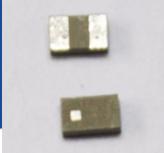


# Low profile Compact 2.4 GHz Ceramic Chip Antenna



ACAG0201-2450-T



2.0 x 1.25 x 0.6mm

RoHS/RoHS II Compliant

MSL = 1

## FEATURES

- Gain of 2.7dBi
- VSWR  $\leq 2.0$
- Miniature form factor 2.0 x 1.25 x 0.6mm
- Made using LTCC technology (low temperature co-fired ceramic)
- Omni-directional

## APPLICATIONS

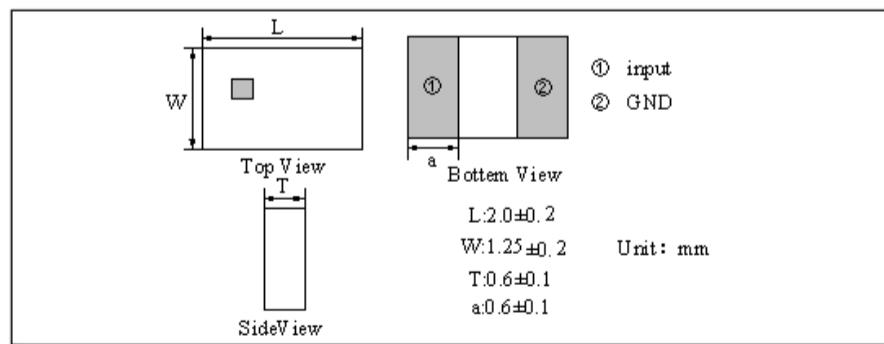
- IoT and wearable
- Wi-Fi
- Bluetooth/BLE
- ISM band

## ELECTRICAL CHARACTERISTICS

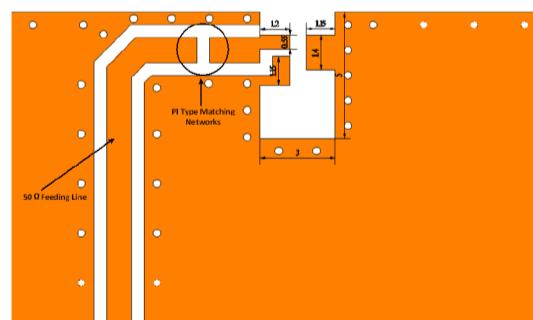
Item	Specification
Centre Frequency (After matching)	2450 MHz
Bandwidth	65 MHz typ
VSWR	$\leq 2.0$
Impedance	50Ω
Gain	2.7 dBi
Azimuth	Omni-directional
Polarization	Linear
Operating Temperature range	-40°C ~ + 125°C
Storage Temperature range	-40°C ~ + 125°C

## MECHANICAL DIMENSIONS (mm)

### Antenna Dimensions



### Layout Dimensions



# Low profile Compact 2.4 GHz Ceramic Chip Antenna



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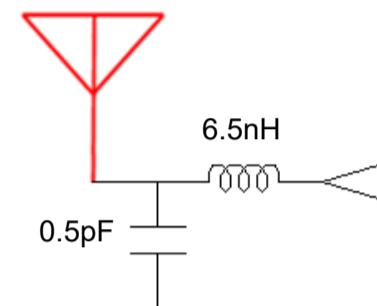
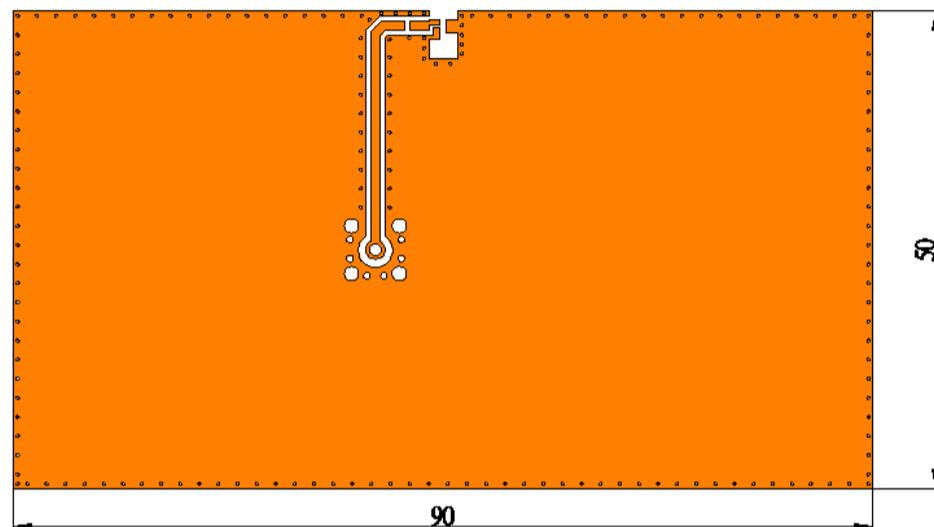


2.0 x 1.25 x 0.6mm

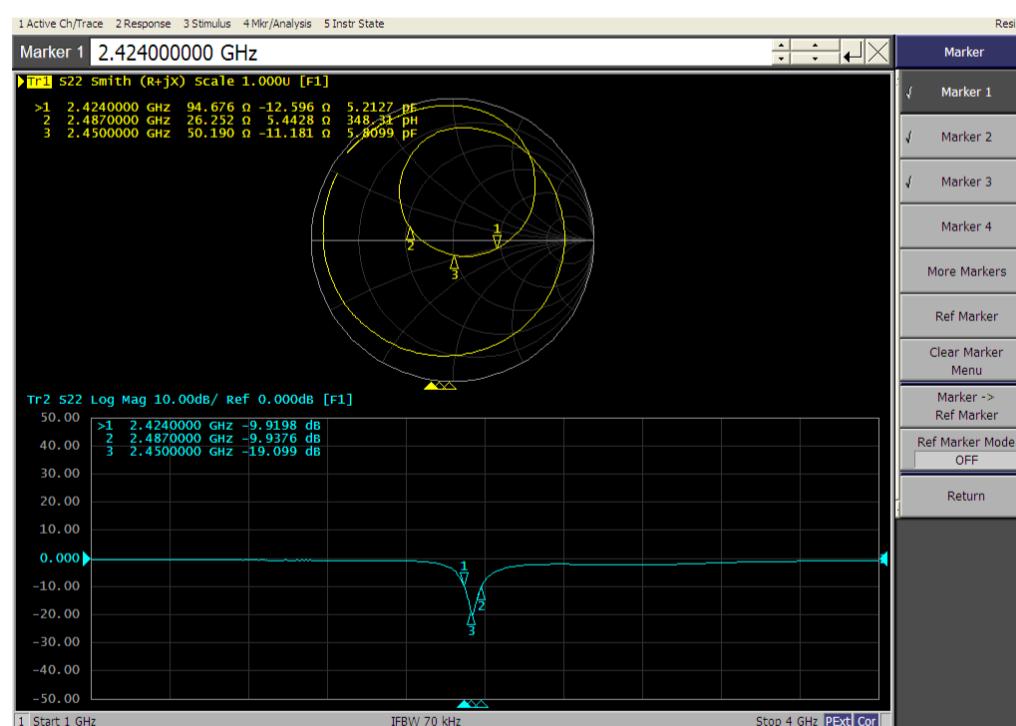
RoHS/RoHS II Compliant

MSL = 1

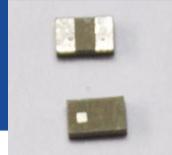
## EVALUATION BOARD AND MATCHING CIRCUITS



## ANTENNA RESPONSE – SMITH CHART AND RETURN LOSS S11



# Low profile Compact 2.4 GHz Ceramic Chip Antenna



ACAG0201-2450-T



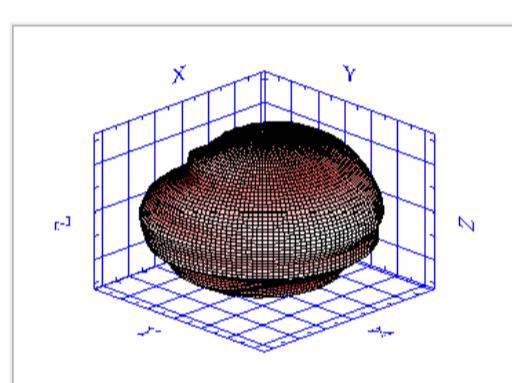
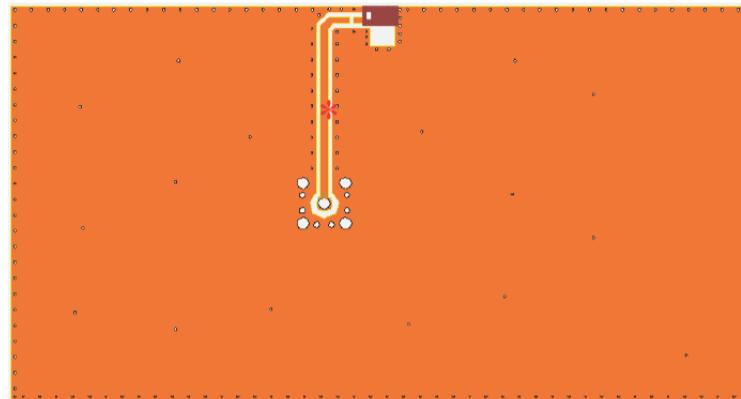
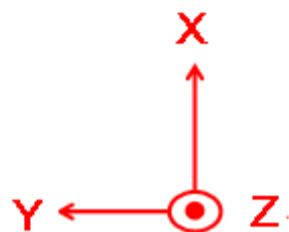
2.0 x 1.25 x 0.6mm

RoHS/RoHS II Compliant

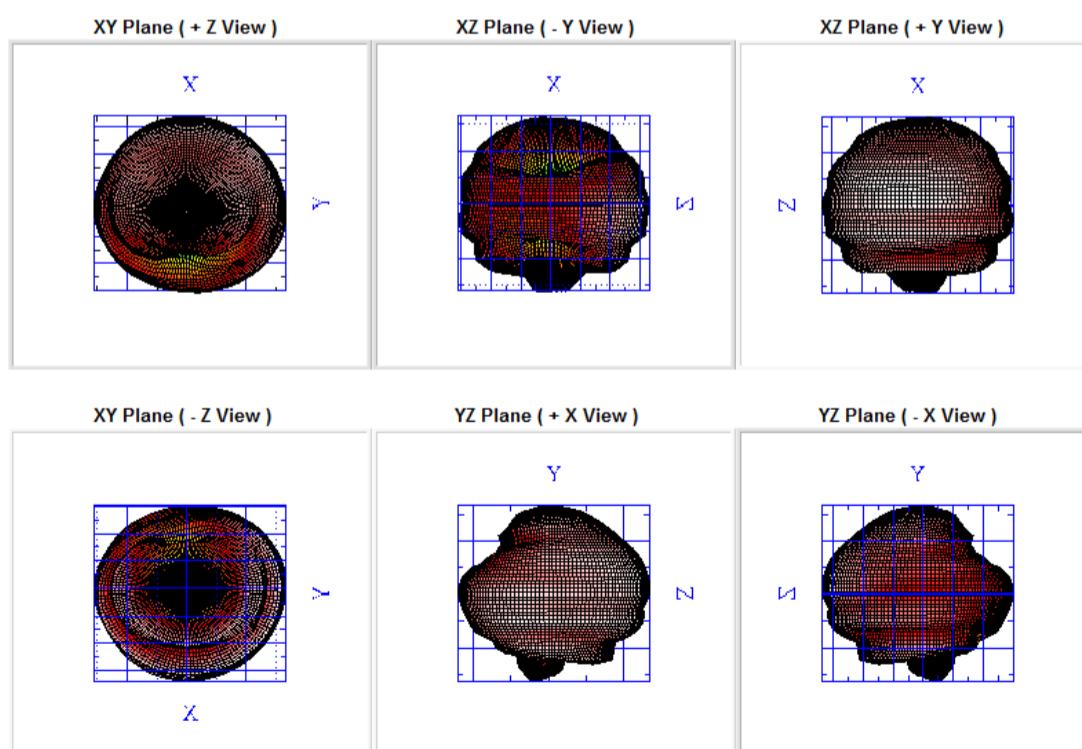
MSL = 1

## RADIATION PATTERNS

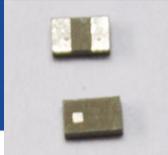
### Coordinates



Frequency (MHz)	TRP (dBm)	Efficiency (%)
2450.00	-1.38	72.7
Peak EIRP (dBm)	Max. Power (dBm)	Directivity (dBi)
2.7	2.7	4.09
NHPRP +/- 45 (dBm)	Min. Power (dBm)	Average Gain (dB)
-2.41	-32.6	-1.38
NHPRP +/- 30 (dBm)	Avg. Power (dBm)	Upper Hem. (dBm)
-3.45	-1.13	-3.84
E-Theta Peak Gain (dBi)	Max. / Min. Ratio (dB)	Lower Hem. (dBm)
1.85	35.3	-5.02
E-Phi Peak Gain (dBi)	Max. / Avg. Ratio (dB)	Upper Hem. (%)
2.23	3.83	41.26
E-Total Peak Gain (dBi)	Min. / Avg. Ratio (dB)	Lower Hem. (%)
2.7	-31.47	31.45



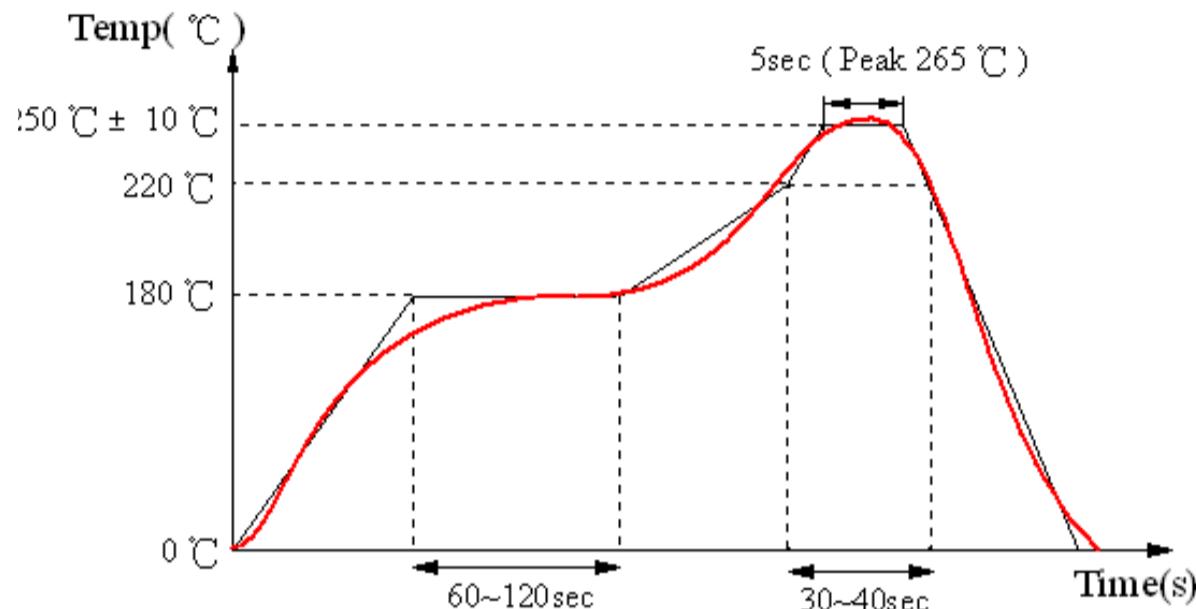
# Low profile Compact 2.4 GHz Ceramic Chip Antenna



ACAG0201-2450-T

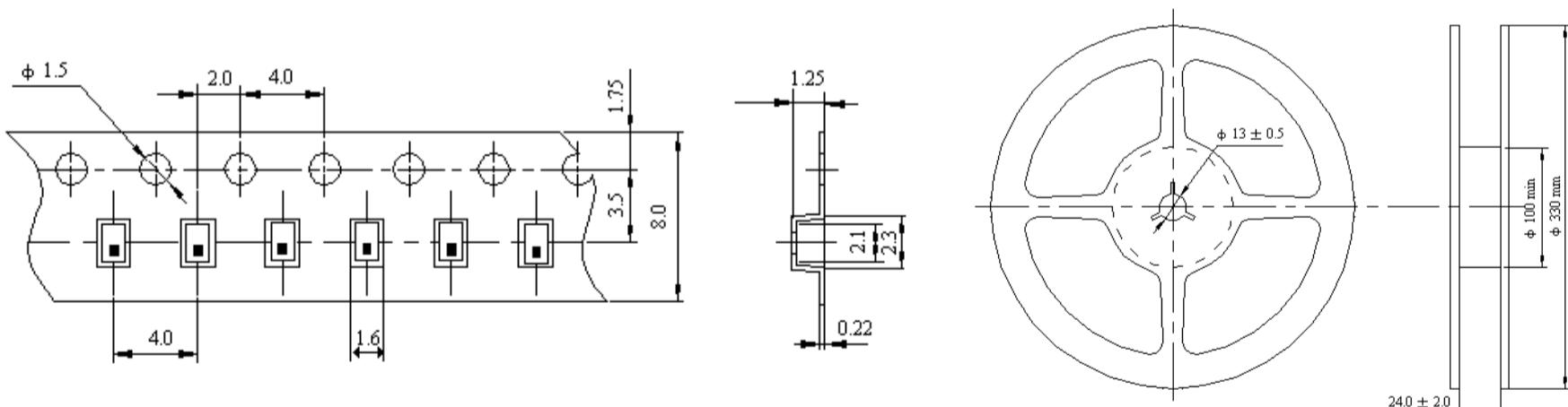
2.0 x 1.25 x 0.6mm  
RoHS/RoHS II Compliant  
MSL = 1

## REFLOW SOLDERING STANDARD CONDITION



## PACKAGING

Reel (4000 pcs/Reel)



Dimensions: mm

Storage Temperature Range : <30 degree C, Humidity : <60%RH

MSL - 1

Oxidizable, 12 months in a vacuum sealed bag.

Once opened, please repack the unused items within 168 hours by re-seal package treatment.



5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
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REVISED: 09.21.2020

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# Low profile Compact 2.4 GHz Ceramic Chip Antenna



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2.0 x 1.25 x 0.6mm

RoHS/RoHS II Compliant

MSL = 1

## CAUTIONS

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### 1. Static voltage

Static voltage between signal & ground may cause deterioration & destruction of the component. Please avoid static voltage.

### 2. Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning.

### 3. Soldering

Only leads of the component may be soldered. Please avoid soldering to any other part of the component, such as on the patterns as this will change the performance of the antenna.

# Mouser Electronics

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