

ACAG0201-2450-T



MSL = 1

FEATURES

- Gain of 2.7dBi
- VSWR ≤ 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

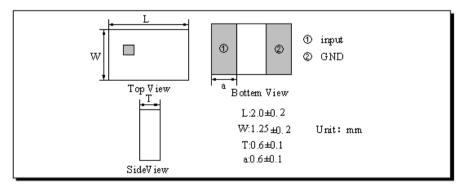
- IoT and wearable
- Wi-Fi
- Bluetooth/BLE
- ISM band

ELECTRICAL CHARACTERISTICS

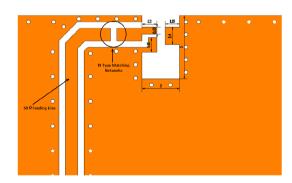
Item	Specification	
Centre Frequency (After matching)	2450 MHz	
Bandwidth	65 MHz typ	
VSWR	≤2.0	
Impedance	50Ω	
Gain	2.7 dBi	
Azimuth	Omni-directional	
Polarization	Linear	
Operating Temperature range	-40°C ∼ + 125°C	
Storage Temperature range	-40°C ∼ + 125°C	

MECHANICAL DIMENSIONS (mm)

Antenna Dimensions



Layout Dimensions





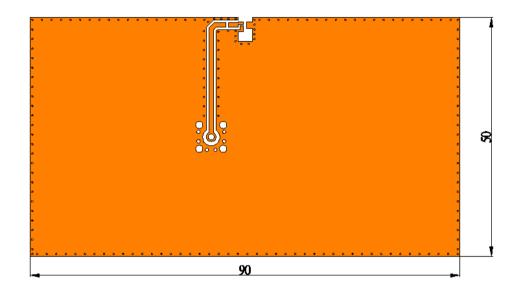
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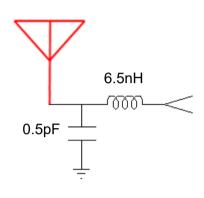


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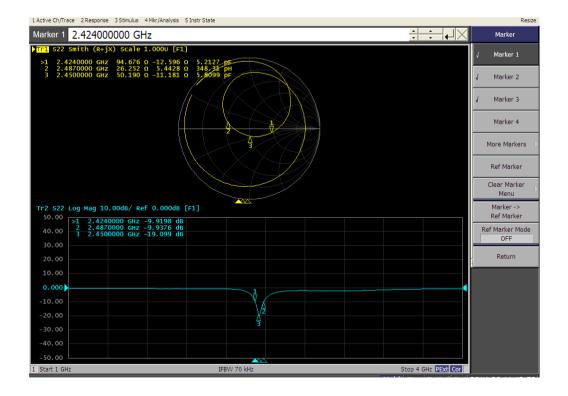


EVALUATION BOARD AND MATCHING CIRCUITS





ANTENNA RESPONSE – SMITH CHART AND RETURN LOSS S11





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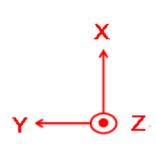
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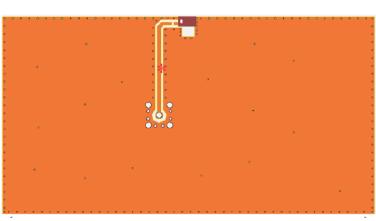


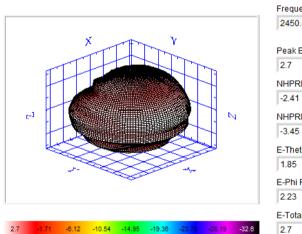
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RADIATION PATTERNS

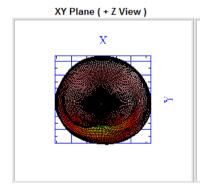
Coordinates

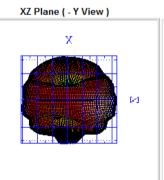


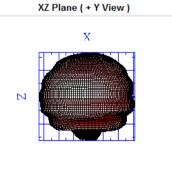


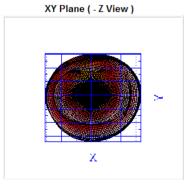


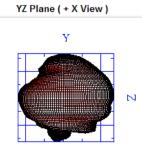
Frequency (MHz)	TRP (dBm)	Efficiency (%)
2450.00	-1.38	72.7
Peak EIRP (dBm)	Max. Power (dBm)	Directivity (dBi)
2.7	2.7	4.09
NHPRP +/- 45 (dBm)	Min. Power (dBm)	Average Gain (dB)
-2.41	-32.6	-1.38
NHPRP +/- 30 (dBm)	Avg. Power (dBm)	Upper Hem. (dBm)
-3.45	-1.13	-3.84
E-Theta Peak Gain (dE	Bi)Max. / Min.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

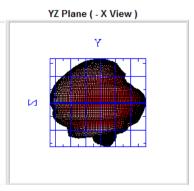














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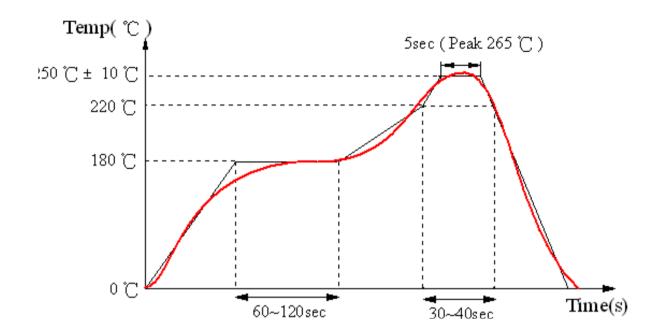


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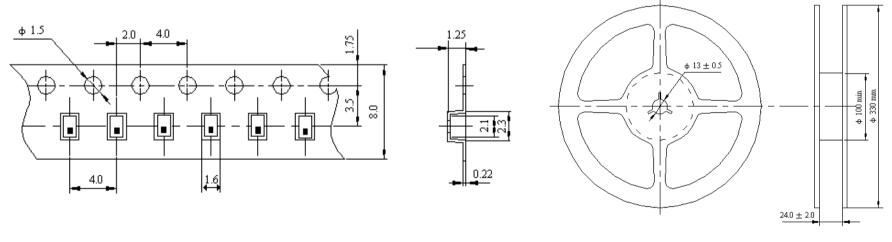
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REFLOW SOLDERING STANDARD CONDITION



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.



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CAUTIONS

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.



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