



CERAMIC PATCH ANTENNA, 1561-1602MHz, 25X25X6MM

Part Numbers:

L000694-01

L000694-80

FEATURES

- Covers all L1 GPS/ BEIDOU bands for GNSS
- High efficiency/ peak gain passive patch antenna
- The following data is based on 70 x 70 x 1.0mm ground size
- Through-hole pin and adhesive on bottom assembly
- No matching circuits required

RF SPECIFICATIONS

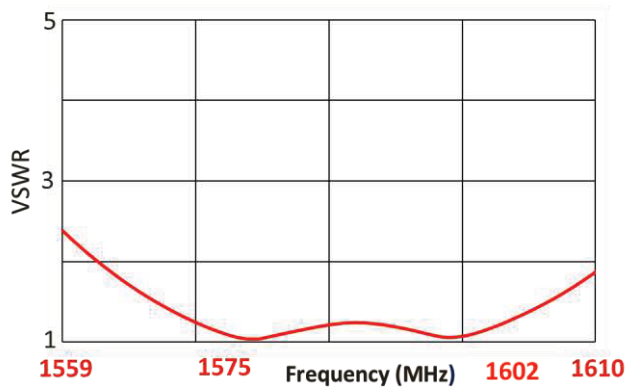
Frequency Range (MHz)	1561.098	1575.42	1602
Bandwidth (MHz)	±2.046	±1.023	±5
VSWR (center frequency)	<2.6:1	<2.6:1	<2.6:1
Peak Gain at Zenith	Typ. -2.8 dBi	Typ. -2.8 dBi	Typ. -3.6 dBi
Average Gain	-1.2 dBi	-1.0 dBi	-1.0 dBi
Efficiency (%)	79%	86%	83%
Feed Point Impedance	50 ohms		
Polarization	Right hand polarization		

MECHANICAL SPECIFICATIONS

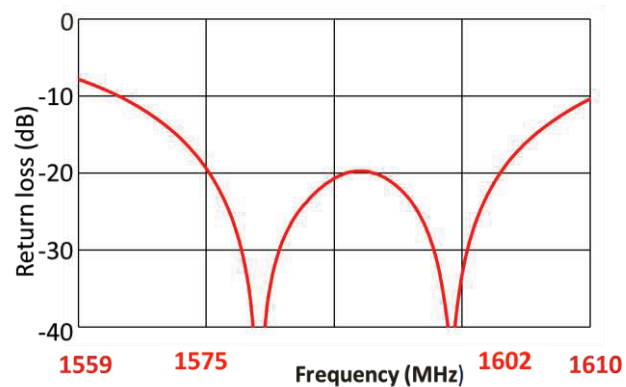
Size (L x W x H)	25.0 mm x 25.0 mm x 6.0 mm (L/W/H ± 0.2)
Weight	< 16 g
Mounting	Through Hole and Adhesive Tape
Mating Connector	N/A
Cable	N/A
Operating Temperature	-40 to +105°C
Storage Temperature	-40 to +105°C
Dielectric Material	Ceramic
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

RF DATA (SHOWN AS L000694-01 : GROUND SIZE : 70 X 70 X 1.0 MM.)

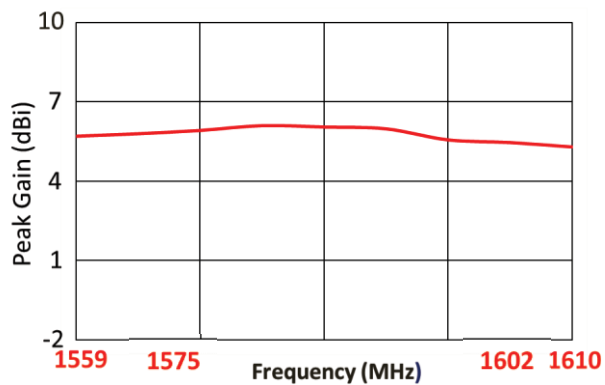
VSWR



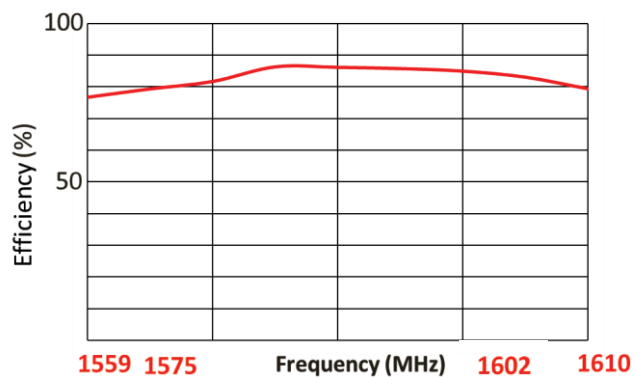
Return Loss



Peak Gain



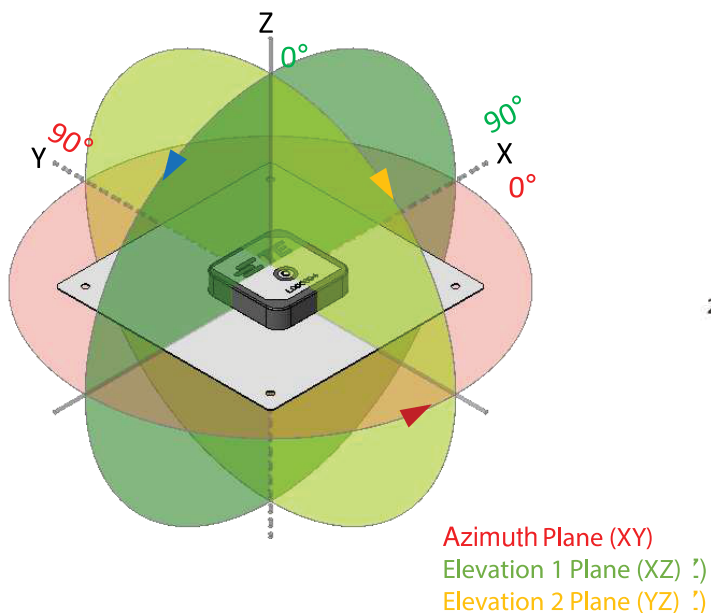
Efficiency



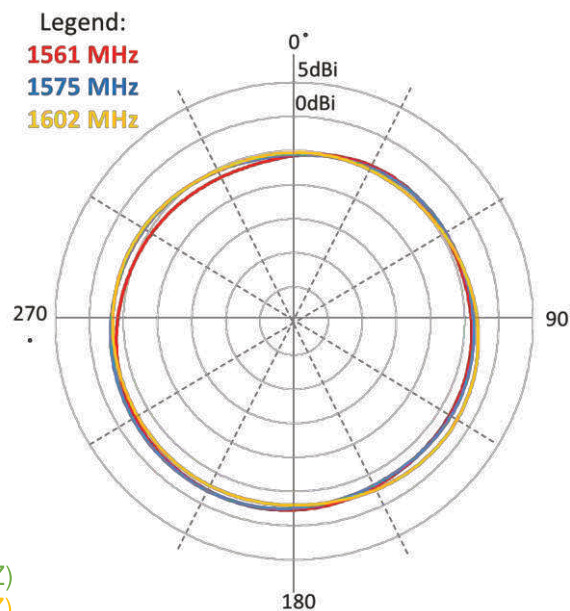
Data measured in free space and on reference ground plane of 70x70x1.0 mm ground plane condition, application data might vary.

RADIATION PATTERN (SHOWN AS L000694-01 : GROUND SIZE : 70 X 70 X 1.0 MM.)

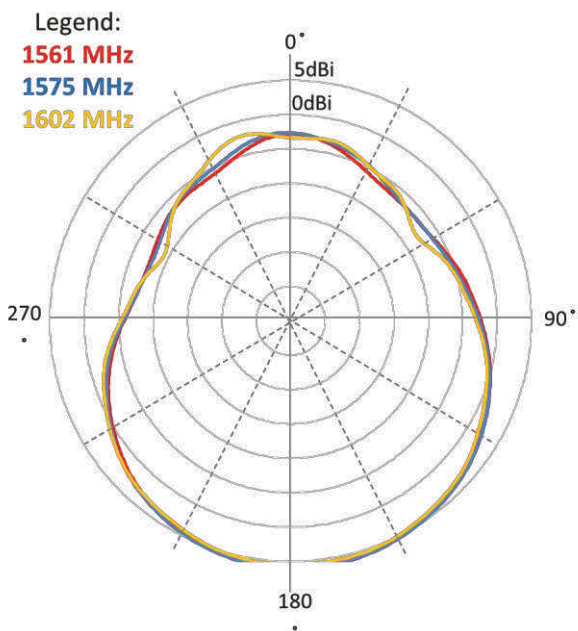
Test setup



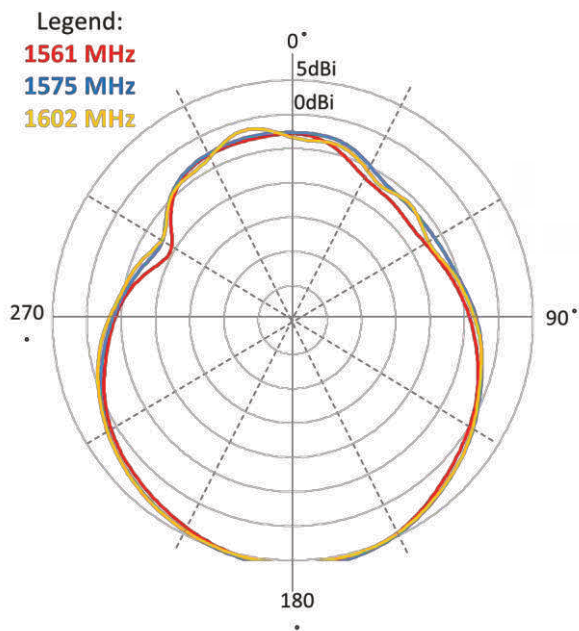
Azimuth (XY)



Elevation 1(XZ)

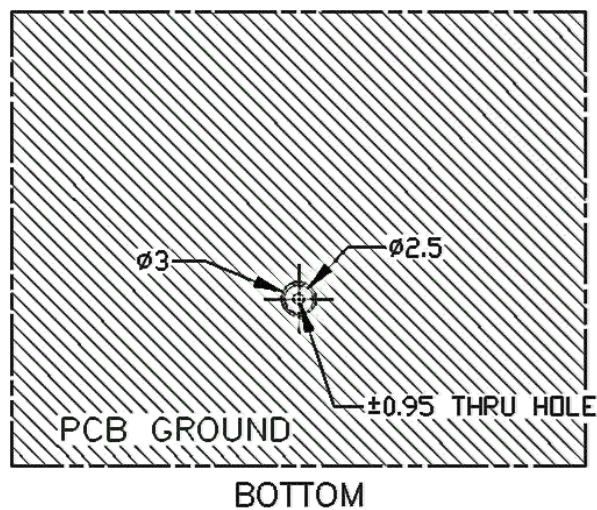
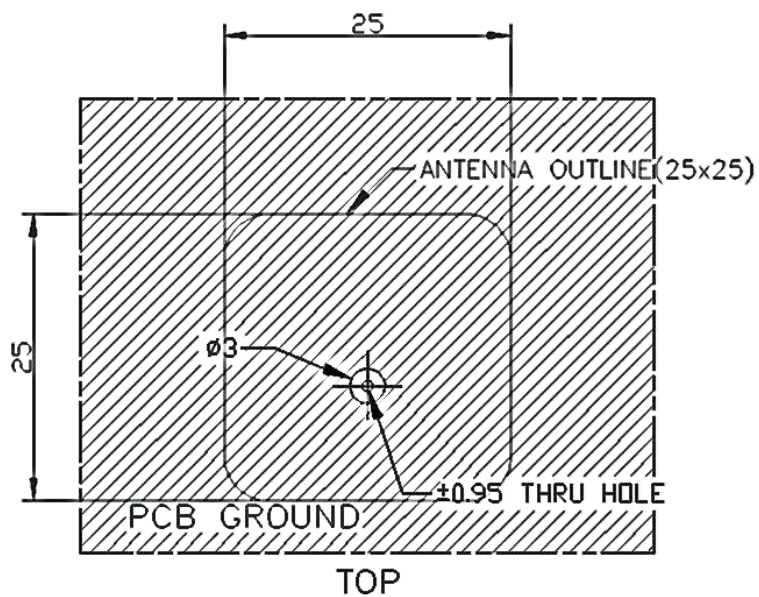


Elevation 2 (YZ)



Data measured in free space and on reference ground plane of 70x70x1.0 mm ground plane condition, application data might vary.

MOUNTING GUIDE



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

2. NC = Non connection (mechanical mounting pads).

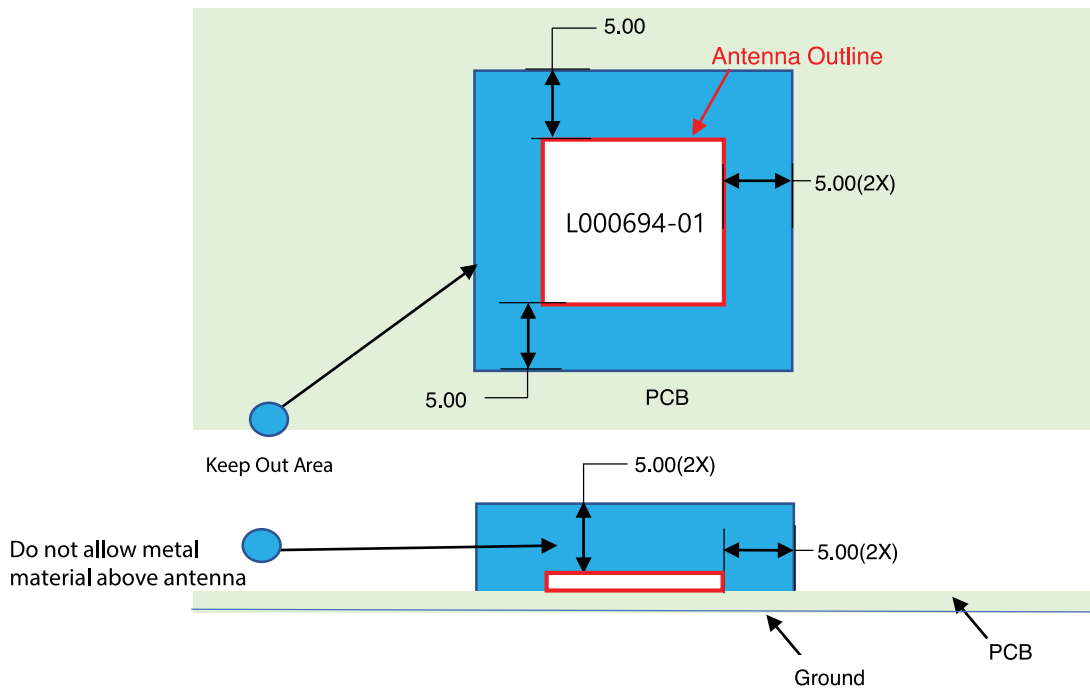
3. Tolerance : $\pm 0.2\text{mm}$

4. For more information please call TE.

Dimensions: mm

Diagram is not to scale

KEEP OUT AREA



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

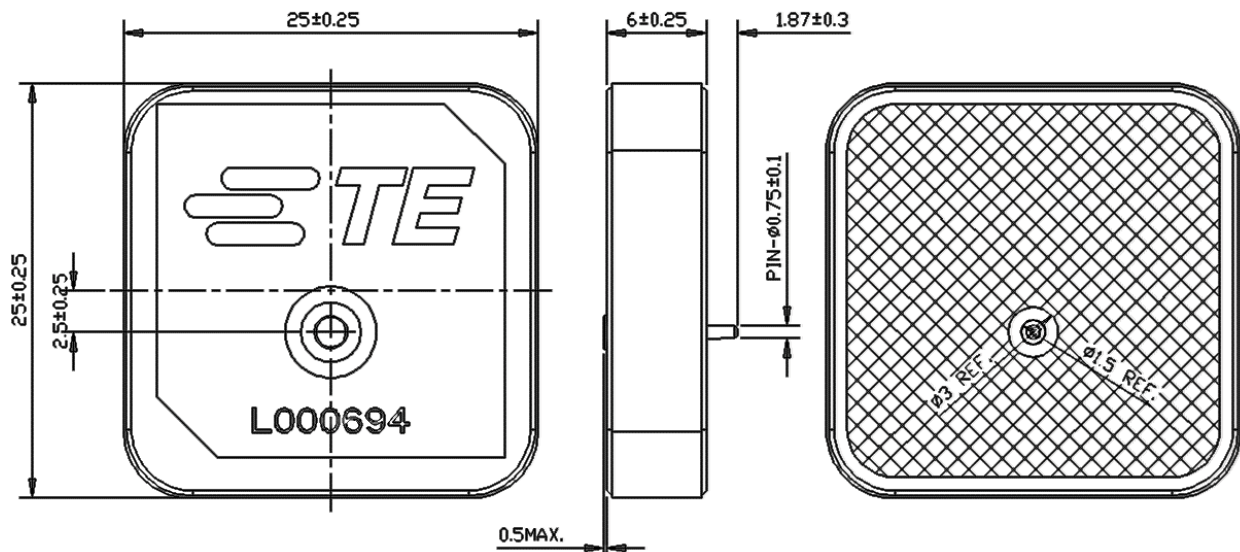
2. Area in blue above indicates Keep Out Area.

3. For more information please call TE.

Dimensions: mm

Diagram is not to scale

DIMENSIONS

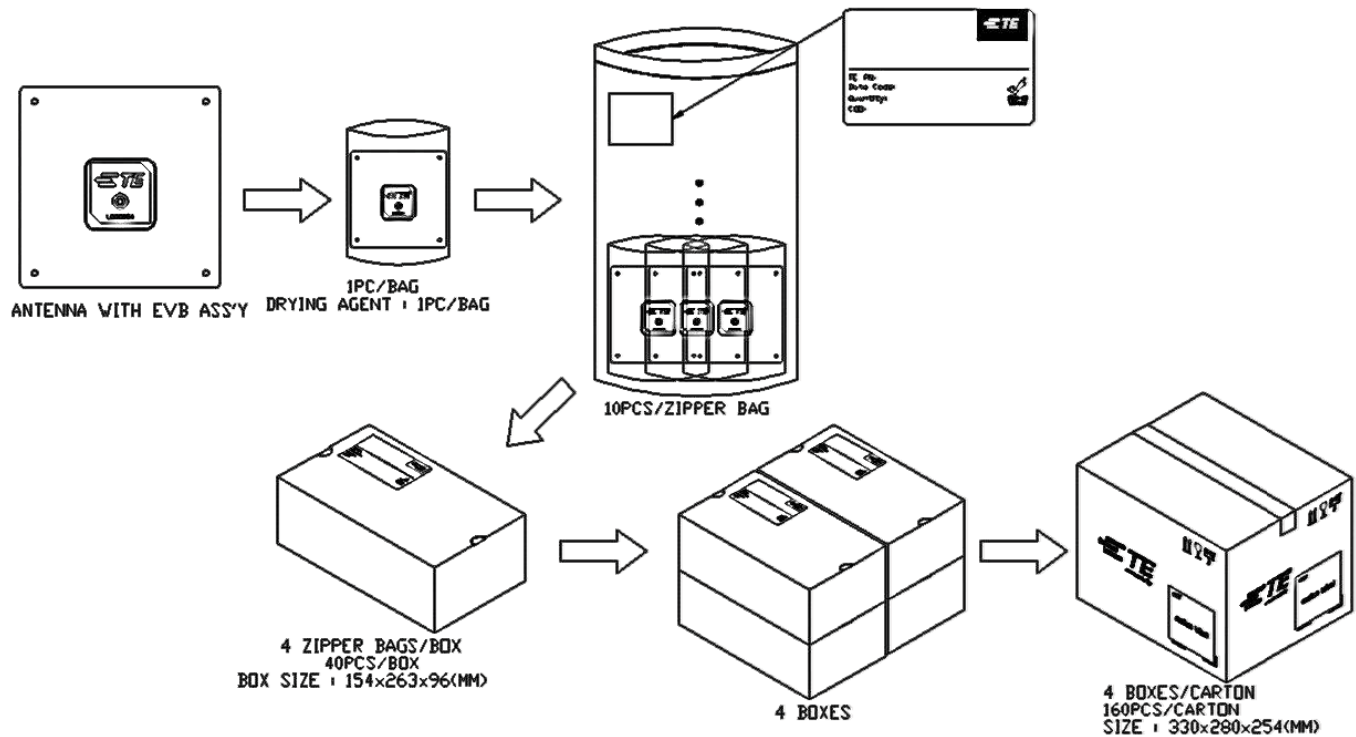


Dimensions: mm

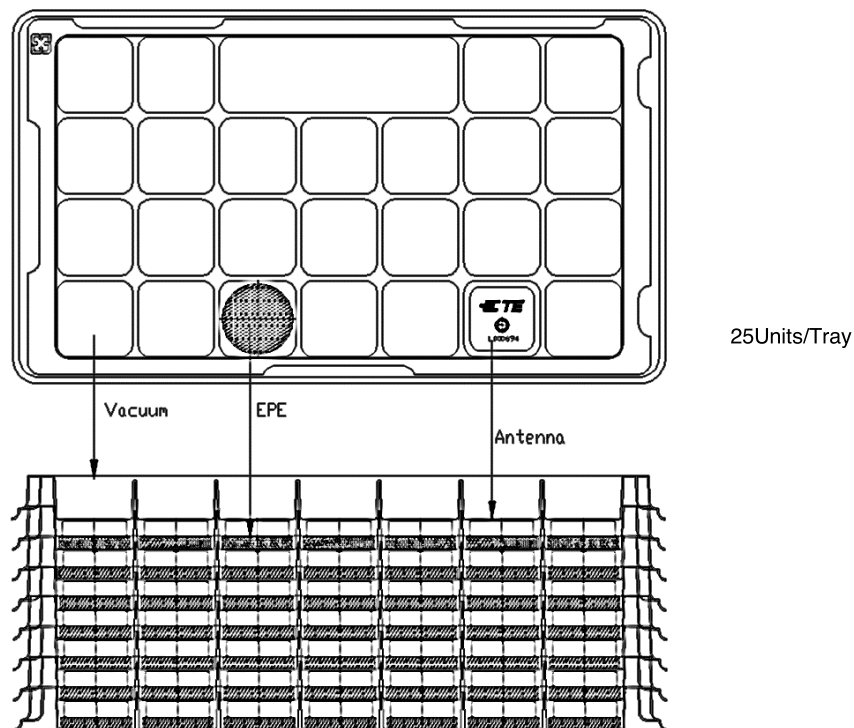
Diagram is not to scale

PACKAGING

L000694-80 (BULK)



L000694-01 (TRAY)



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Standard Antenna Solutions

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Netherlands: +31 (0) 73-6246-999

China: +86 (0) 400-820-6015

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