

SPECIFICATION

- Part No. : WLP.2450.25.4.A.02
- Specification No : DA2450C
- Product Name : 2450MHz Patch Antenna
- Features : 25mm*25mm*4.5mm ROHS Compliant



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1.0 Introduction

This WLP.25 patch antenna for ISM, Wi-Fi, Bluetooth and Zigbee is based on smart *XtremeGain*[™] technology. It is mounted via pin and double-sided adhesive and has been selected as optimal solution for the 50*50mm ground plane. This passive patch offers typical gain response from 2.5 dBi and a higher gain can be achieved, depending on the Ground Plane, the space available and clearance afforded. The WLP.25's high gain performance is a perfect solution for metering and remote monitoring applications; it can deliver longer range than smaller chip antennas.

2.0 Key Antenna Performance Indicators

| No | Parameter | Specification | Notes |
|----|--------------------------------|-----------------|--------------------|
| 1 | Range of Receiving Frequency | 2450±50Mhz | |
| | | | with 50*50mm GND |
| 2 | Center Frequency | 2482MHz | Plane |
| 3 | Bandwidth | 85 MHz min | Return Loss £-10dB |
| 4 | VSWR | 1.5 max | Center Frequency |
| 5 | Gain at Zenith | +5.0dBi typ. | Center Frequency |
| 6 | Gain at 10° Elevation | -1.0dBi typ. | Center Frequency |
| 7 | Axial Ratio | 3 dB Max | Center Frequency |
| 8 | Polarization | RHCP | |
| 9 | Impedance | 50Ω | |
| 10 | Frequecy Temp Coefficient (Tf) | 0±20ppm/°C | -40°C to +105°C |
| 11 | Operating Temperature | -40°C to +105°C | |

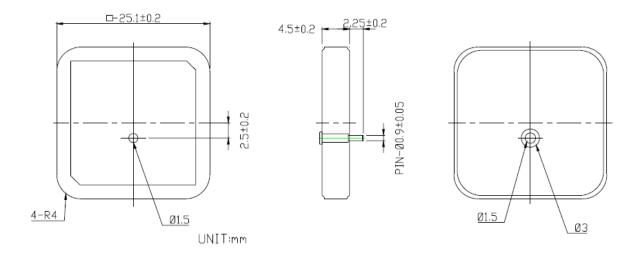
Original Patch Specification tested on 50*50mm ground plane

*Changes in user groundplane and environment will have an effect on the antennas performance

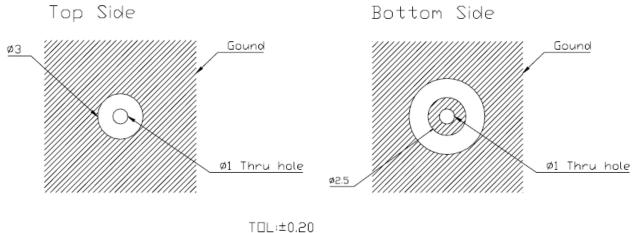


3.0 Mechanical Specifications

3.1 Dimensions and Drawing



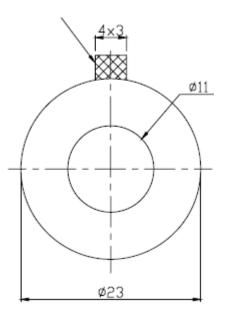
3.2 Layout Dimensions



UNIT:mm

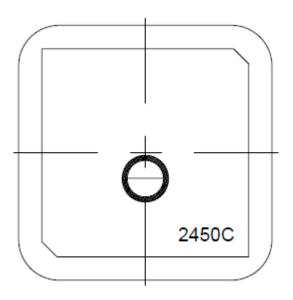


3.3 Tape Dimensions



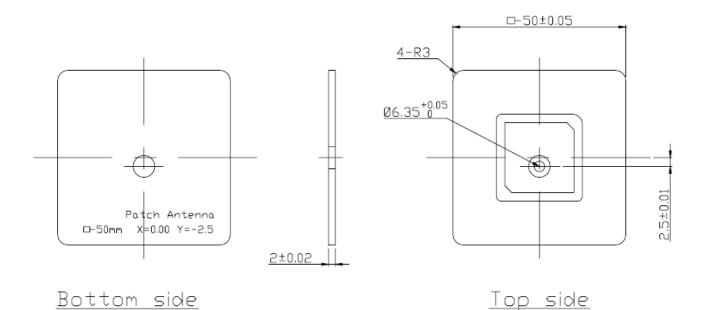
<u>1.NITTO: NO.5015</u> <u>2.Double-coated adhesive tape for industrial use</u> <u>3.Thickness: 0.12mm</u>

3.4 Mark

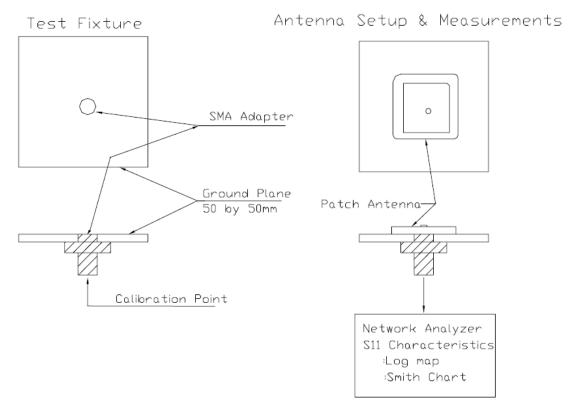




3.5 Ground Plane Dimension

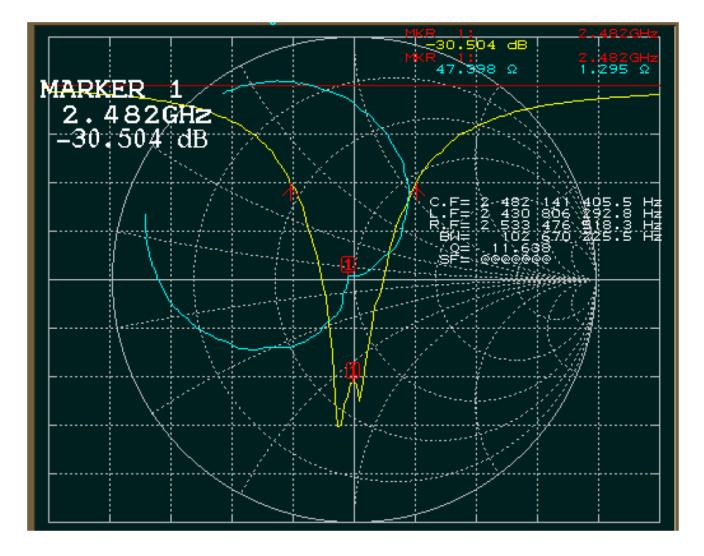


3.6 Test Fixture Antenna & Performance Measurements



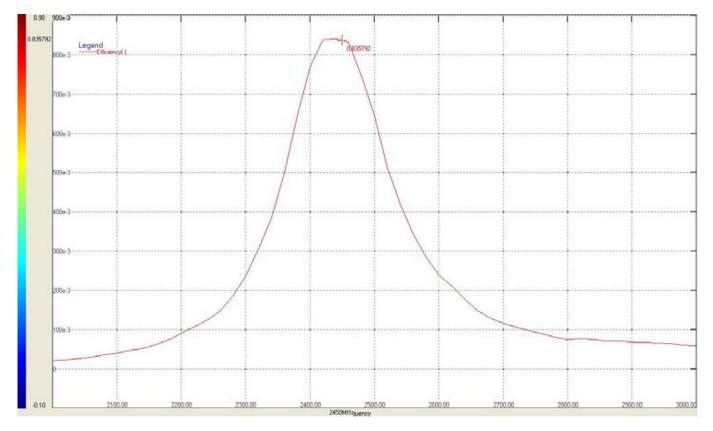


4.0 Performance Measurement



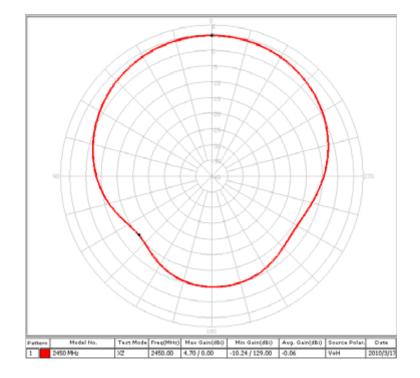


4.2 Efficiency

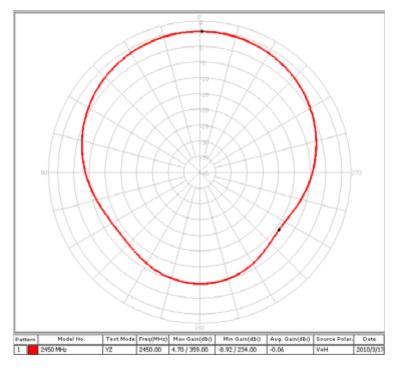




4.3 Antenna Gain

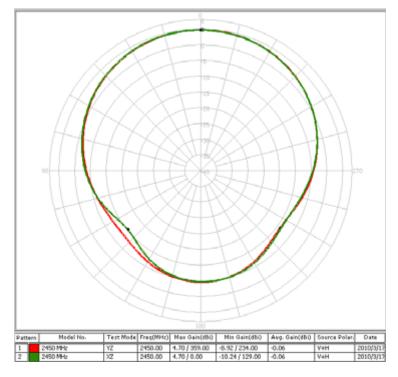


XZ-Plane



YZ-Plane





XY Plane



5.0 Packaging

- •Per Tray: 50 pieces
- •Per Carton(Inside Box) 4 Trays = 200 pieces

•Outer Carton (Outside Box)- 4 Cartons = 800 pieces

