

# **GPS / Wi-Fi Dual Band Dual Feed Ceramic SMD Antenna**

L000951-80

**Part Number: L000951-01** 

#### **FEATURES & BENEFITS**

- Supporting GPS & WiFi Dual band, covering 1.57542 GHz, 2.4~2.5 GHz & 5.15~5.85 GHz with dual feed SMD antenna.
- SMD Passive Chip Antenna, Ultra-low Profile, Compact Size.
- The following data is based on 80 x 40 ground size
- · With matching circuits required

## **RF SPECIFICATIONS**

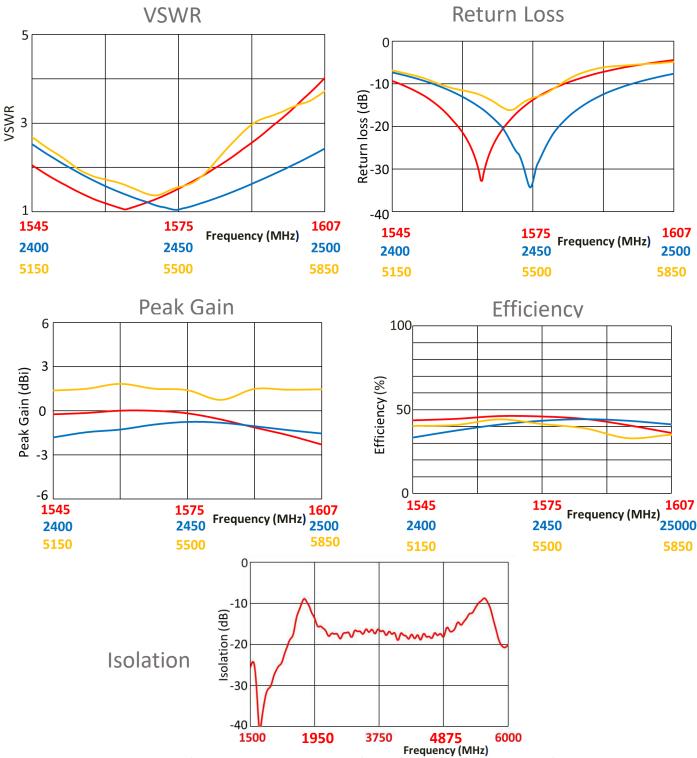
Frequency Range (MHz)	1575.42	2400-2484	5150-5850
Bandwidth (MHz)	2 MHz	84 MHz	700 MHz
VSWR (center frequency)	< 2.0:1	< 2.0:1	< 2.0:1
Peak Gain (Typ.)	-0.2 dBi	-1.2 dBi	1.4 dBi
Average Gain (Typ.)	-3.6 dB	-4.0 dB	-4.2 dB
Efficiency (Typ.)	44 %	40 %	38 %
Isolation	< -20 dB	< -8dB	< -8dB
Feed Point Impedance	50 ohms		
Polarization	Linear Polarization		

# **MECHANICAL SPECIFICATIONS**

Size (LxWxH)	3.2 mm x 1.6 mm x 0.5 mm ( L/W/H ± 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**

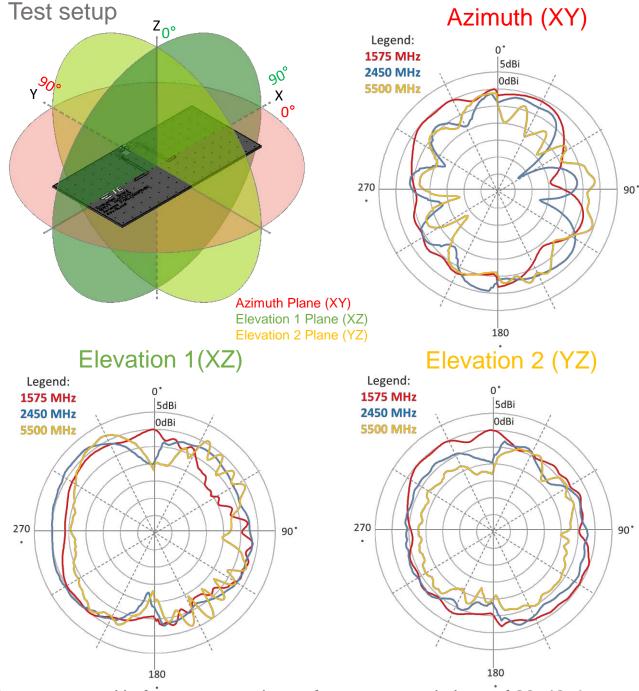
(shown as L000951-01 : Ground size : 80 x 40 x 1 mm.)



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

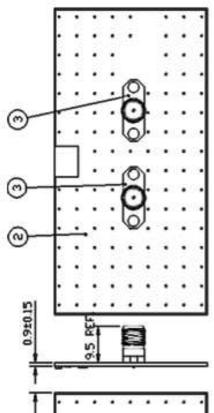
## **RADIATION PATTERN**

(shown as L000951-01 : Ground size : 80 x 40 x 1 mm.)

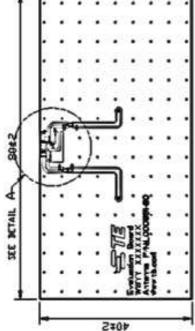


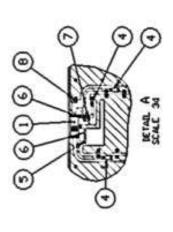
Data measured in free space and on reference ground plane of 80x40x1 mm ground plane condition, application data might vary.

# MOUNTING GUIDE AND MATCHING CIRCUIT



8	0402 CAPACITOR(0.3pF)	1
7	0402 CAPACITOR(0.9pF)	1
6	0402 CAPACITOR(0.8pF)	1
5	0402 CAPACITOR(1.8pF)	1
4	0402 RESISTOR(00hm)	3
3	SMA Connector(Female)	2
2	EVB	1
1	ANTENNA	1
ITEM	DESCRIPTION	Q'TY(PC)





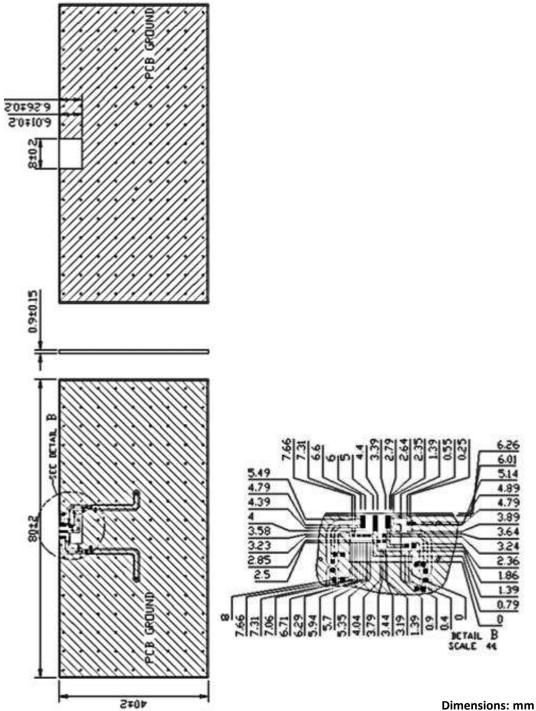
NOTES: 1. Antenna must be mounted on the edge of PCB.

2. For more information please call TE.

3. Reference PCB Dimension(mm) - 80.0 x 40.0 x 1.0

Dimensions: mm
Tolerance: ±0.2mm
Diagram is not to scale

## MOUNTING GUIDE AND MATCHING CIRCUIT

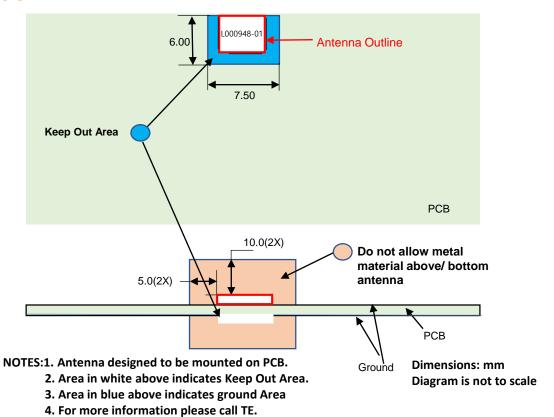


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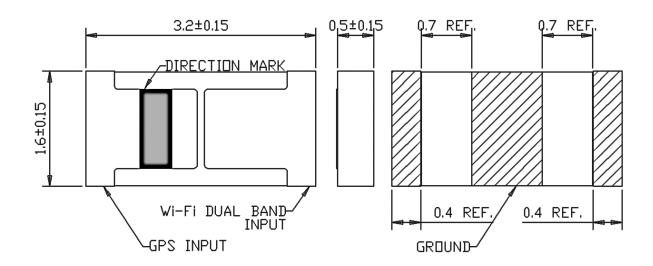
- 2. For more information please call TE.
- 3. Reference PCB Dimension(mm) 80.0 x 40.0 x 1.0

Tolerance: ±0.2mm
Diagram is not to scale

# **KEEP OUT AREA**



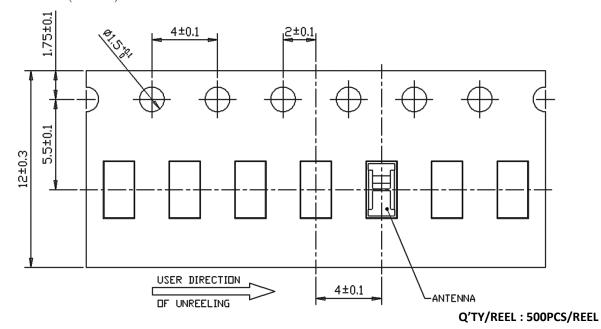
# **DIMENSIONS and PIN Definitions**

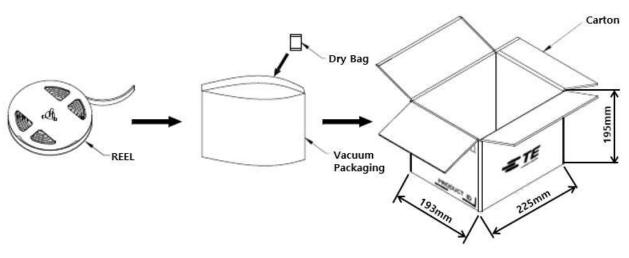


Dimensions: mm
Diagram is not to scale

# **PACKAGING**

L000951-01 (REEL)



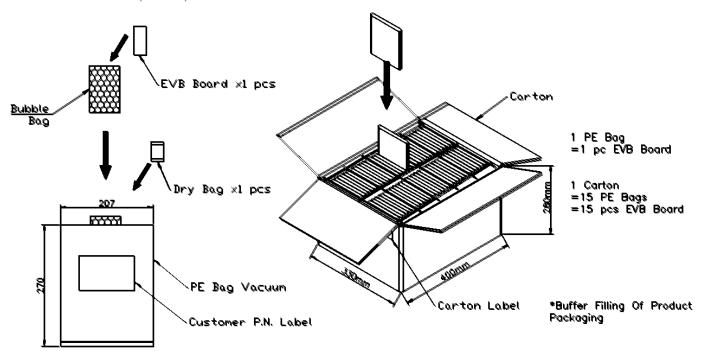


1Carton = 1REEL = 5000pcs
\* Using Air pillows for packaging



#### **PACKAGING**

L000951-80 (BULK)



#### TE TECHNICAL SUPPORT CENTER

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