



M-Rook Tag

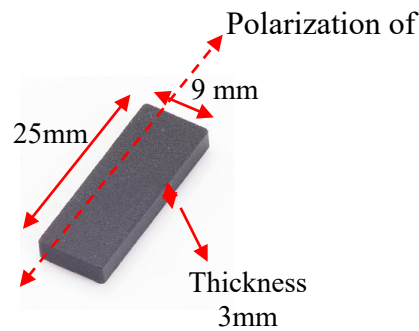
FEATURES

- M-Rook Tag is small in size & has very good read range, when attached to metal.
- The product has been designed to be easily attached by adhesive.
- Flexible Read/Write Range (reader dependant).

APPLICATIONS

- Used in IT asset tracking applications such as backup tapes, servers, hard drives and media tapes without any human intervention.
- Inventory control of small tools and manufacturing equipment, servers and network routers.

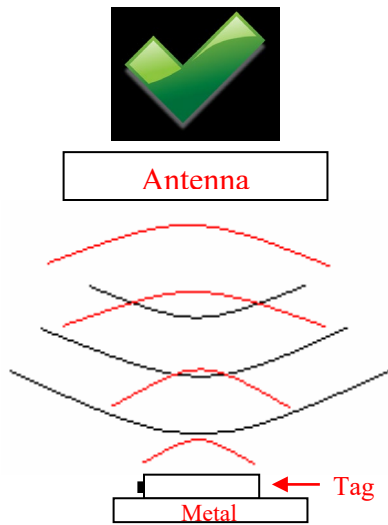
Chip Type:	Alien Higgs 3 EPC Class 1 Gen 2	
	EPC Memory : 96 bit extendable up to 480 bits	
	User Memory : 512 bit	
	Data retention : 50 years	
Write endurance : 100,000 cycles at Room temperature		
Mechanical:	Length	25 ±0.5 mm (at chip area: 25.5±0.5)
	Width	9±0.5 mm
	Thickness	3±0.5 mm
	Material	Ceramic
	Encasing	Durable Paint
	Colour	Black
	Weight	3.6 g
Electrical:	Operating Frequency	865-868MHz, (902-928MHz also available on request)
	Operating mode	Passive (battery-less transponder)
Ingress Protection:	IP68	
Thermal:	Application Temp.	-40°C to +150°C (+150°C for 30min)
	Operating Temp.	-40°C to +85°C
Part Number:	382V1	



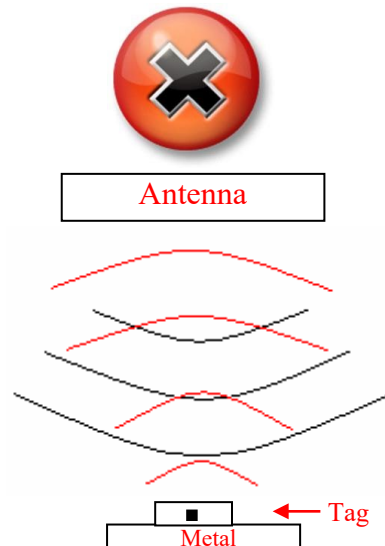
Tag Placement

- Tag can be easily attached through adhesive tape at back.
- M-Rook tag is polarized along with the dotted line in the above picture (Dimension section).
- 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:

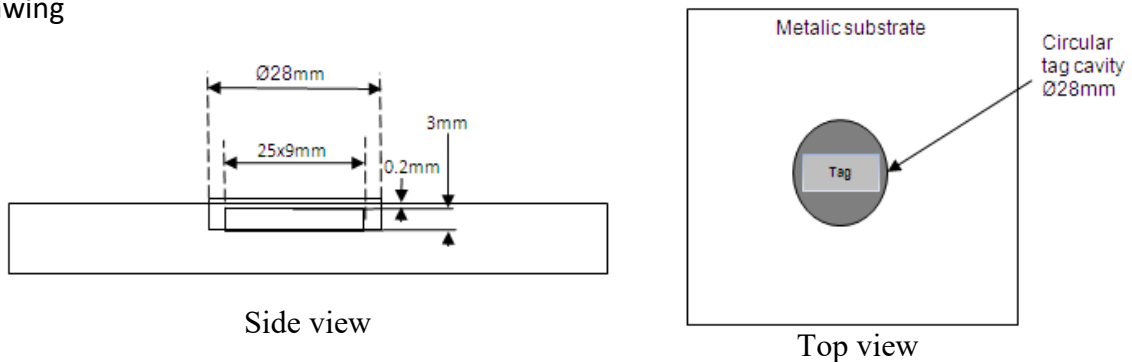
Correct way



Wrong way

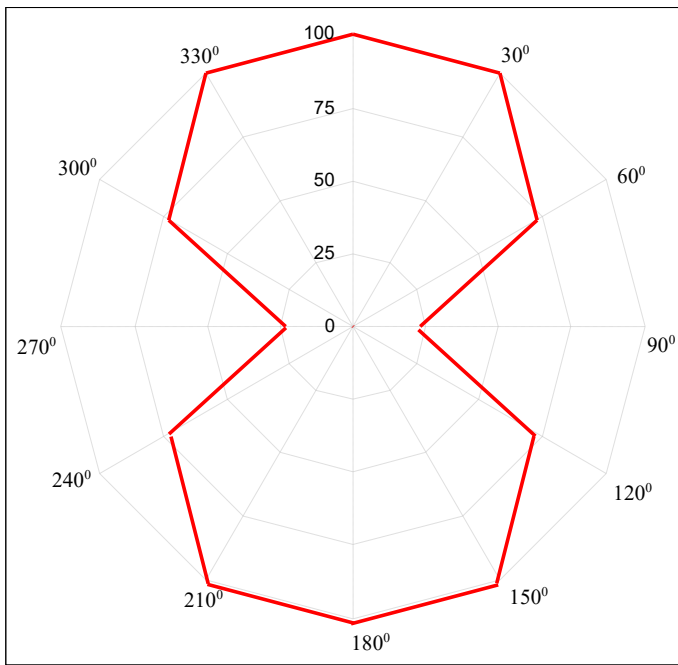


- If the tag is to be placed/embedded in metal then:
 - Ensure that the tag should be surrounded by metallic surface to get optimum read range.
 - It is recommended to make a round cavity in metal substrate having dimensions as per below drawing

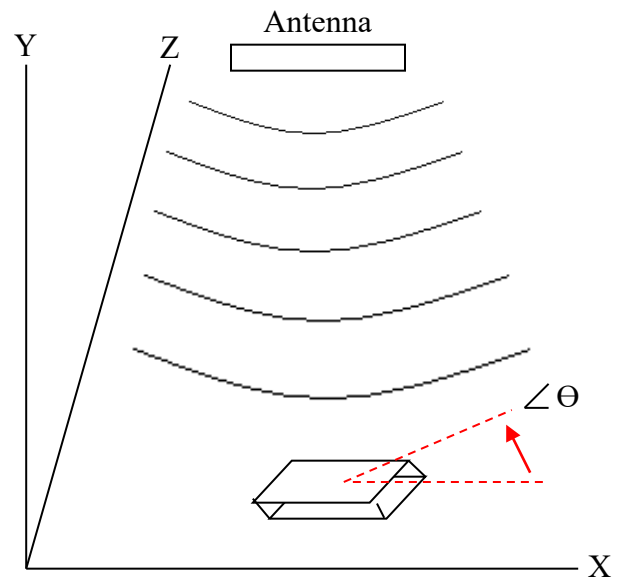


M-Rook Tag Angular Sensitivity

(Relative Read Range vs. Orientation)



Read range (in percent) at various angle.



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