



# WiFi6 Dual Band Ceramic SMD Antenna 3.2x1.6x0.5 mm

Part Number: L000947-01  
L000947-80

## FEATURES & BENEFITS

- DUAL BAND WLAN/Bluetooth/IEEE802.11 a/b/g/n/ac Application.
- SMD Passive Ceramic Chip Antenna with evaluation board 80 x 40 mm<sup>2</sup>
- Ultra low profile antenna suitable for IoT applications
- With matching circuits that designed on the evaluation board.

## RF SPECIFICATIONS

Frequency Range (MHz)	2400-2484	5150-5850
Bandwidth (MHz)	84 MHz	700 MHz
VSWR (center frequency)	< 2.0:1	< 3.6:1
Peak Gain (Typ.)	2.7 dBi	2.8 dBi
Average Gain (Typ.)	-1.5 dB	-2.1 dB
Efficiency (Typ.)	71 %	51 %
Feed Point Impedance	50 ohms	
Polarization	Linear Polarization	

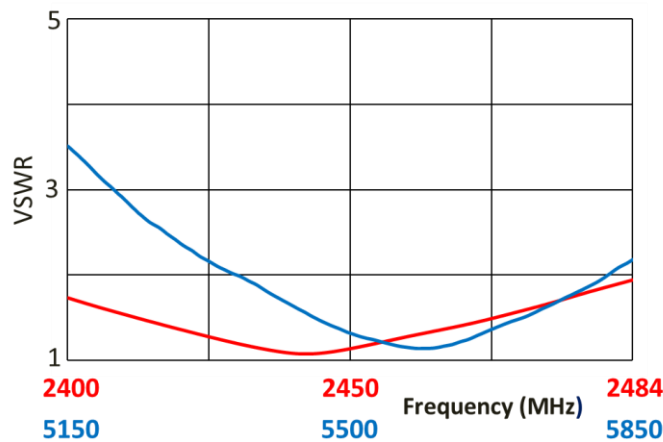
## MECHANICAL SPECIFICATIONS

Size ( L x W x H )	3.2 mm x 1.6 mm x 0.5 mm ( L/W/H $\pm$ 0.15)
Weight	< 0.1 g
Mounting	SMD (Surface Mount Device)
Mating Connector	N/A
Cable	N/A
Operating Temperature	-40 to + 85°C
Storage Temperature	-5 to + 40°C
Dielectric Material	Ceramic
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

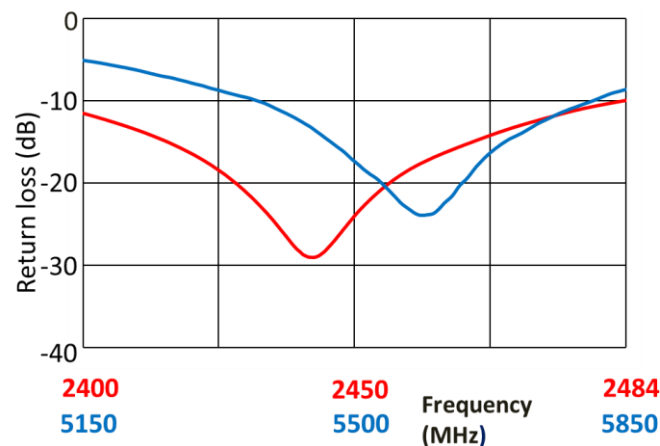
RF DATA

(shown as L000947-01 : Ground size : 80 x 40 x 1 mm.)

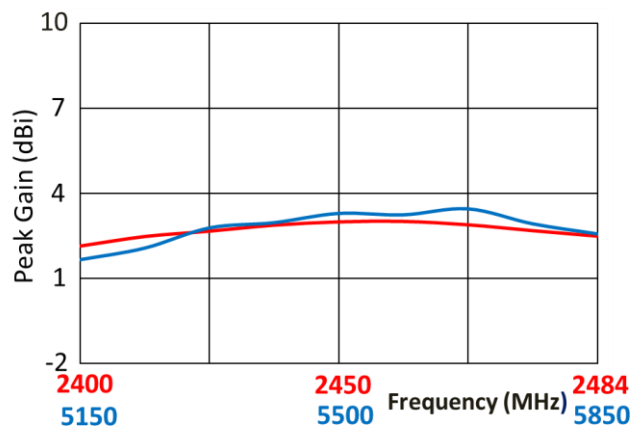
VSWR



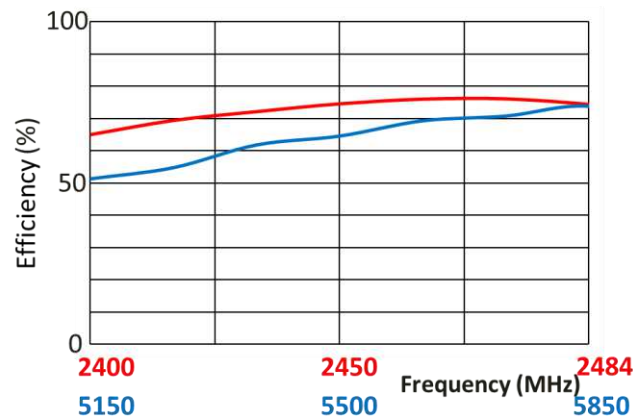
Return Loss



Peak Gain



Efficiency

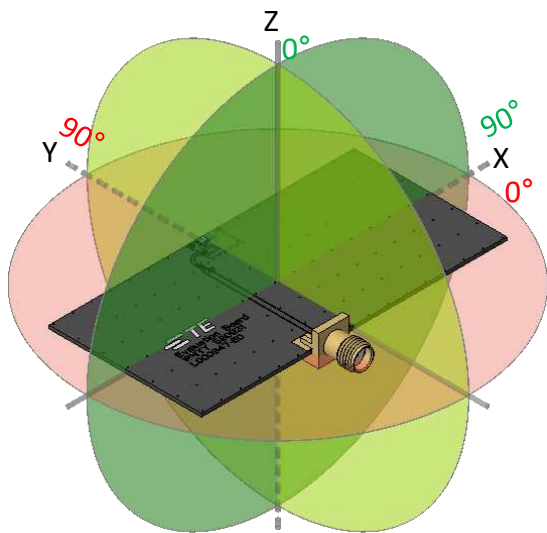


Data measured in free space and on reference ground plane of 80x40x1 mm ground plane condition, application data might vary.

# RADIATION PATTERN

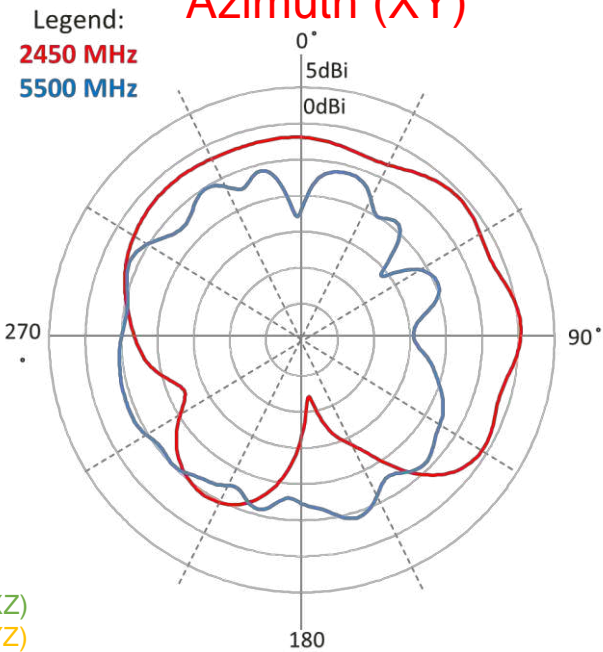
(shown as L000947-01 : Ground size : 80 x 40 x 1 mm.)

## Test setup

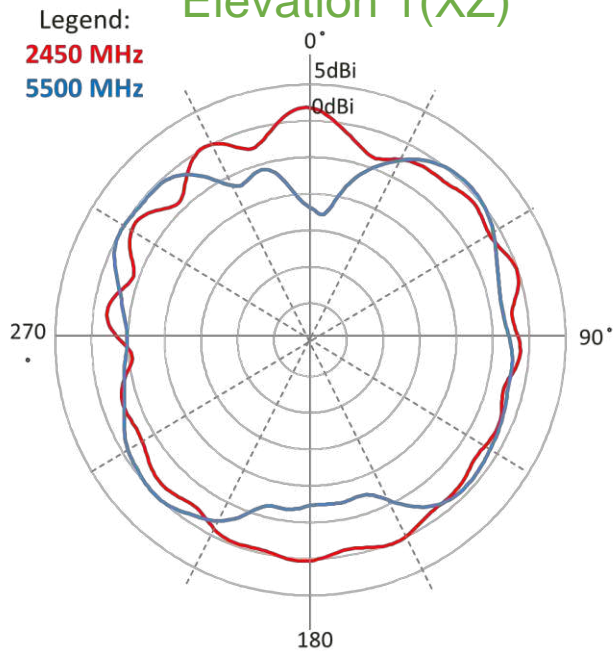


Azimuth Plane (XY)  
Elevation 1 Plane (XZ)  
Elevation 2 Plane (YZ)

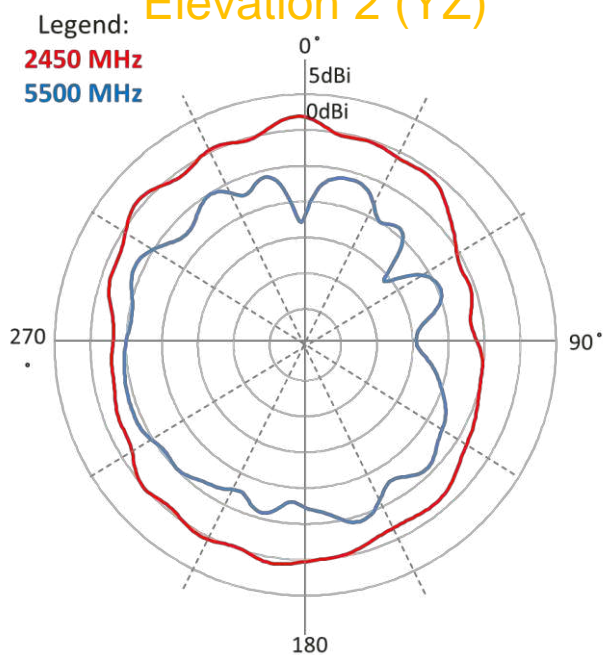
## Azimuth (XY)



## Elevation 1 (XZ)

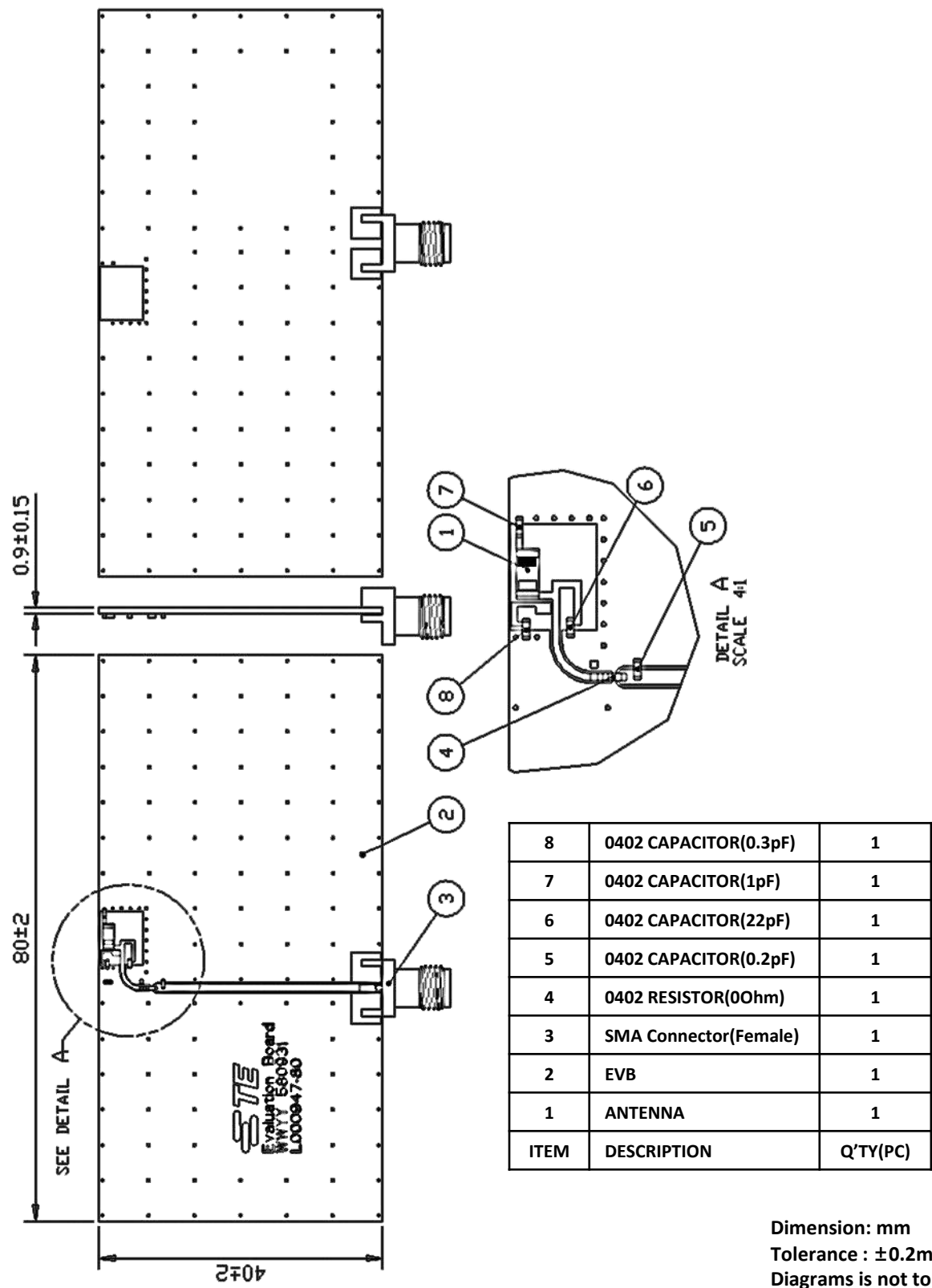


## Elevation 2 (YZ)

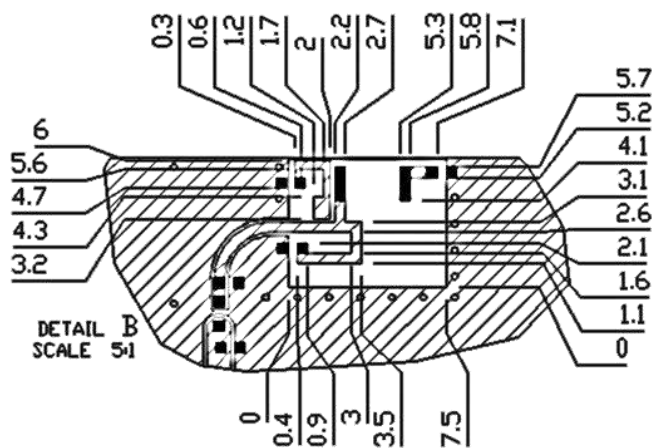
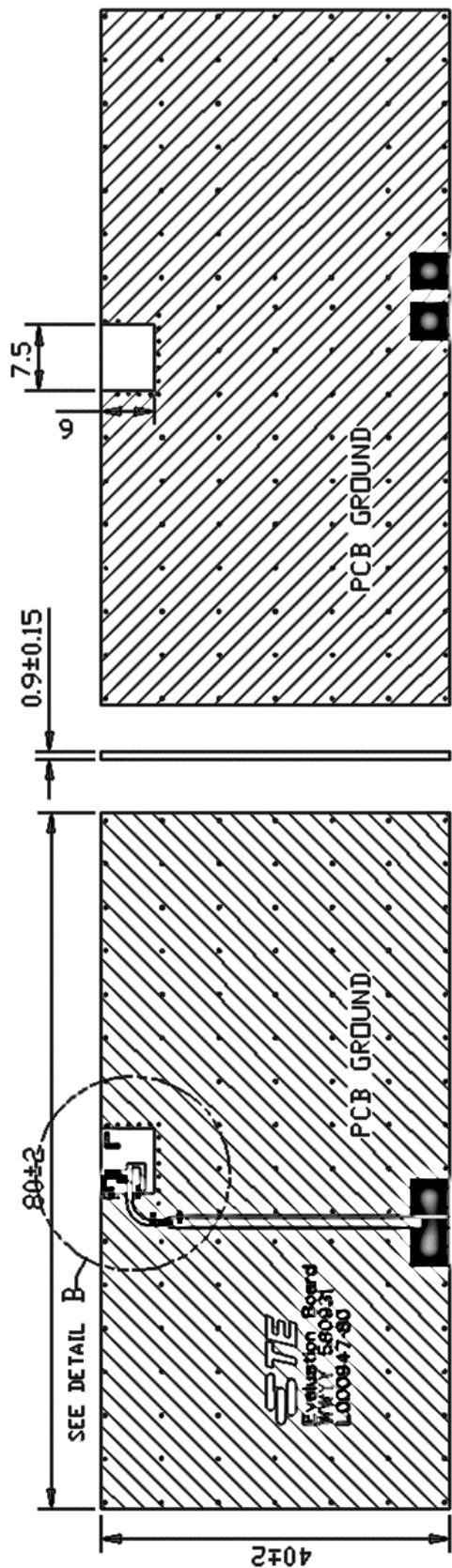


Data measured in free space and on reference ground plane of 80x40x1 mm ground plane condition, application data might vary.

# MOUNTING GUIDE AND MATCHING CIRCUIT



MOUNTING GUIDE AND MATCHING CIRCUIT

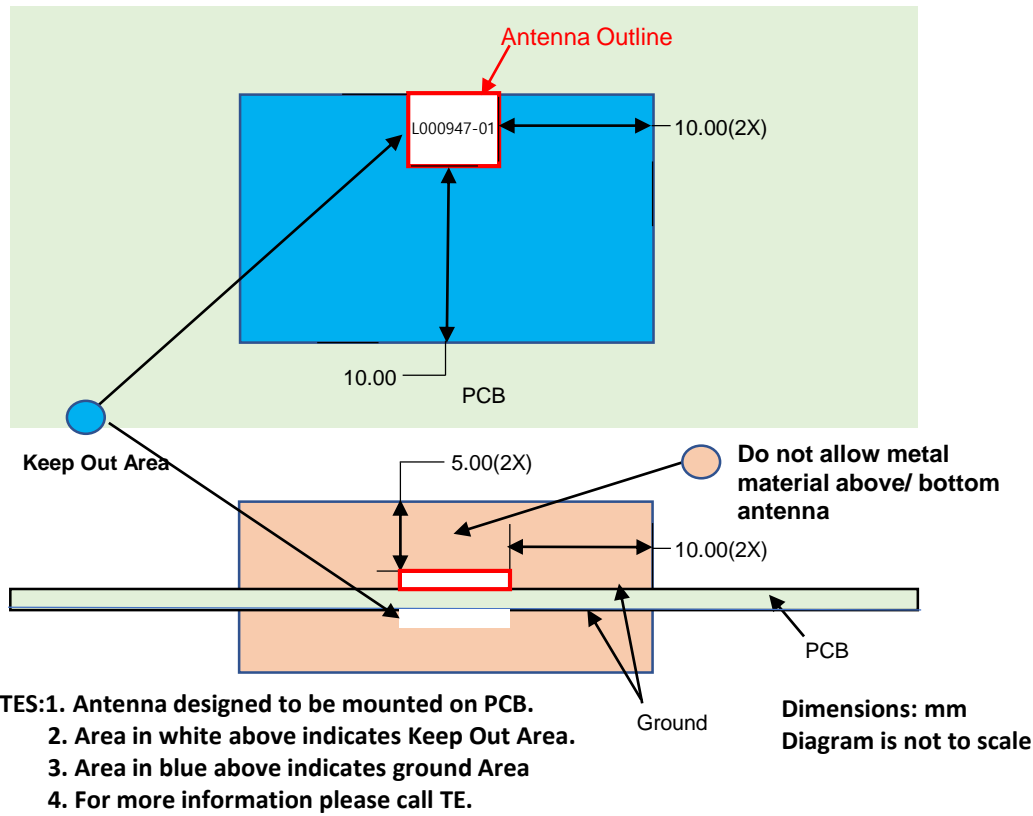


Dimension: mm  
Tolerance :  $\pm 0.2$ mm  
Diagrams is not to scale

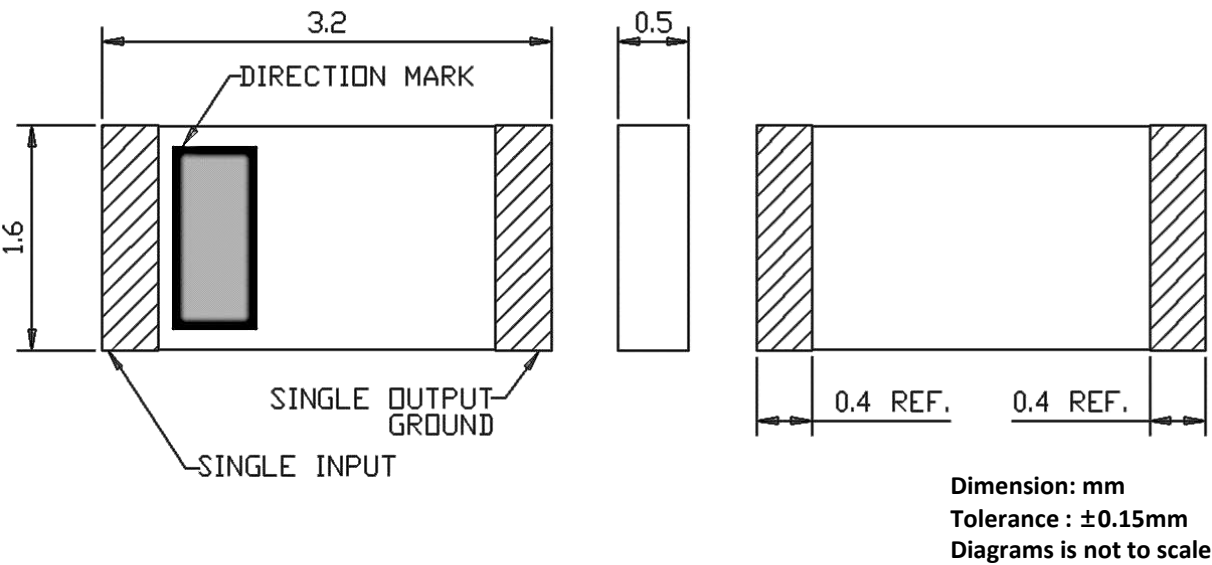
WiFi6 Dual Band Ceramic SMD Antenna 3.2x1.6x0.5 mm

Standard Antenna Solutions

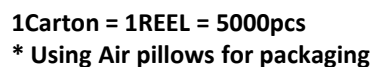
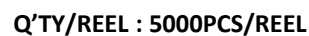
KEEP OUT AREA



DIMENSIONS



L000947-01 (REEL)



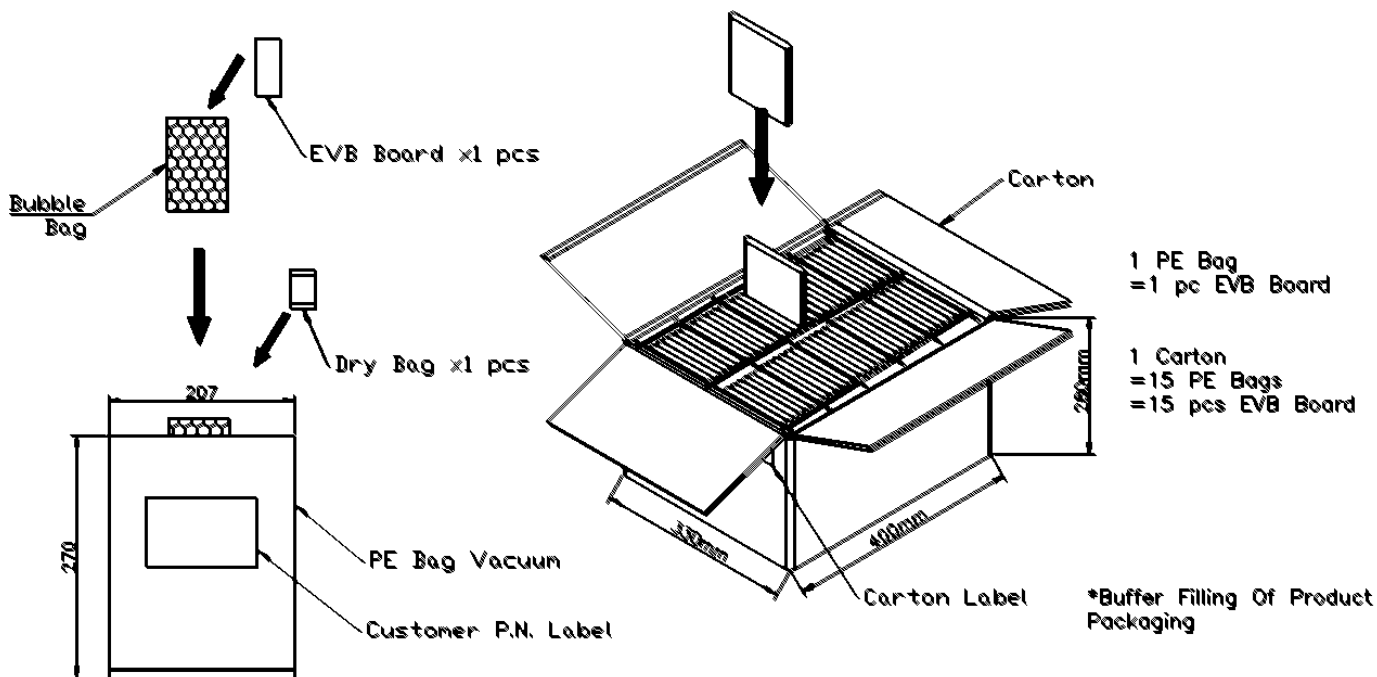


## WiFi6 Dual Band Ceramic SMD Antenna 3.2x1.6x0.5 mm

Standard Antenna Solutions

### PACKAGING

L000947-80 (BULK)



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