



## M-Tudor (Max) Tag

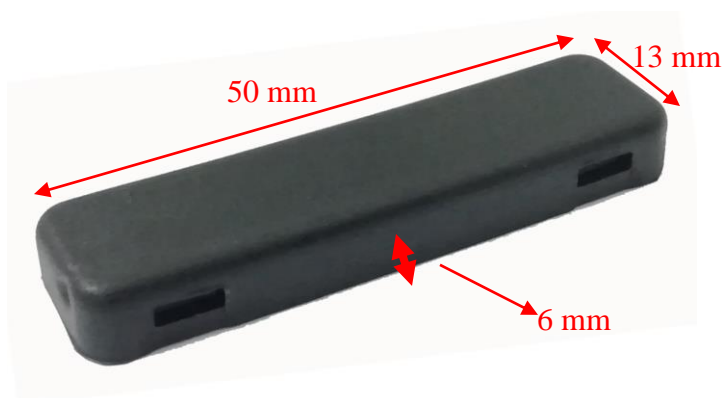
### FEATURES

- M-Tudor (Max) Tag is very small in size & has very good read range, especially when attached to metal.
- Can be used with cable ties through its mounting hole.
- 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 9, GS1 Class 1 Gen 2</b>                   |                                    |
|                            | <b>EPC Memory:</b> Up to 496-EPC Bits (nominally 96 bits) |                                    |
|                            | <b>User Memory:</b> Up to 688 Bits                        |                                    |
|                            | <b>Data Retention:</b> 50 Years                           |                                    |
|                            | <b>Write Endurance:</b> 200,000 Cycles                    |                                    |
| <b>Mechanical:</b>         | <b>Dimension</b>  | 50 x 13 x 6 mm                     |
|                            | <b>Face Material</b>                                      | TPU                                |
|                            | <b>Colour</b>   | Black                              |
|                            | <b>Weight</b>   | 4.6g                               |
| <b>Electrical:</b>         | <b>Operating Frequency</b>                                | 865-868MHz, ETSI Frequency         |
|                            | <b>Operating mode</b>                                     | Passive (battery-less transponder) |
| <b>Ingress Protection:</b> | IP68  |                                    |
| <b>Thermal:</b>            | <b>Storage Temp.</b>                                      | -25°C to +85°C                     |
|                            | <b>Operating Temp.</b>                                    | -25°C to +85°C                     |
| <b>Part Number:</b>        | 663V1   |                                    |
| <b>Options:</b>            | <b>Available with:</b>                                    |                                    |
|                            | Other IC type and Frequency on request.                   |                                    |
|                            | Other Colour combination & material                       |                                    |
|                            | Adhesive backing for easy mounting                        |                                    |
|                            |   | Non-metallic application           |



Note: Tolerance applicable are **Length:**  $\pm 1\text{mm}$ , **Width:**  $\pm 0.5\text{mm}$  and **Thickness:**  $\pm 0.3\text{mm}$

## Tag Placement

- ✚ M-Tudor (Max) is polarized perpendicular to length of tag.

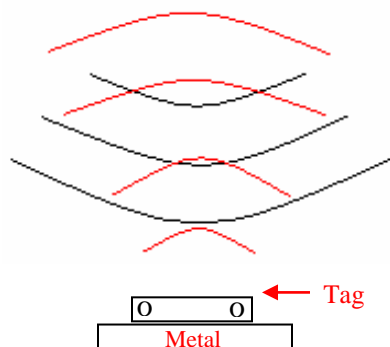


- ✚ Place the tag in such a way that most of its bottom area comes in direct contact with metal.
- ✚ Ensure that there is no hindrance between the tag and the reader antenna.
- ✚ Reader antenna should be parallel to the length of tag as shown in below figure:

**Correct way**



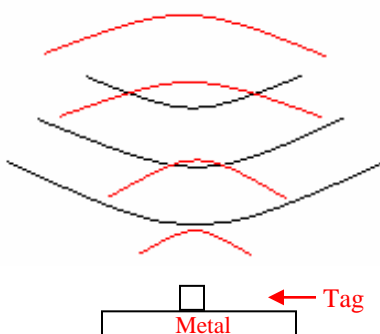
Antenna



**Wrong way**

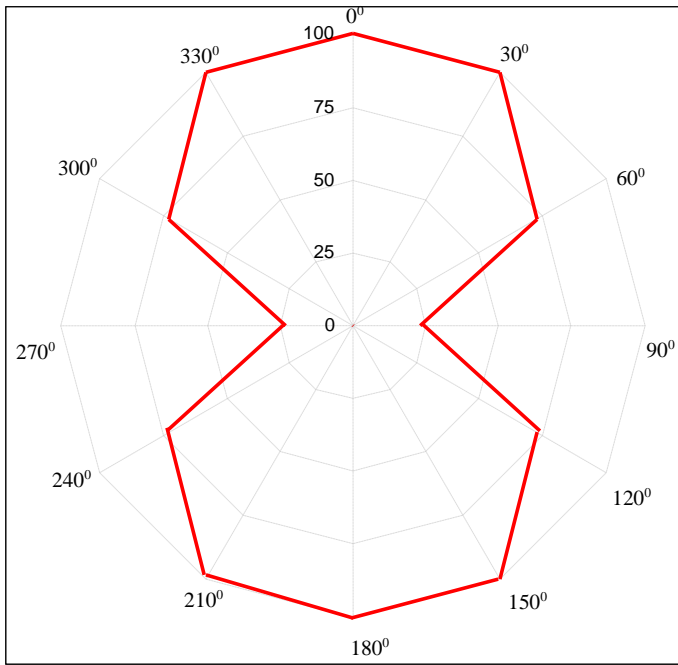


Antenna

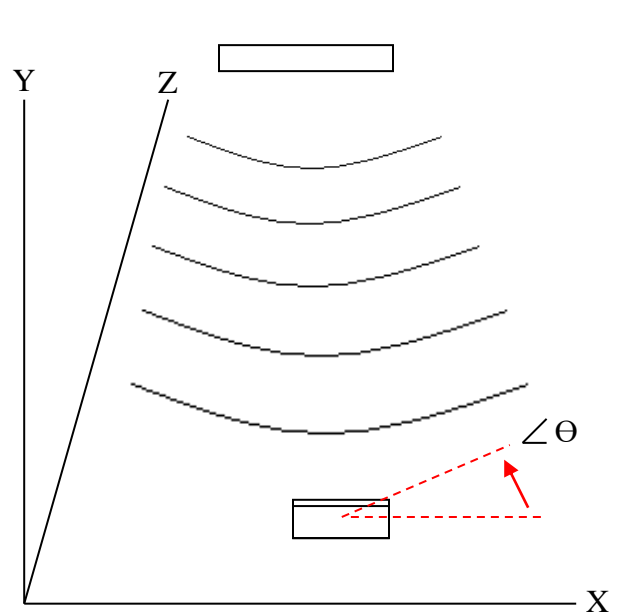


- ✚ Tag can be attached through adhesive tape, cable tie or can be hanged through nylon thread.

## M-Tudor (Max) 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

