



## M-Pawn Tag

### FEATURES

- M-Pawn Tag is very 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.

<b>Chip Type:</b>	<b>Alien Higgs 3 EPC Class 1 Gen 2</b>	
	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

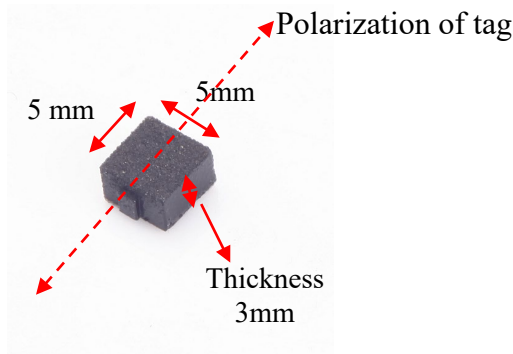
<b>Mechanical:</b>	Length	5±0.5 mm, (at chip area: 5.5±0.5mm)
	Width	5±0.5 mm
	Thickness	3 ±0.5 mm
	Material	Ceramic
	Encasing	Durable Paint
	Colour	Black
	Weight	0.4 g

<b>Electrical:</b>	Operating Frequency	865-868MHz, (902-928MHz also available on request)
	Operating mode	Passive (battery-less transponder)

<b>Ingress Protection:</b>	IP68
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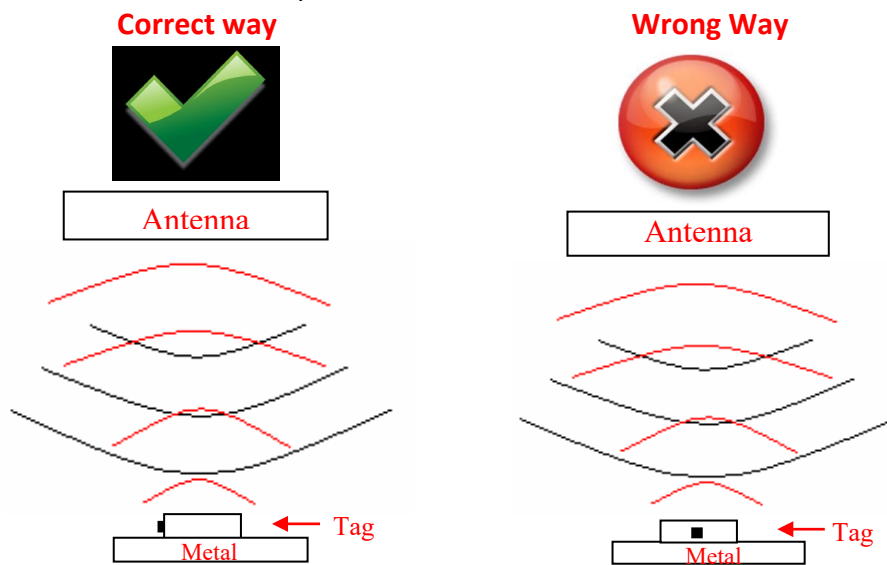
<b>Thermal:</b>	Application Temp.	-40°C to +150°C (+150°C for 30min)
	Operating Temp.	-40°C to +85°C

<b>Part Number:</b>	380V1
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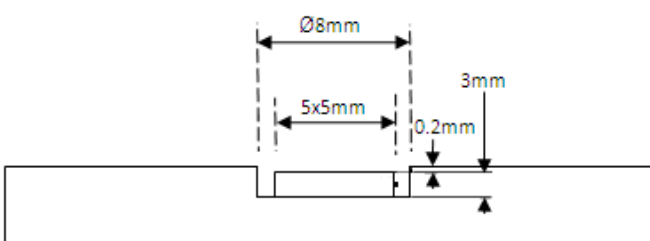
### Tag Placement

- Tag can be easily attached through adhesive tape at back.
- M-Pawn 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:

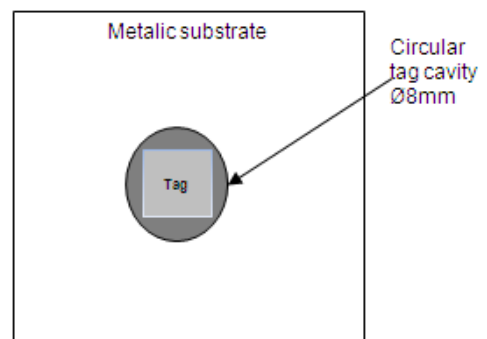


- If the tag is to be placed/embedded in metal then:

- 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.



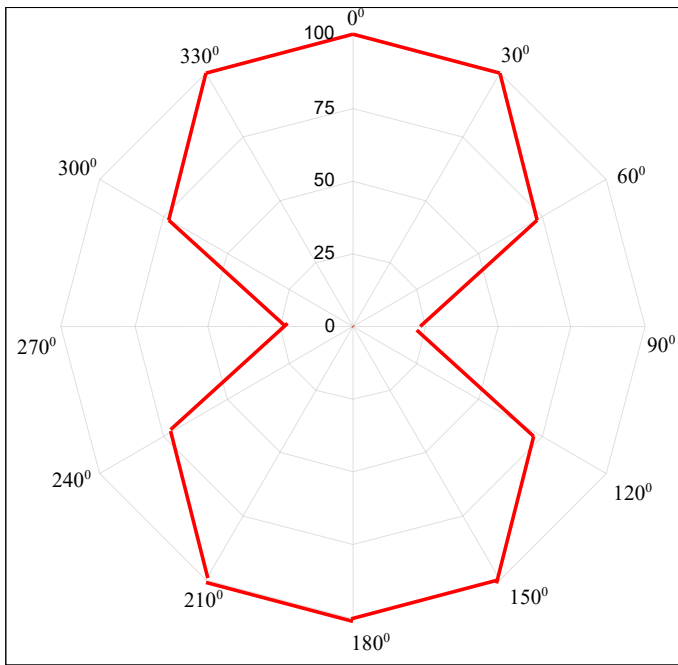
Side view



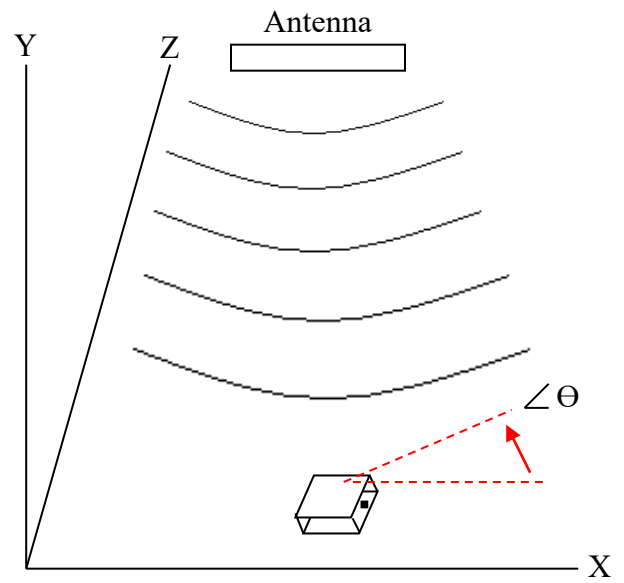
Top view

### M-Pawn 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