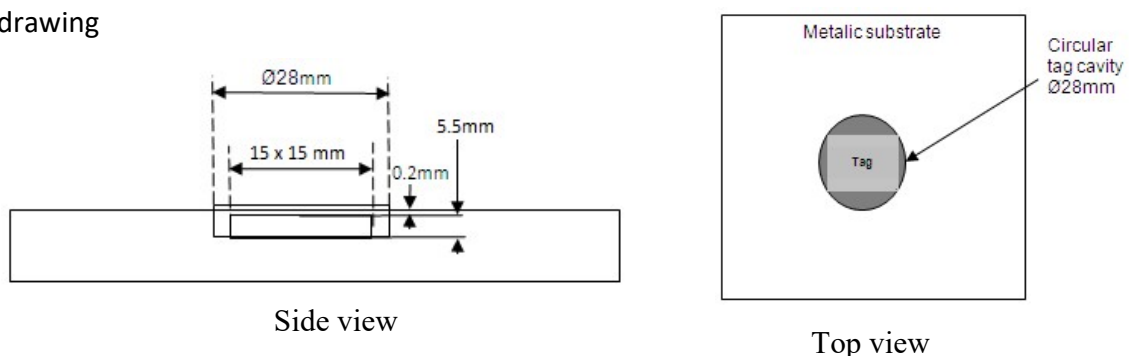
Tag Placement

- Tag can be easily attached through high temperature epoxy/adhesive tape.
- Place the tag in such a way that most of its bottom area comes in direct contact with metal.
- Ensure that there is no hindrance between the tag and the reader antenna.
- Reader antenna should be parallel to the dotted line as shown in above figure:



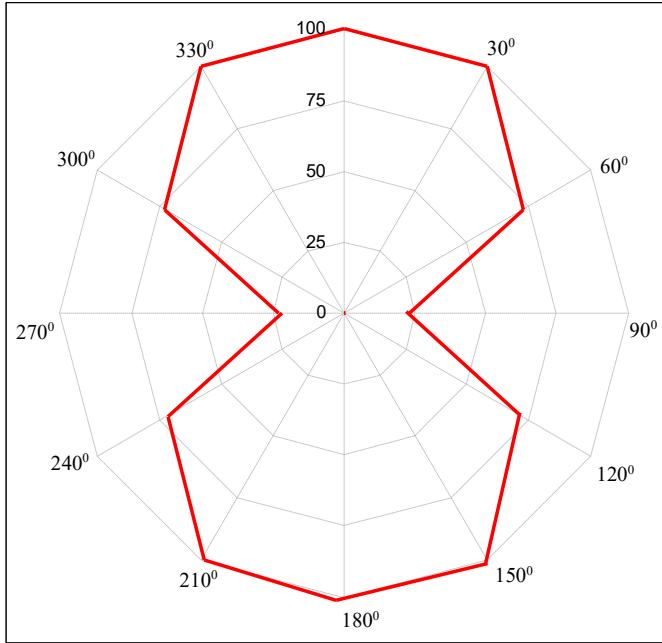
- If the tag is to be placed/embedded in metal then:

- Ensure that the tag should be surrounded by metallic surface to get optimum read range.
- It is recommended to make a round cavity in metal substrate having dimensions as per below drawing

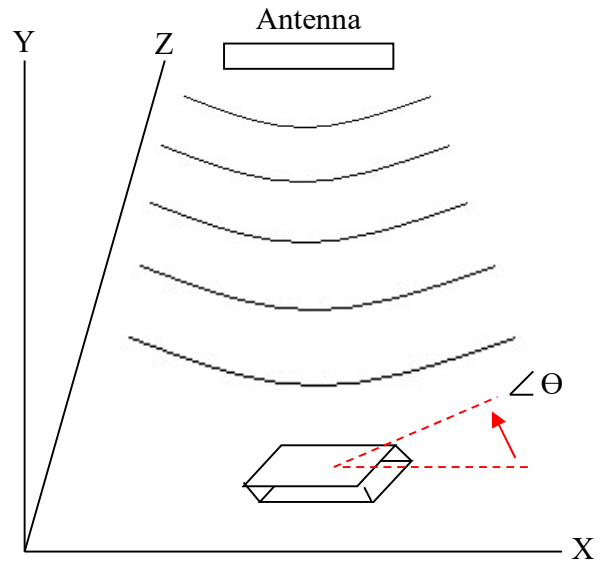


M-Heat Tag Angular Sensitivity

(Relative Read Range vs. Orientation)



Read range (in percent) at various angle.



Tag is rotated in the X-Y plane about the z axis