



# BT/Wi-Fi 2.4 GHz EMBEDDED CHIP ANTENNA

Part Numbers: 2108832-1

## FEATURES & BENEFITS

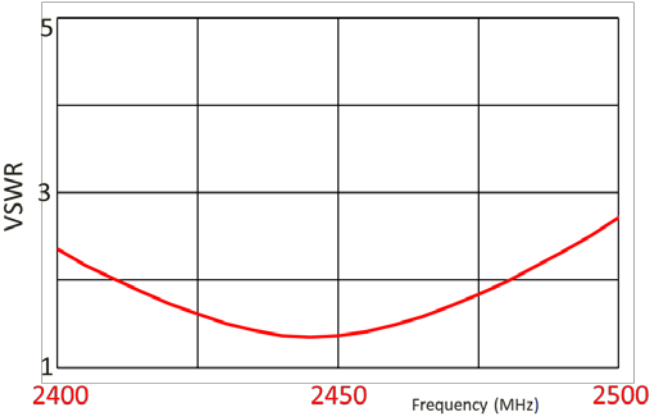
- Wi-Fi 2.4 GHz, Bluetooth, ZigBee
- Embedded Ceramic Chip Antenna
- On Board SMD Antenna
- Available in tape & reel
- The following data is based on 50 x 50 mm ground size

## SPECIFICATIONS

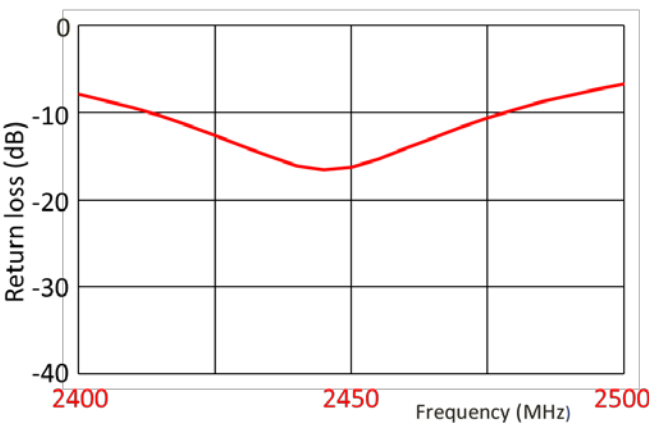
|                       |                                                                                |
|-----------------------|--------------------------------------------------------------------------------|
| Frequency Range (MHz) | 2400 - 2500                                                 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

RF DATA

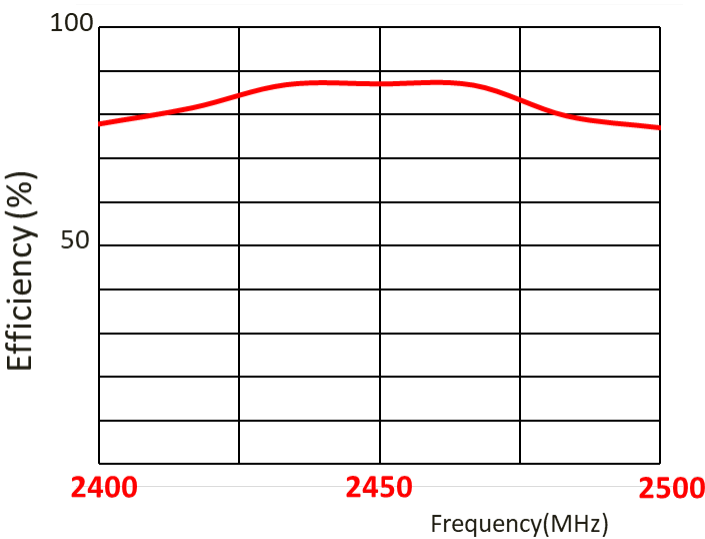
VSWR



Return Loss

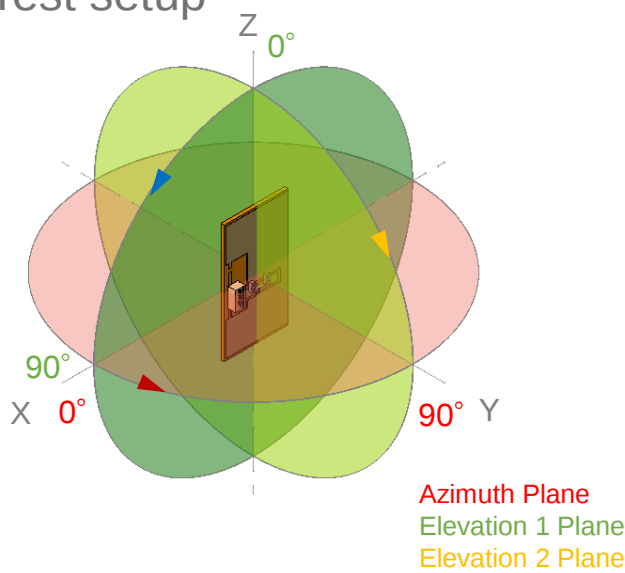


Efficiency

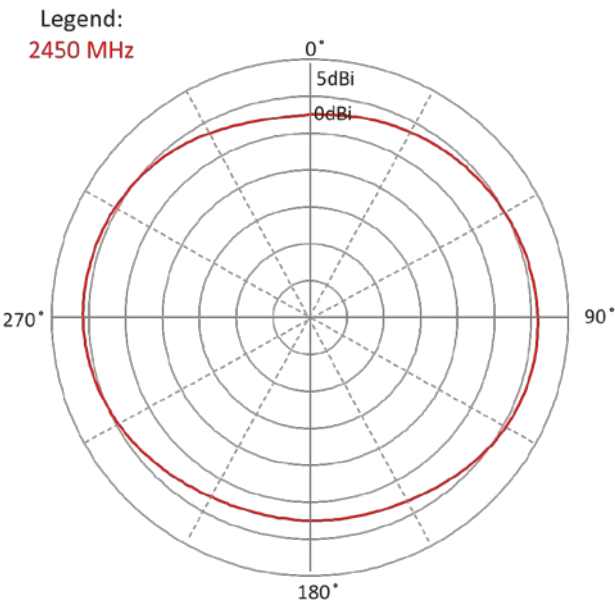


# RADIATION PATTERN

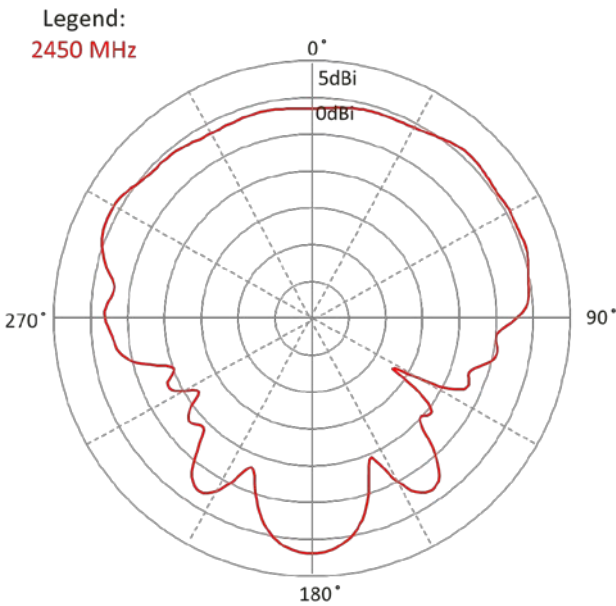
Test setup



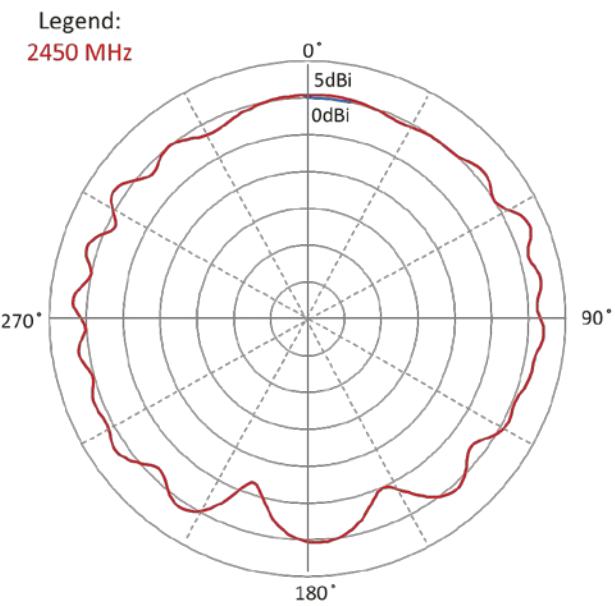
Azimuth

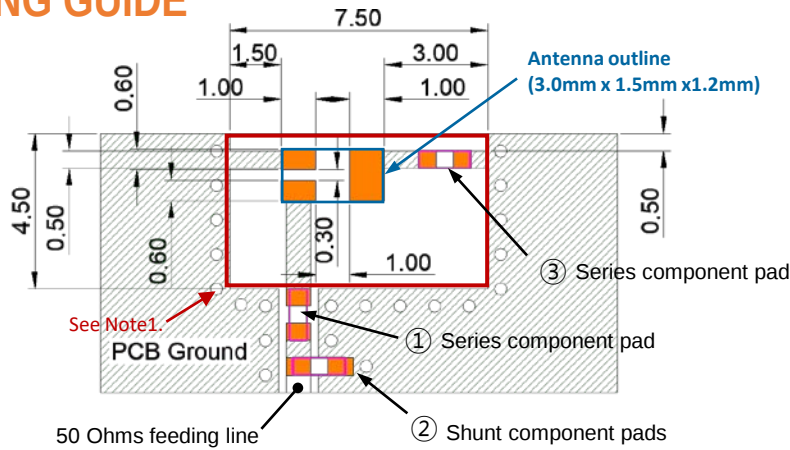


Elevation 1



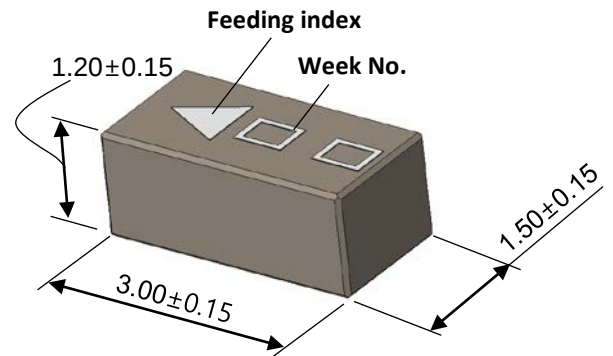
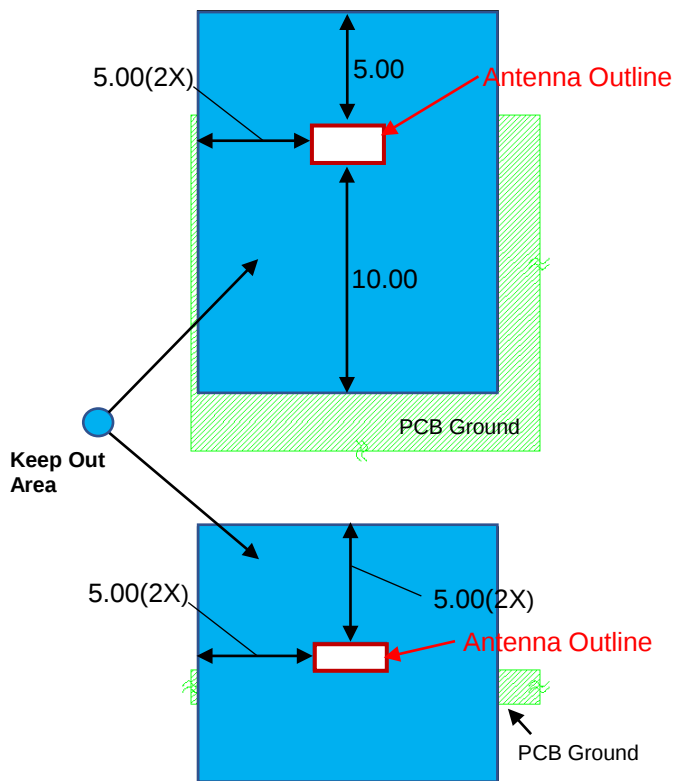
Elevation 2



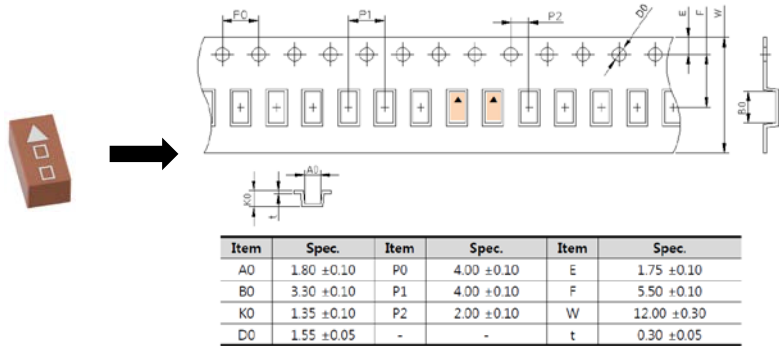


| No | Assignment |
|----|------------|
| ①  | Feeding    |
| ②  | GND        |
| ③  | GND        |

- 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

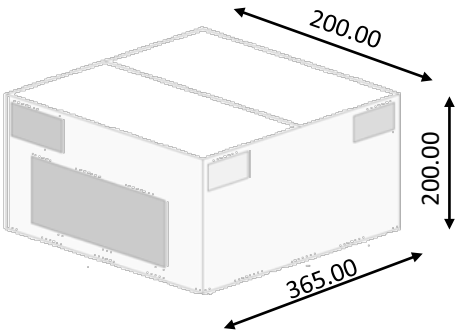
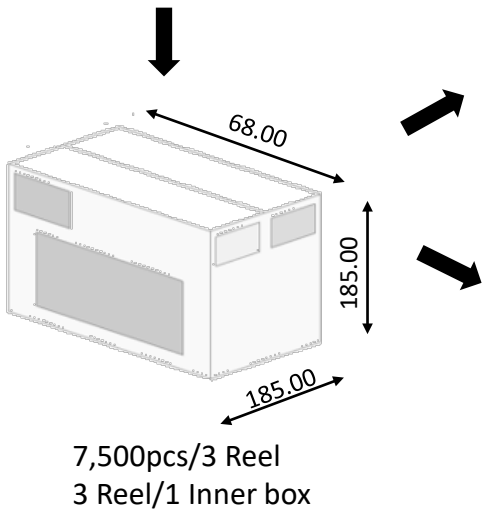


PACKAGING

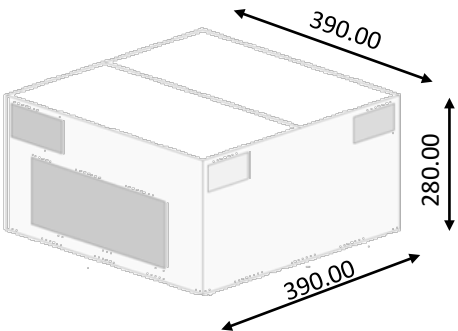


| Item | Spec.      | Item | Spec.      | Item | Spec.       |
|------|------------|------|------------|------|-------------|
| A0   | 1.80 ±0.10 | P0   | 4.00 ±0.10 | E    | 1.75 ±0.10  |
| B0   | 3.30 ±0.10 | P1   | 4.00 ±0.10 | F    | 5.50 ±0.10  |
| K0   | 1.35 ±0.10 | P2   | 2.00 ±0.10 | W    |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

2,500pcs/1Reel  
Ø7" x 12 mm



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



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

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