



# BT/Wi-Fi 2.4 GHz EMBEDDED CHIP ANTENNA

**Part Numbers: 2108832-1**

## FEATURES & BENEFITS

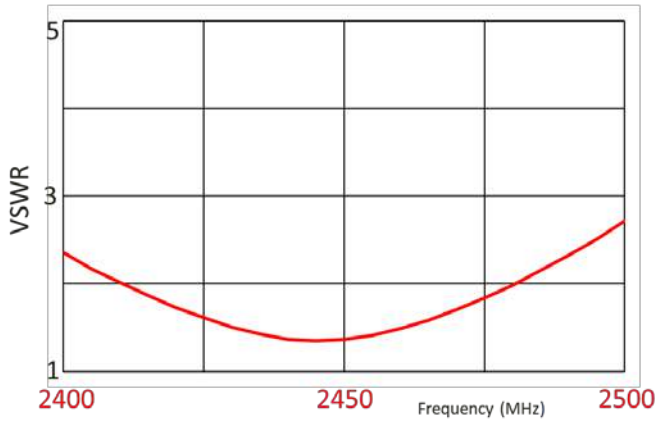
- Wi-Fi 2.4 GHz, Bluetooth, ZigBee
- Embedded Ceramic Chip Antenna
- On Board SMD Antenna
- Available in tape & reel
- The following data is based on 50 x 50 mm ground size

## SPECIFICATIONS

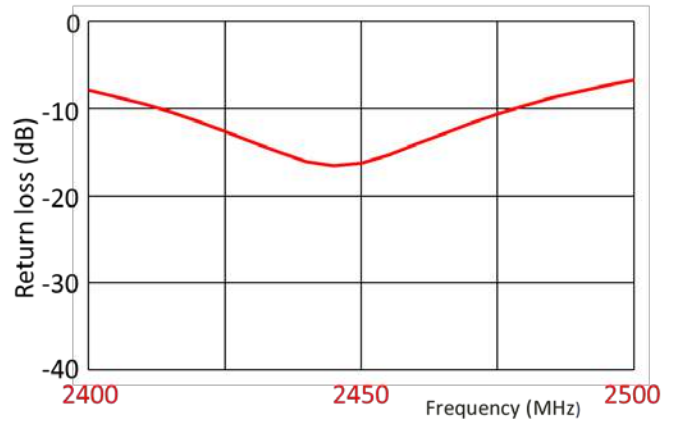
|                              |  |
|------------------------------|--|
| <b>Frequency Range (MHz)</b> | 2400 - 2500  |
| <b>VSWR</b>                  | < 2.8:1  |
| <b>Average Efficiency</b>    | 82 %   |
| <b>Peak Gain</b>             | 1.8 dBi  |
| <b>Average Gain</b>          | -1.9 dBi   |
| <b>Feed Point Impedance</b>  | 50 ohms  |
| <b>Polarization</b>          | Linear   |
| <b>Size</b>                  | 3.0 mm x 1.5 mm x 1.2 mm   |
| <b>Weight</b>                | < 0.02 g   |
| <b>Mounting</b>              | Surface mount  |
| <b>Mating Connector</b>      | N/A  |
| <b>Cable</b>                 | N/A  |
| <b>Operating Temperature</b> | -40 to +85°C   |
| <b>Storage Temperature</b>   | -40 to +85°C   |
| <b>Hazardous Materials</b>   | A certificate of conformance is available from the product page on TE website. |

## RF DATA

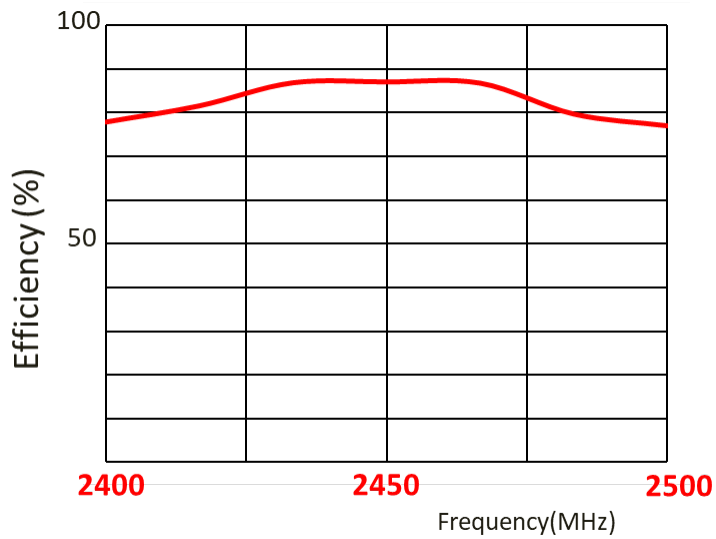
VSWR



Return Loss

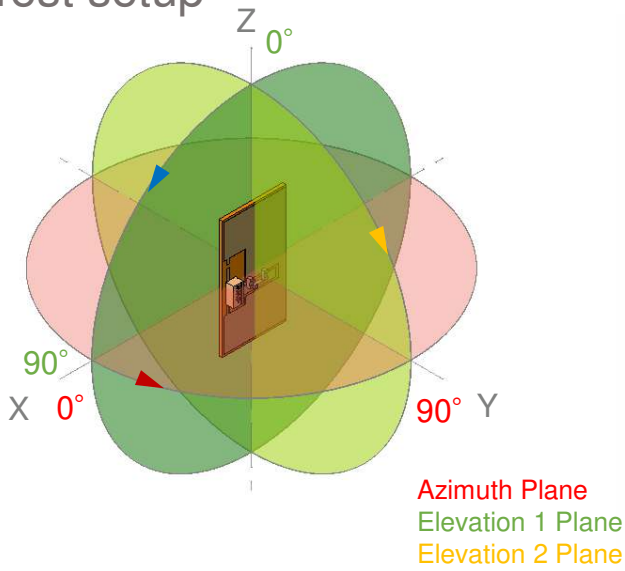


Efficiency

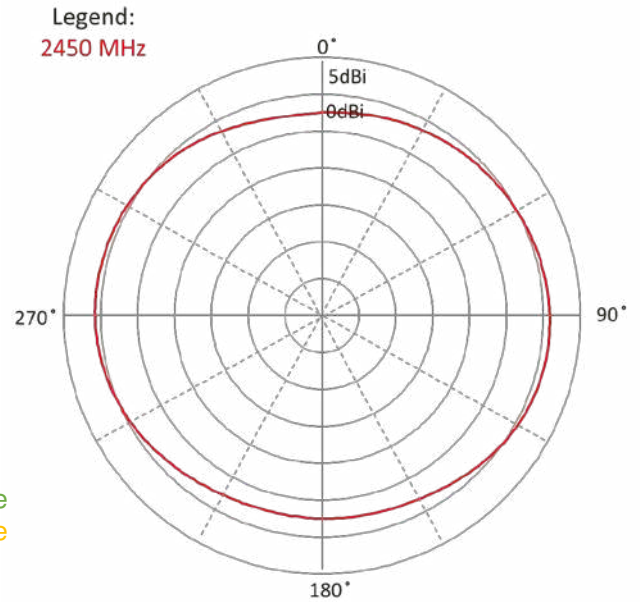


# RADIATION PATTERN

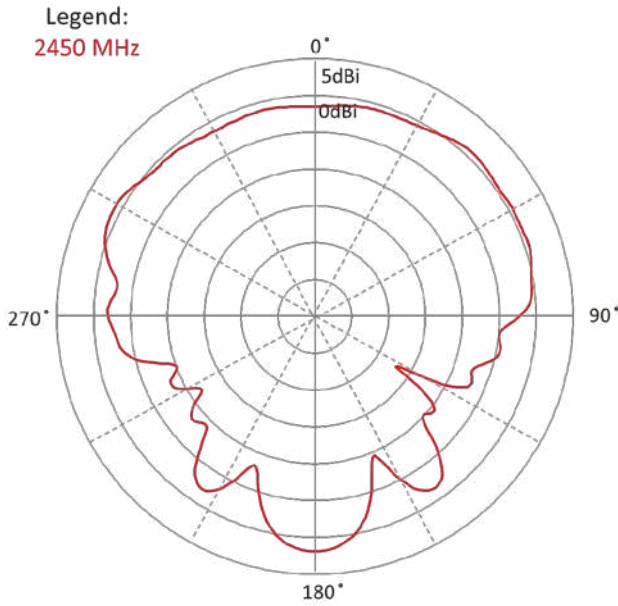
Test setup



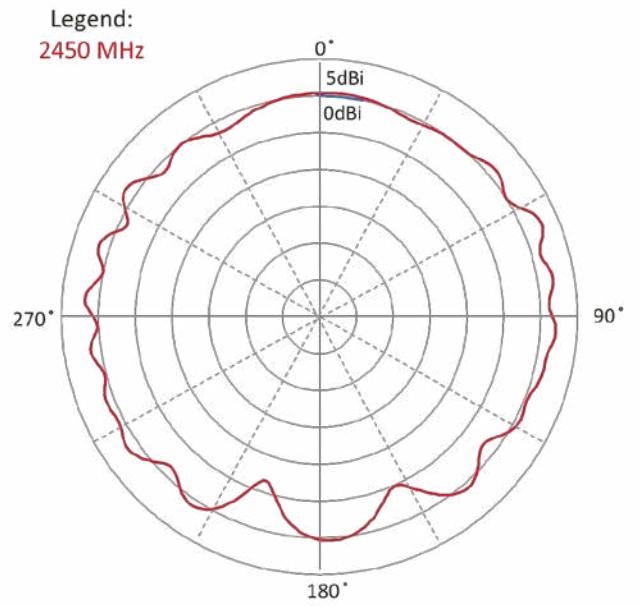
Azimuth



Elevation 1



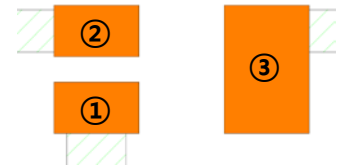
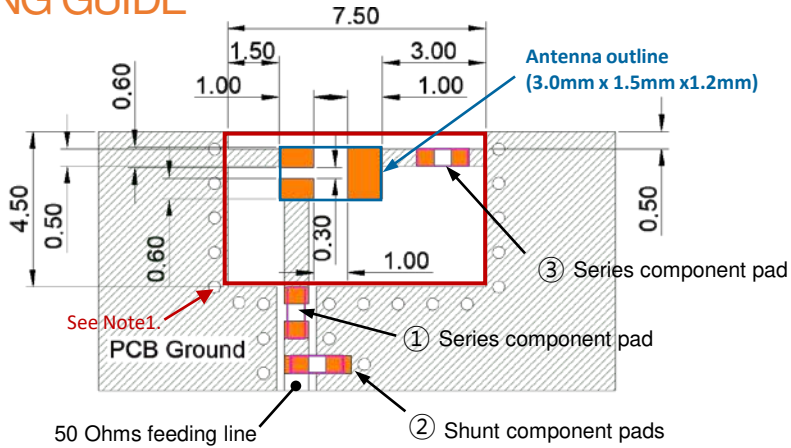
Elevation 2



# BT/Wi-Fi 2.4 GHz EMBEDDED CHIP ANTENNA

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## MOUNTING GUIDE

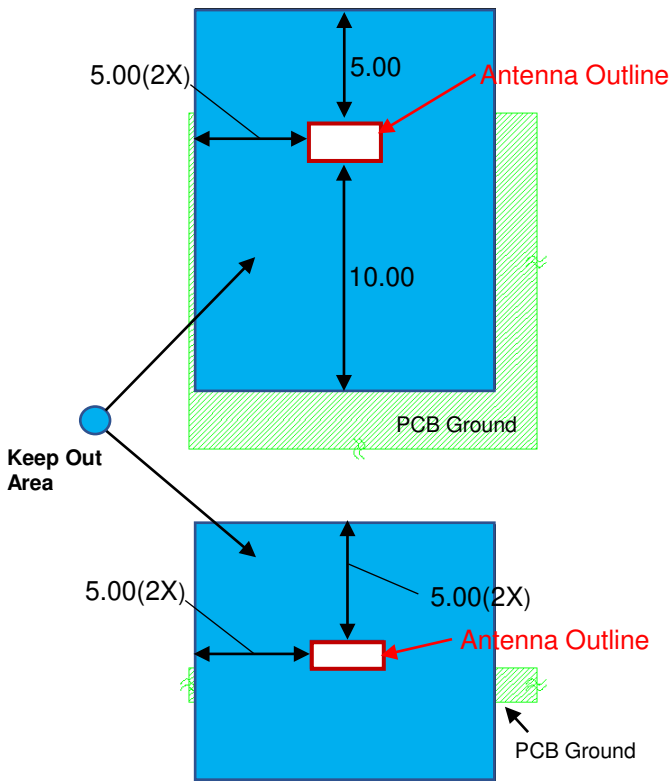


| No | Assignment |
|----|------------|
| ①  | Feeding    |
| ②  | GND        |
| ③  | GND        |

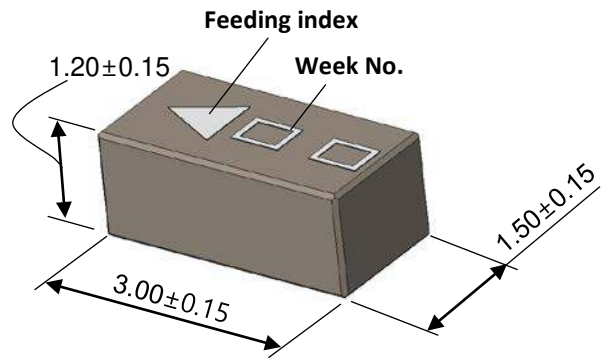
- NOTES: 1. No copper allowed in designated area on all PCB layers –   
 2. Measured with above matching circuit condition.  
 3. For more information please call TE.  
 4. Measured with below matching circuit condition.  
 ① 4.7pF ② 2.7nH ③ 100pF

**Dimension: mm**  
**Diagrams is not to scale**

## KEEP OUT AREA



## DIMENSIONS

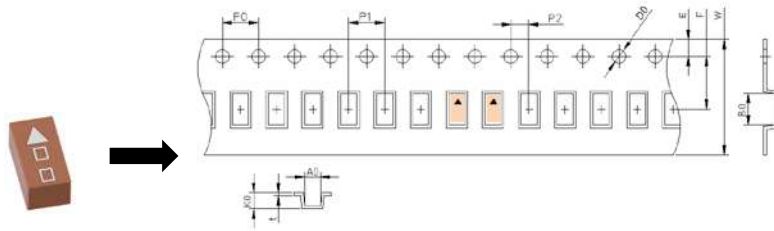


**Dimension: mm**  
**Diagrams is not to scale**

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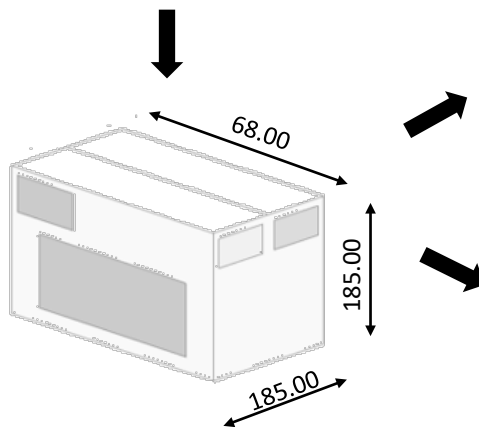
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## PACKAGING

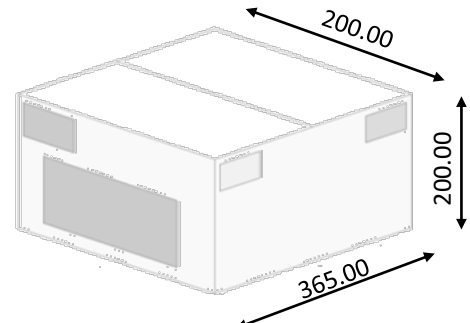


| Item | Spec.      | Item | Spec.      | Item | Spec.       |
|------|------------|------|------------|------|-------------|
| A0   | 1.80 ±0.10 | P0   | 4.00 ±0.10 | E    | 1.75 ±0.10  |
| B0   | 3.30 ±0.10 | P1   | 4.00 ±0.10 | F    | 5.50 ±0.10  |
| K0   | 1.35 ±0.10 | P2   | 2.00 ±0.10 | W    | 12.00 ±0.30 |
| D0   | 1.55 ±0.05 | -    | -          | t    | 0.30 ±0.05  |

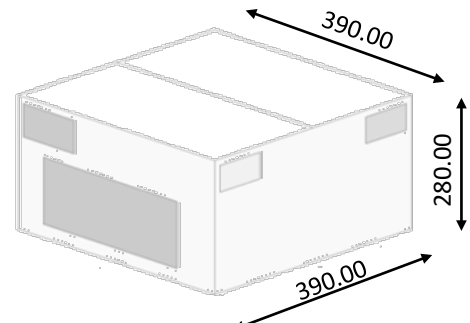
2,500pcs/1Reel  
Ø7" x 12 mm



7,500pcs/3 Reel  
3 Reel/1 Inner box



37,500pcs/5 Inner box  
5 Inner box/1 Outer box #1



105,000pcs/14 Inner box  
14 Inner box/1 Outer box #2

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- Germany: +49 (0) 6251-133-1999
- UK: +44 (0) 800-267666
- France: +33 (0) 1-3420-8686
- Netherlands: +31 (0) 73-6246-999
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