



# CERAMIC PATCH ANTENNA, 1575-1602MHz, SMD, 18X18X4MM

Part Numbers: L000953-01 L000953-80

#### **FEATURES**

- L1 GPS bands for GNSS
- Passive Patch Antenna; SMD
- The following data is based on 50 x 50 x 1mm ground size
- No matching circuits required for evaluation board

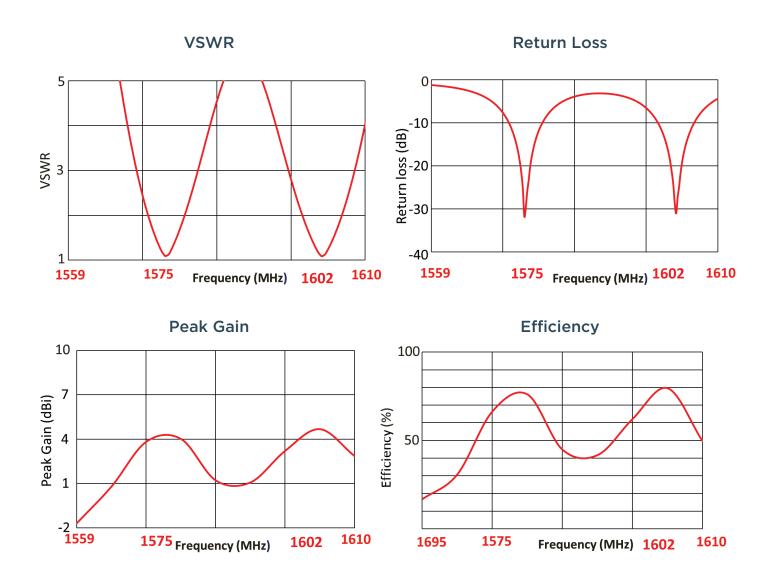
#### **RF SPECIFICATIONS**

Frequency Range (MHz)	1575.42	1602
Bandwidth (MHz)	±1.023	±5
VSWR (center frequency)	<2.0:1	<2.0:1
Peak Gain at Zenith	Typ. 0.5 dBi	Typ. 0.6 dBi
Average Gain	-1.5 dB	-1.7 dB
Efficiency (%)	70%	65%
Feed Point Impedance	50 ohms	
Polarization	Right Hand Polarization (RHP)	

#### **MECHANICAL SPECIFICATIONS**

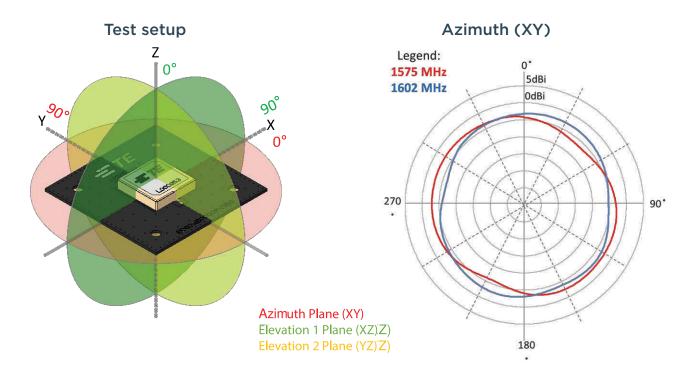
Size (LxWxH)	18.0 mm x 18.0 mm x 4.0 mm ( L/W/H ± 0.15)	
Weight	< 10 g	
Mounting	SMD (Surface Mount Device)	
Mating Connector	N/A	
Cable	N/A	
Operating Temperature	-40 to +105°C	
Storage Temperature	-40 to +105°C	
Dielectric Material	Ceramic	
Hazardous Materials	A certificate of conformance is available from the product page on TE website.	

### RF DATA (SHOWN AS L000953-01: GROUND SIZE: 50 X 50 X 1.0)

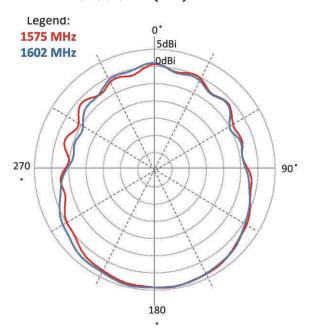


Data measured in free space and on reference ground plane of  $50 \times 50 \times 1.0$  mm ground plane condition, application data might vary.

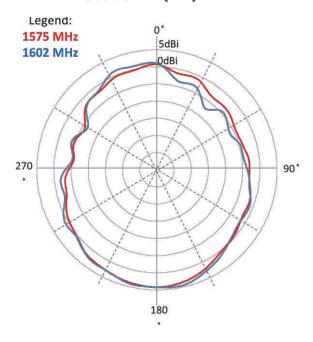
### RADIATION PATTERN (SHOWN AS LO00953-01: GROUND SIZE: 50 X 50 X 1.0 MM.)



# Elevation 1 (XZ)

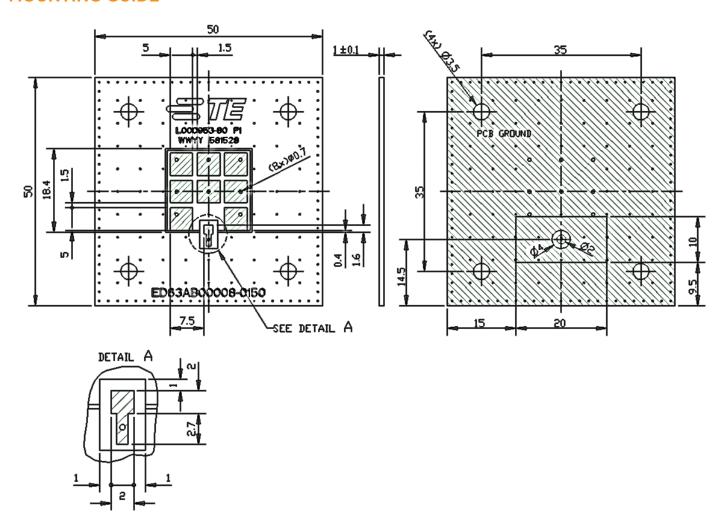


# Elevation 2 (YZ)



Data measured in free space and on reference ground plane of  $50 \times 50 \times 1.0$  mm ground plane condition, application data might vary.

#### **MOUNTING GUIDE**



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

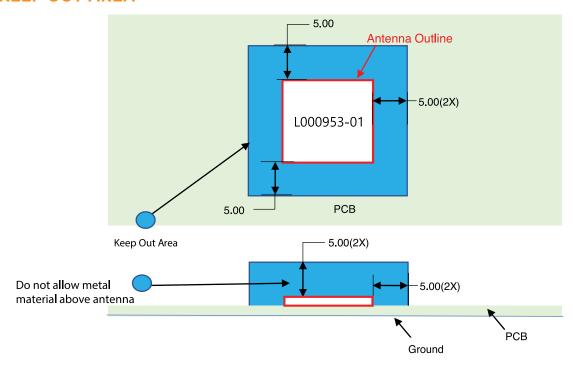
- 2. For more information please call TE.
- 3. Reference PCB Dimension(mm) 50.0 x 50.0 x 1.0

Dimension: mm

Tolerance: ±0.2mm

Diagrams is not to scale

#### **KEEP OUT AREA**

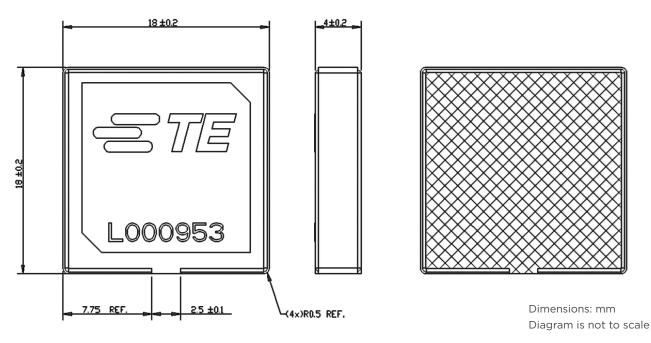


NOTES:1. Antenna designed to be mounted on PCB.

- 2. Area in blue above indicates Keep Out Area.
- 3. For more information please call TE.

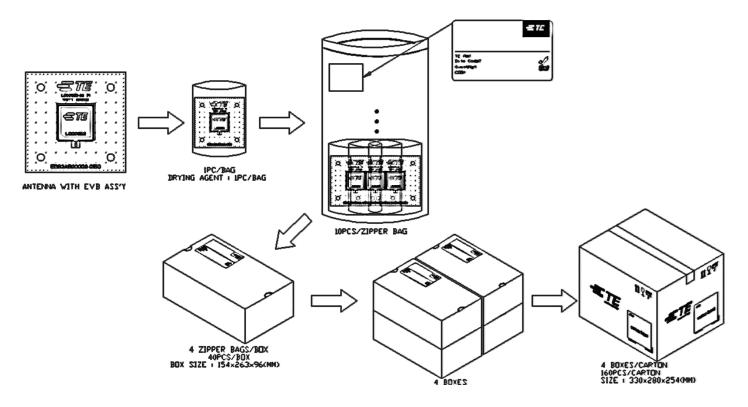
Dimensions: mm Diagram is not to scale

### **DIMENSIONS**

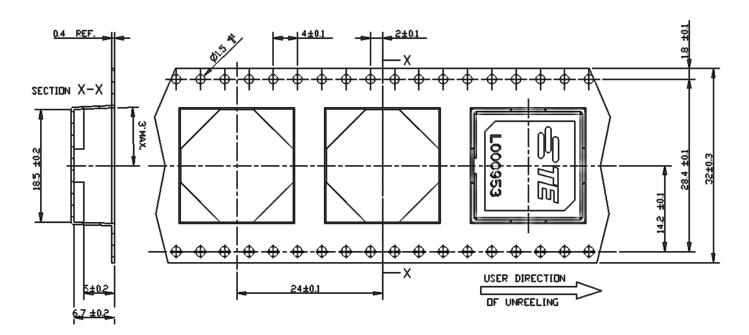


## **PACKAGING**

# L000953-80 (BULK)



## L000953-01 (REEL)



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