

# SPECIFICATION

Part No. : **PF.1001.017**

Product Name : 2.4 & 5 GHz Embedded PIFA Antenna

Features : WiFi/BT/ZigBee/ISM/IoT Bands

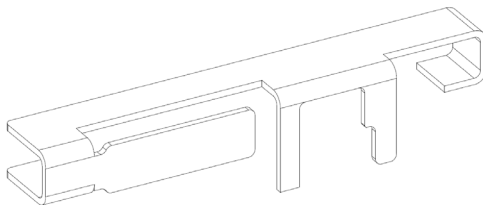
2400~2500MHz / 5150~5850MHz

5 dBi Peak Gain

21.5\*3.5\*2.5 mm size

High Efficiency Multi-Band SMD antenna

RoHS Compliant



## 2. Specifications



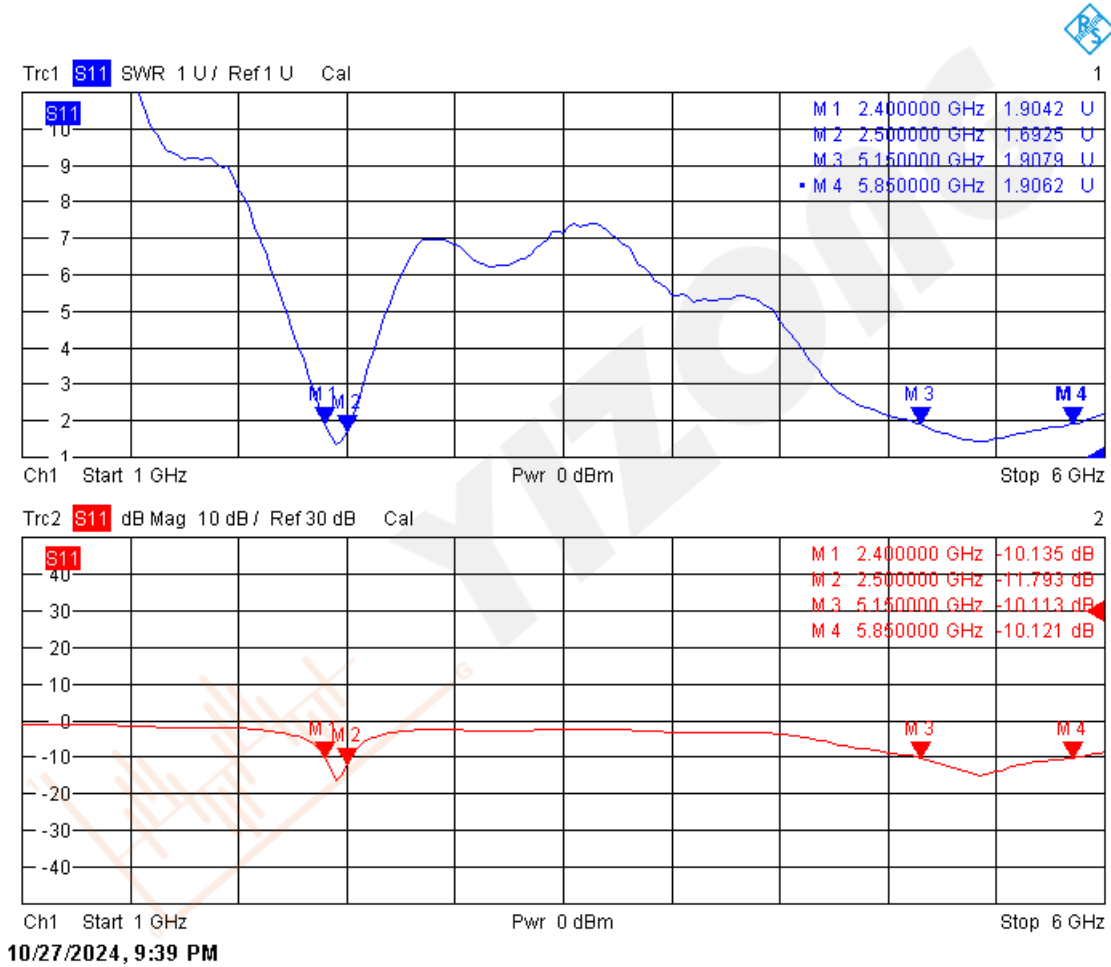
| 2.4 & 5 GHz Embedded PIFA Antenna |                           |           |
|-----------------------------------|---------------------------|-----------|
| Frequency (MHz)                   | WiFi / BT / 2.4G / ZigBee |           |
|                                   | 2400~2500                 | 5150-5850 |
| VSWR                              | < 2.0                     | < 2.0     |
| Return Loss (dB)                  | -10                       | -10       |
| Peak Gain (dBi)                   | 4.5                       | 6.5       |
| Efficiency (%)                    | ~60                       | ~60       |
| Average Gain (dBi)                | -2                        | -2        |
| Radiation Properties              | Omni-directional          |           |
| Max Input Power (Watts)           | 5                         |           |
| Polarization                      | Linear                    |           |
| Impedance (Ohms)                  | 50                        |           |

| Mechanical      |                 |
|-----------------|-----------------|
| Dimensions (mm) | 21.5*3.5*2.5 mm |
| Material        | SUS201          |
| Soldering Type  | SMT             |
| Weight          | 0.5g            |

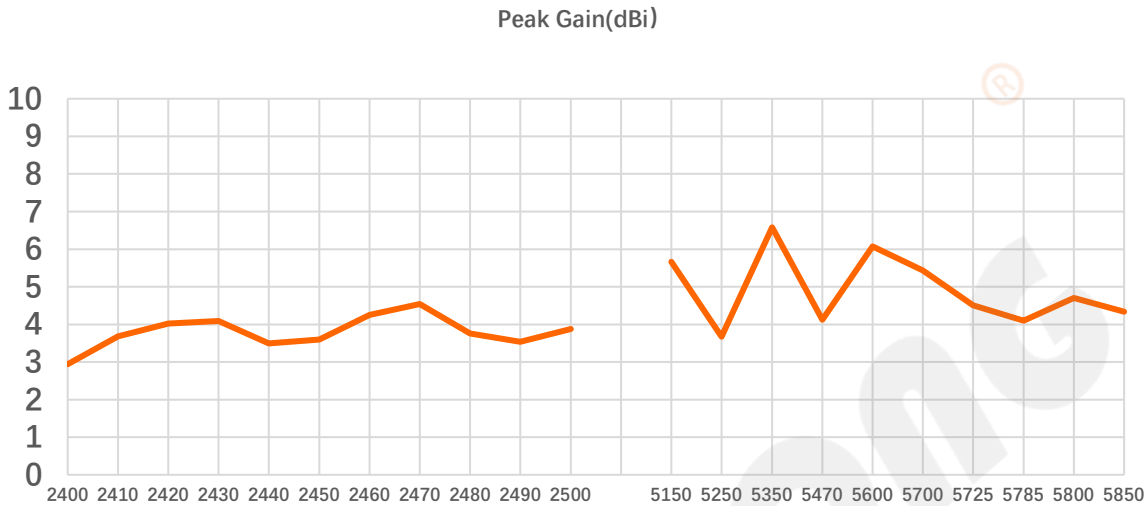
| Environmental         |               |
|-----------------------|---------------|
| Operation Temperature | -40°C to 85°C |
| Storage Temperature   | -40°C to 85°C |
| RoHs Compliant        | Yes           |

## 2. ANTENNA PARAMETERS

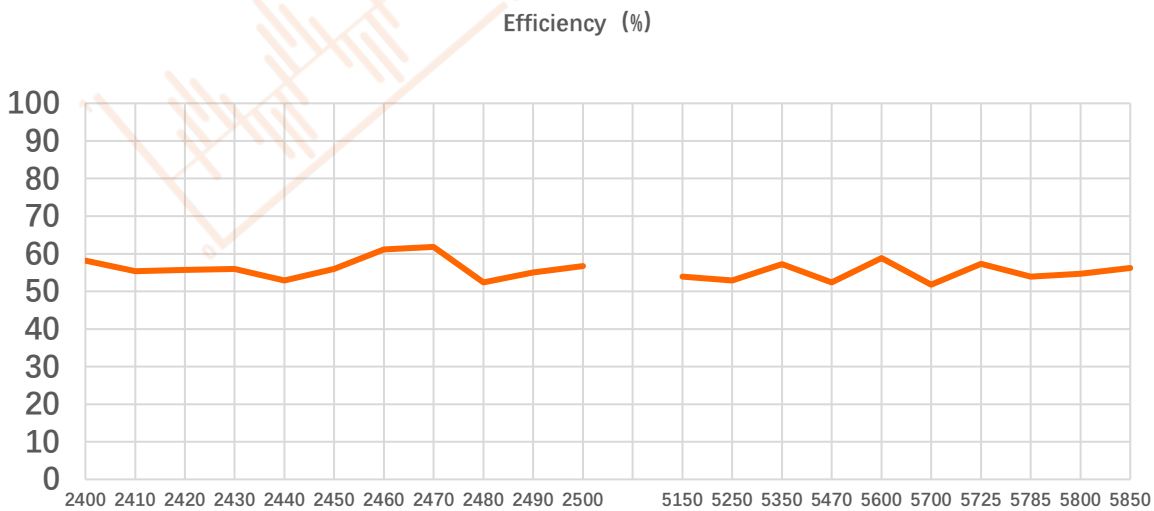
### 2.1 S Parameter



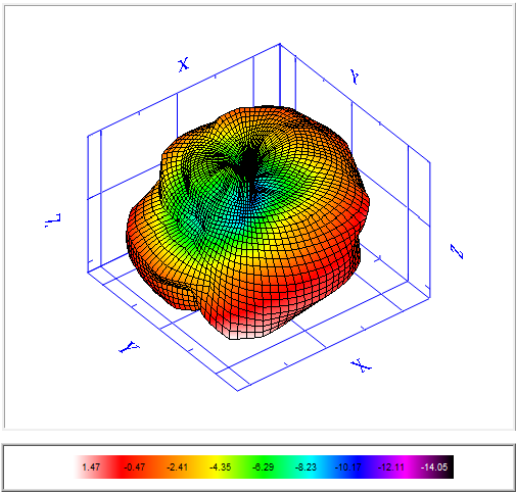
## 2.2 Peak Gain



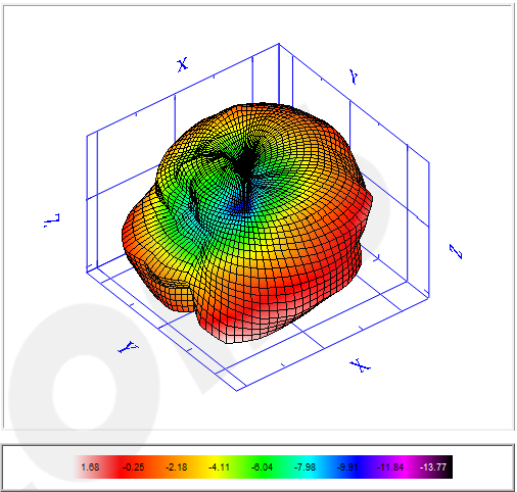
## 2.3 Efficiency



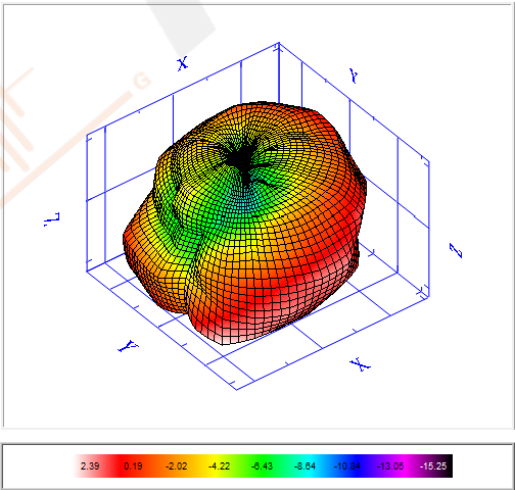
## 2.4 Radiation Pattern



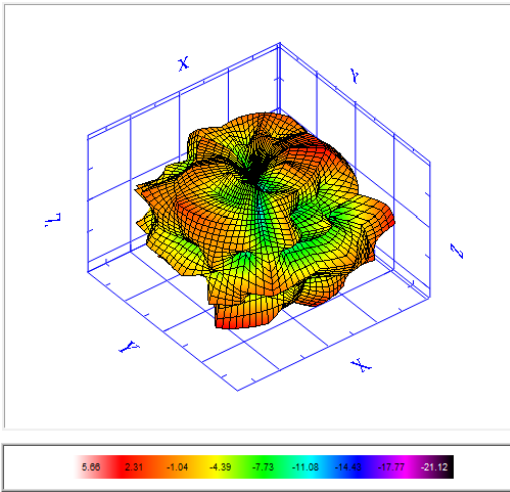
Radiation Pattern at 2400 MHz of Antenna.



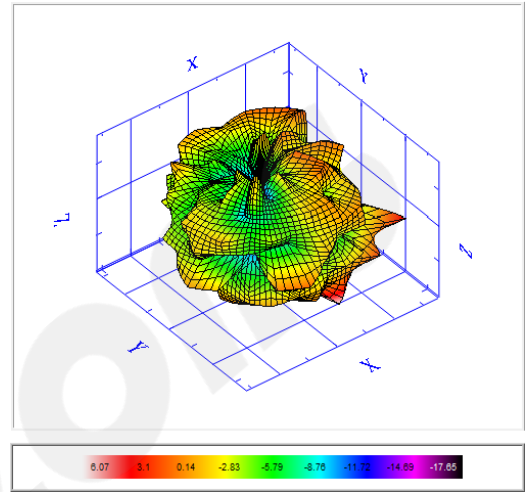
Radiation Pattern at 2450 MHz of Antenna.



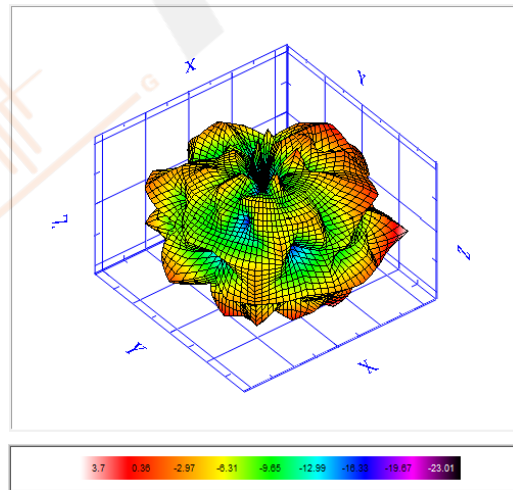
Radiation Pattern at 2500 MHz of Antenna.



Radiation Pattern at 5150 MHz of Antenna.

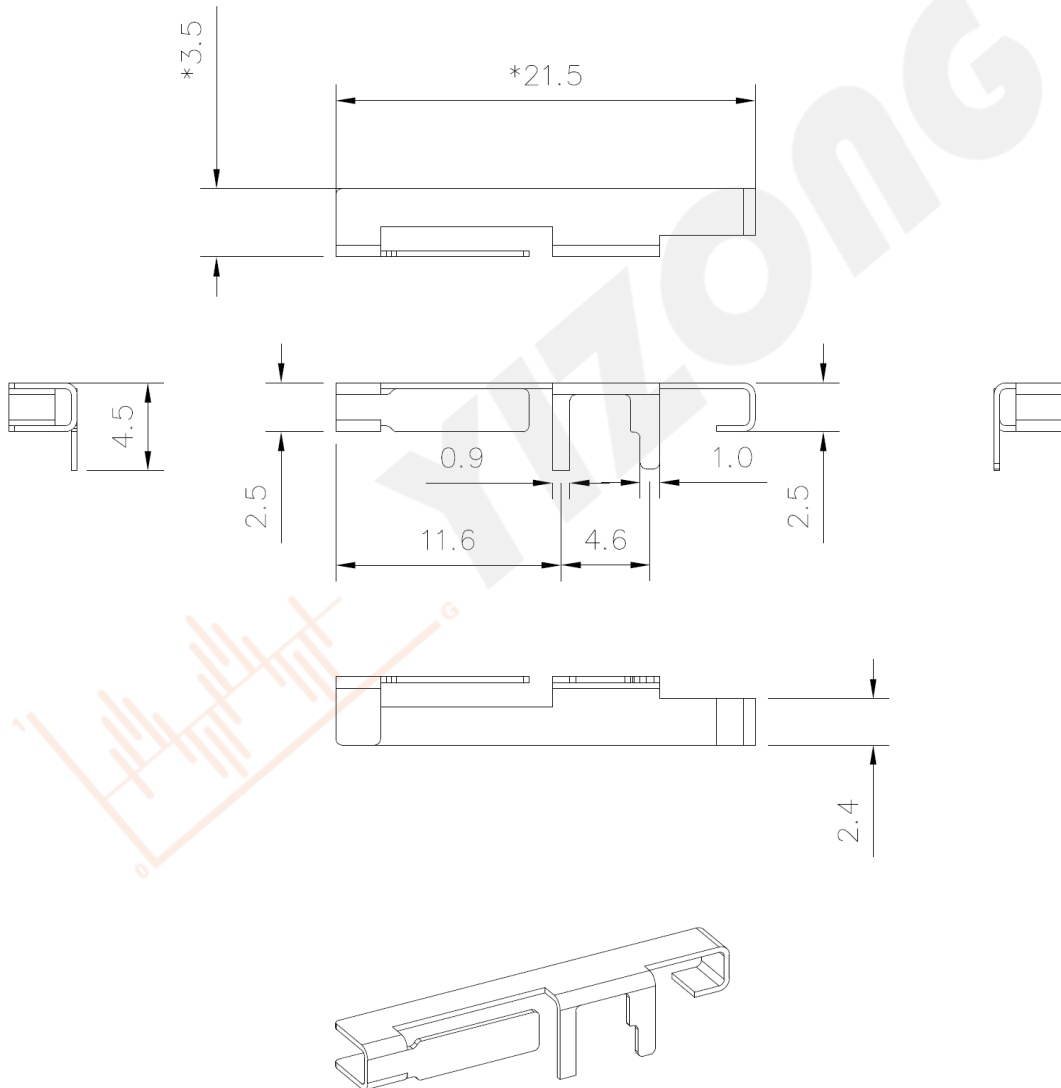


Radiation Pattern at 5500 MHz of Antenna.



Radiation Pattern at 5850 MHz of Antenna.

### 3. MECHANICAL DRAWING



## 4. Recommended PCB Pattern

