



M-Rook Tag

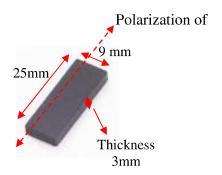
FEATURES

- 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

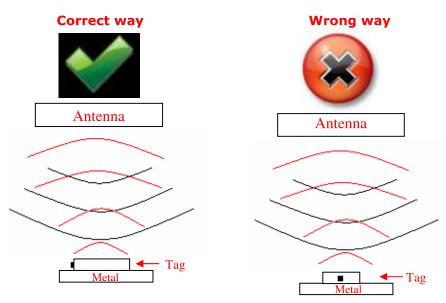
- Used in IT asset tracking applications such as backup tapes, servers, hard drives and media tapes without any human intervention.
- Inventory control of small tools and manufacturing equipment, servers and network routers.

Chip Type:	Alien Higgs 3 EPC Class 1 Gen 2		
	EPC 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	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:	Storage Temp40°C to +150°C		o +150°C
	Operating Temp.	-40°C to +85°C	
Part Number:	382V1		



Tag Placement

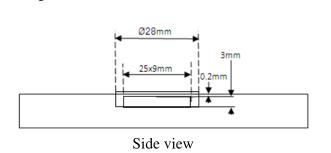
- ♣ Tag can be easily attached through adhesive tape at back.
- ♣ M-Rook tag is polarized along with the dotted line in the above picture (Dimension section).
- ♣ Place the tag in such a way that most of its bottom area comes in direct contact with metal.
- Ensure that there is no hindrance between the tag and the reader antenna.
- ♣ Reader antenna should be parallel to the dotted line as shown in above figure:

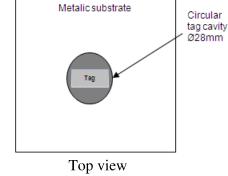


♣ If the tag is to be placed/embed in metal then:

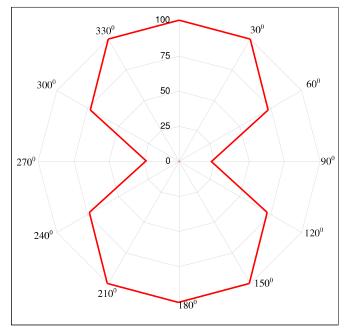
drawing

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

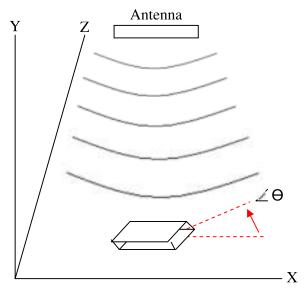




M-Rook Tag Angular Sensitivity (Relative Read Range vs. Orientation)



Read range (in percent) at various angle.



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