Bluetooth Antenna

### **Applications**

This antenna is designed for Bluetooth\WLAN application and it's suitable for cellular phones, PDA, notebook, navigator, and all devices which have Bluetooth\WLAN function.

#### **Features**

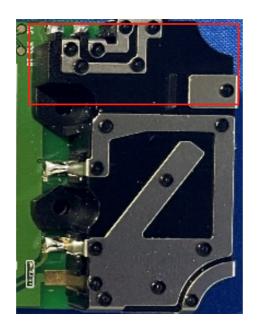
Omni-directional radiation High Efficiency Low cost

- Lead free soldering compatible
- RoHS compliant
- Tape and reel packing

#### **Electrical Characteristics**

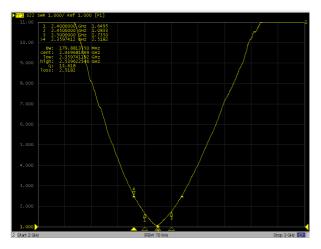
| ITEM           | SPECIFICATION   |  |
|----------------|-----------------|--|
| Frequency Band | 2.40GHz~2.50GHz |  |
| VSWR           | Less than 2.5   |  |
| Polarization   | Linear          |  |
| *Peak Gain     | 1.8 dBi Typ.    |  |
| *Efficiency    | 80% Typ.        |  |
| Impedance      | 50Ω Typ.        |  |

#### **Antenna Dimension**

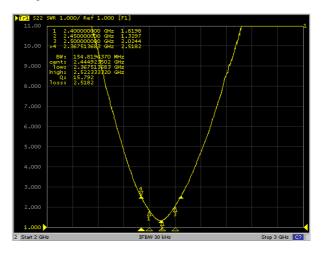


# Typical VSWR

# Layout A

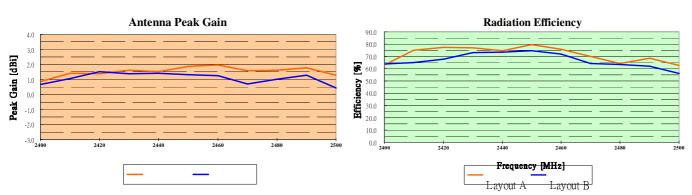


### Layout B

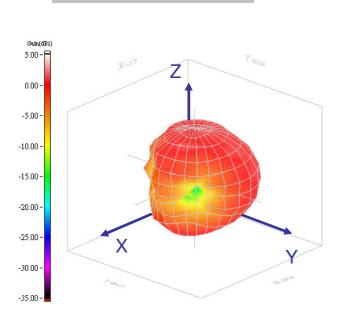


| Frequency | Layout A VSWR | Layout B VSWR |
|-----------|---------------|---------------|
| 2400 MHz  | 1.65          | 1.82          |
| 2450 MHz  | 1.08          | 1.33          |
| 2500 MHz  | 1.74          | 2.02          |

# **Typical Free Space Peak Gain and Efficiency**



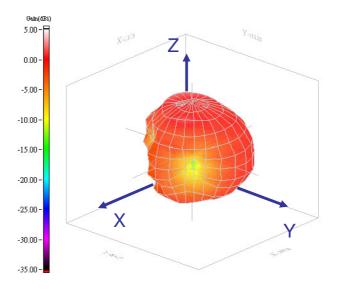
| Frequency | Layout A Peak Gain | Layout B Peak Gain | Layout A Efficiency | Layout B Efficiency |
|-----------|--------------------|--------------------|---------------------|---------------------|
| 2400 MHz  | 0.85 dBi           | 0.66 dBi           | 63.02%              | 63.80%              |
| 2450 MHz  | 1.80 dBi           | 1.33 dBi           | 79.60%              | 74.61%              |
| 2500 MHz  | 1.30 dBi           | 0.42 dBi           | 62.65%              | 56.31%              |



2450 MHz

Layout A

Layout B 2450 MHz



### Typical Free Space Radiation Pattern

2D Radiation Pattern

