

### Features:

- Passive Ultra Small SMD Antenna
- Wi-Fi 2.4GHz, BLE
- Size of antenna: 1 x 0.5 x 0.35 mm  $\pm 0.1$
- Evaluation Board Size: 40 x 20 x 1.6 mm
- Total Efficiency > 78% (-1dB)
- Max.Total Efficiency: 91%(-0.37dB)
- Max Realized Gain: 2.5 dBi
- Linear Polarization
- Vertical Mount

### Applications:

- In-and-Outdoor
- Bluetooth, BLE, Zigbee
- ISM 2.4GHz Radio
- IoT Applications
- Industrial Controls
- M2M applications

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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**Series: SMD Chip Antenna**

**PART NUMBER: CT-2.4G-CHIP0402-01**

### **ELECTRICAL SPECIFICATIONS**

Antenna type	Ultra Small form factor SMD Antenna
Frequency	2400 – 2484MHz
Nominal Impedance	50 $\Omega$
VSWR (2400 – 2484MHz)	< 2.2
Return loss (2400 – 2484MHz)	< -8.45 dB
Realized Gain	> 1.78 dBi
Max Realized Gain	2.5dBi
Total Efficiency	> 78% (-1dB)
Radiation Pattern	Omni- Directional
Polarization	Linear
Power withstanding	2 W

### **MECHANICAL SPECIFICATIONS**

Width / height / Length	1 x 0.5 x 0.35 mm
Antenna Color / Plastic material	Black / UV Protected,
Connector type/Cable type	SMD

### **TEMPERATURE SPECIFICATIONS**

Operating Temperature	-40° to +85° C
Ingress Protection	IP30
RoHS Compliant	Yes

\*The above results are simulated/measured with Evaluation Board. Antenna performance Depends of the PCB size, available Antenna clearance and complexity of Device.

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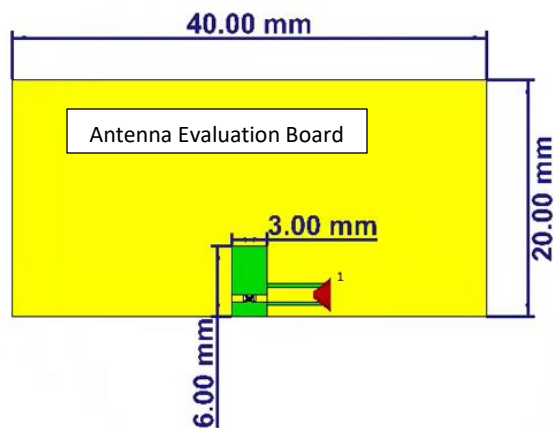
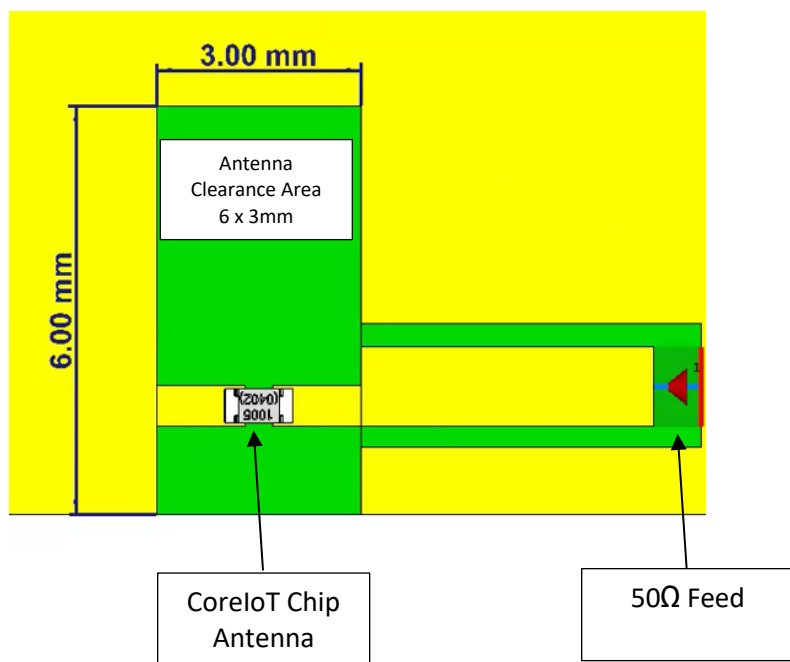
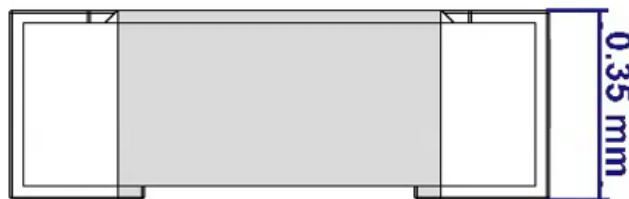
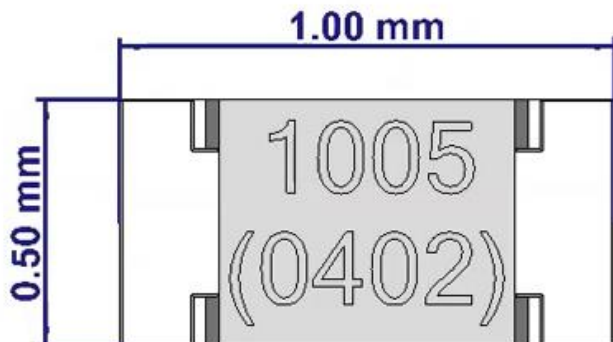
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**MECHANICAL DRAWING**

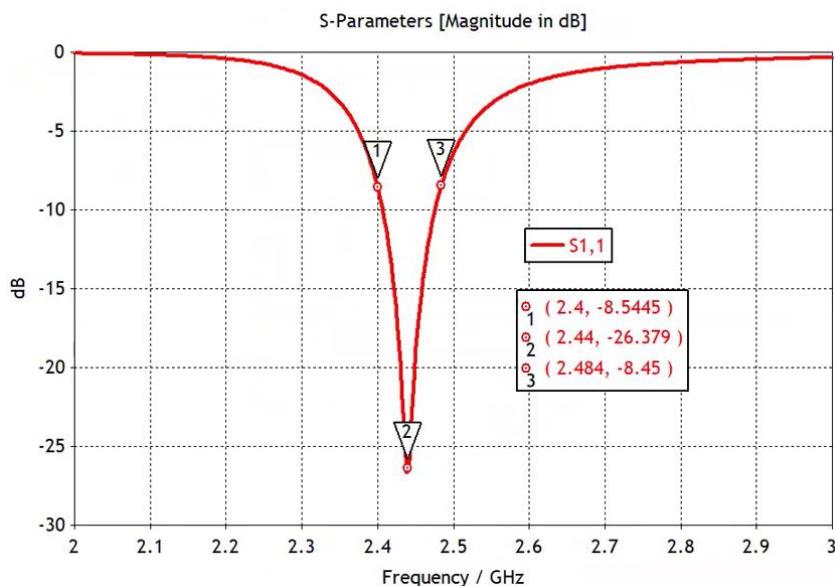


All dimensions are in mm.

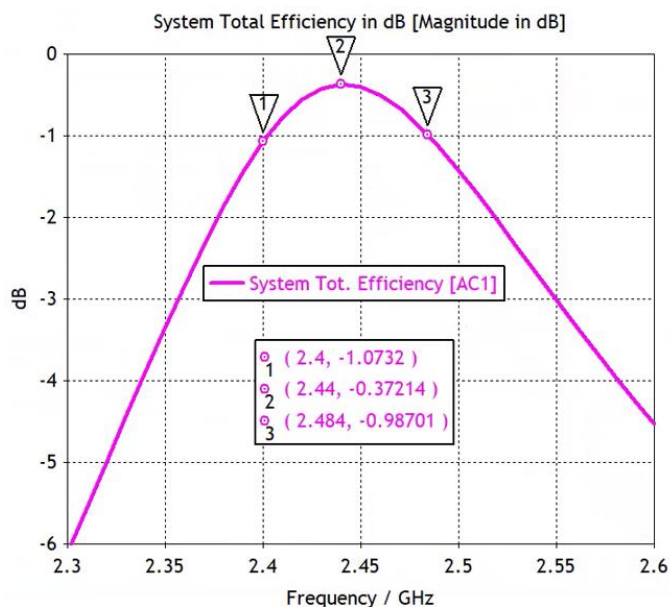
**Series:** SMD Chip Antenna

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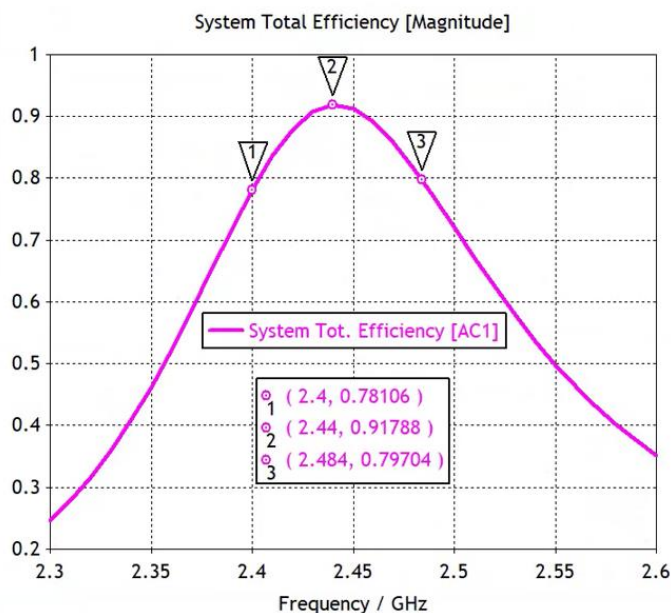
## Return Loss



## Total Efficiency

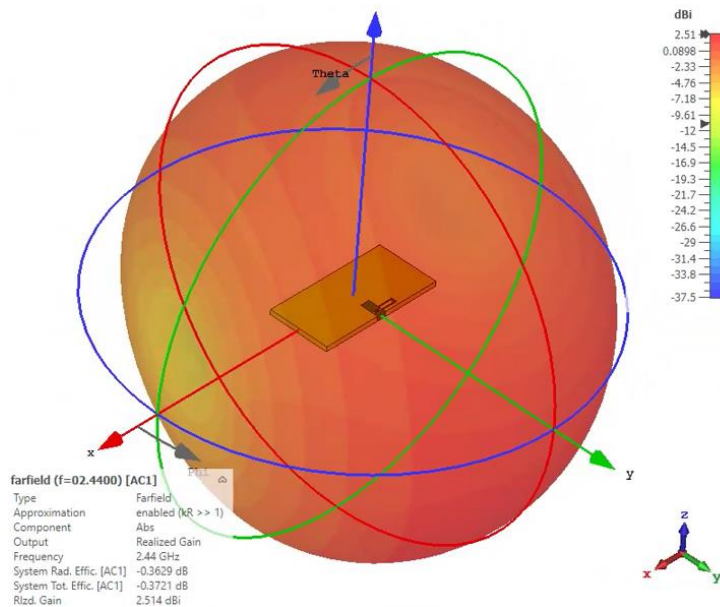
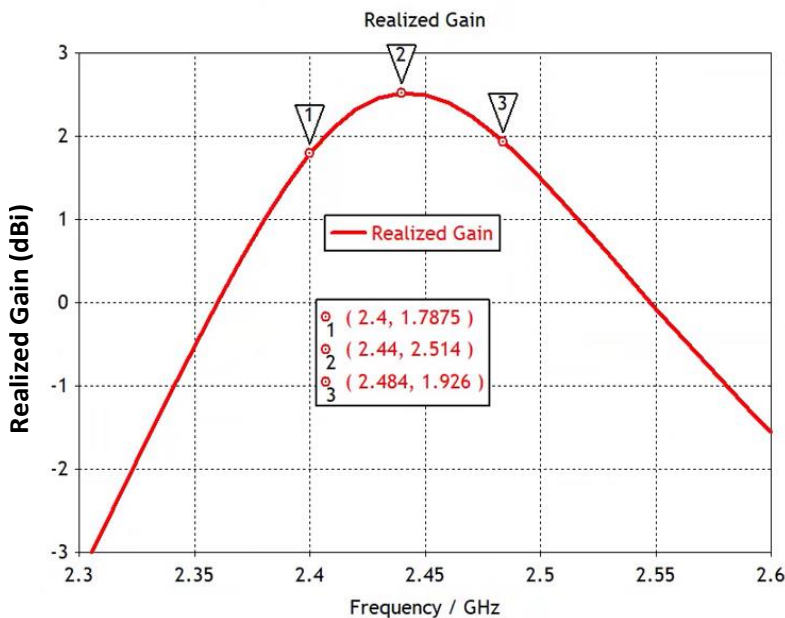


**In dB Scale**

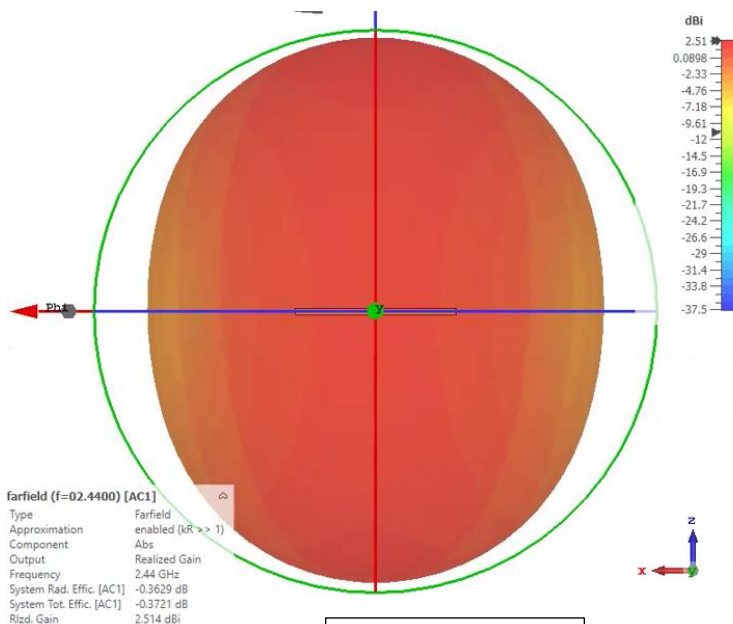


**In Linear Scale**

### Realized Gain And 3D Radiation Pattern



2.5dBi @2.44GHz



2.5dBi @2.44GHz