



CERAMIC PATCH ANTENNA, 1561-1602MHz, 20X20X6MM

Part Numbers:

L000691-01

L000691-80

FEATURES

- Covers all L1 GPS / BEIDOU bands for GNSS
- 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 for evaluation board

RF SPECIFICATIONS

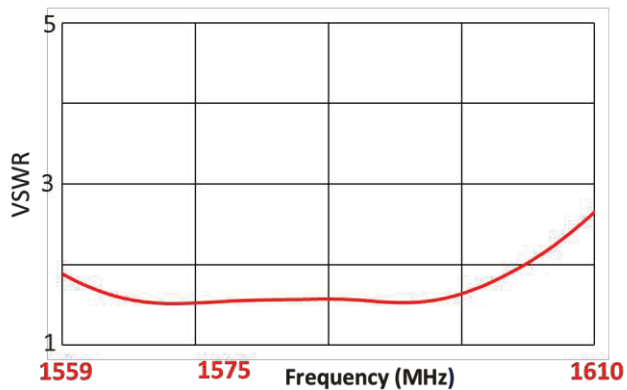
Frequency Range (MHz)	1561.098	1575.42	1602
Bandwidth (MHz)	±2.046	±1.023	±5
VSWR (center frequency)	<2.5:1	<2.5:1	<2.5:1
Peak Gain at Zenith	Typ. -1.7 dBi	Typ. -2.2 dBi	Typ. -4.5 dBi
Average Gain	-1.2 dBi	-1.2 dBi	-1.5 dBi
Efficiency (%)	78%	78.2%	73%
Feed Point Impedance	50 ohms		
Polarization	Right hand polarization		

MECHANICAL SPECIFICATIONS

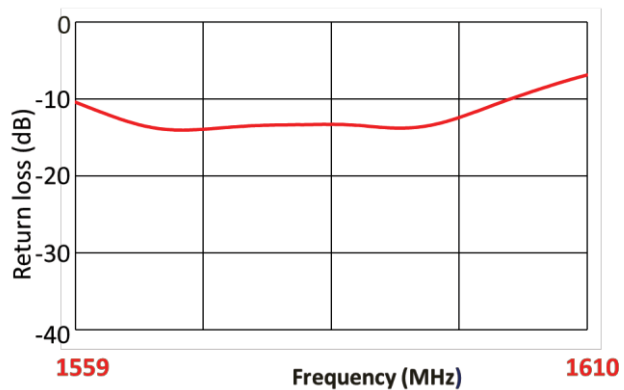
Size (L x W x H)	20.0 mm x 20.0 mm x 6.0 mm (L/W/H ± 0.2)
Weight	< 12 g
Mounting	Through Hole and Adhesive Tape
Mating Connector	N/A
Cable	N/A
Operating Temperature	-40 to +105°C
Storage Temperature	-40 to +105°C
Dielectric Material	Ceramic
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

RF DATA (SHOWN AS L000691-01 : GROUND SIZE : 70 X 70 X 1.0 MM.)

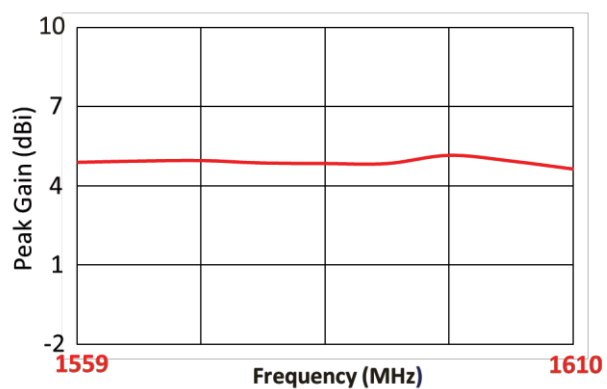
VSWR



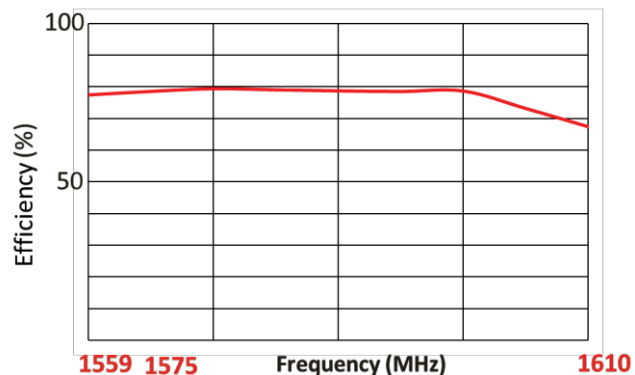
Return Loss



Peak Gain



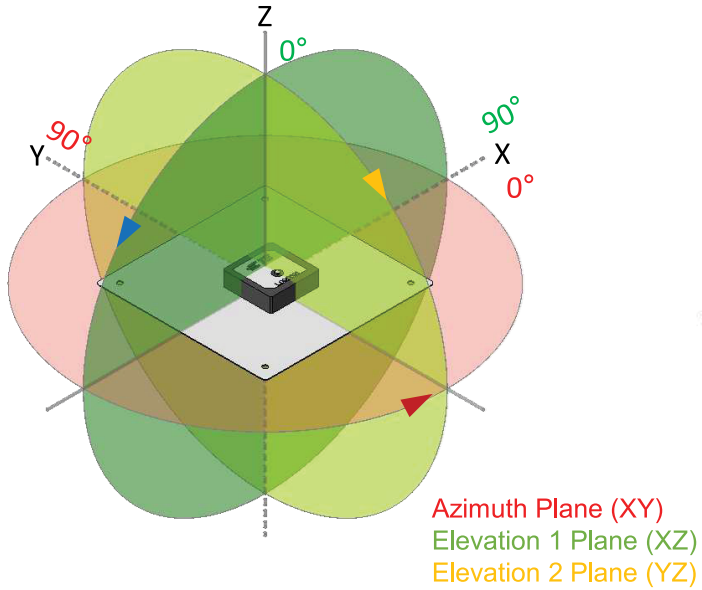
Efficiency



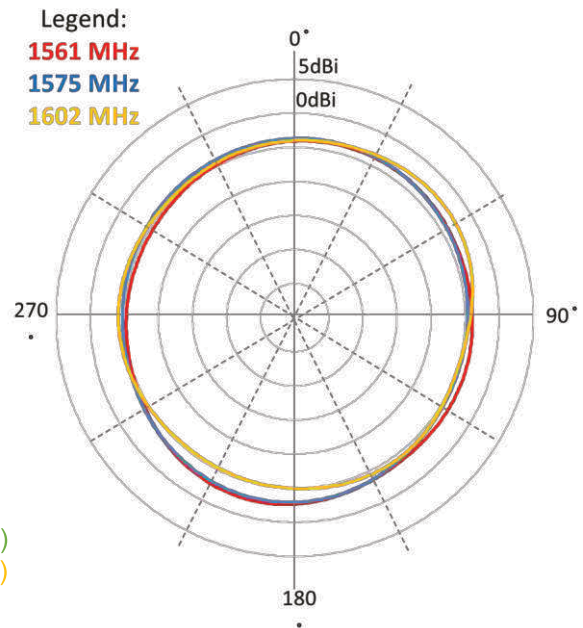
Data measured in free space and on reference ground plane of 70x70x1.0 mm ground plane condition, application data might vary.

RADIATION PATTERN (SHOWN AS L000691-01 : GROUND SIZE : 70 X 70 X 1.0 MM.)

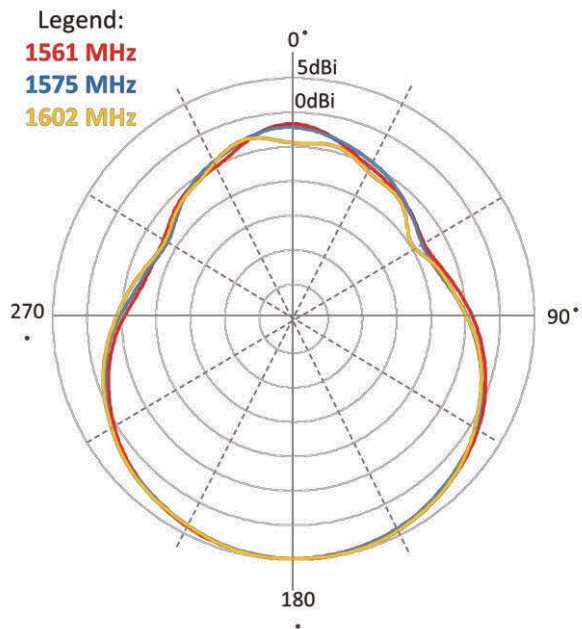
Test setup



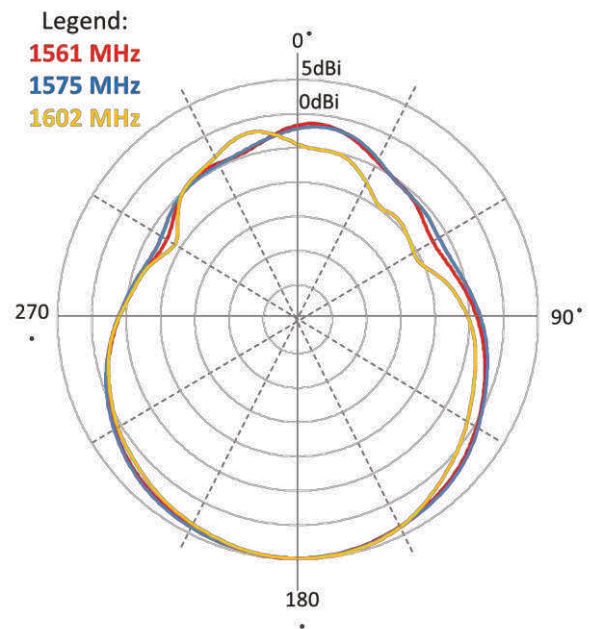
Azimuth (XY)



Elevation 1(XZ)

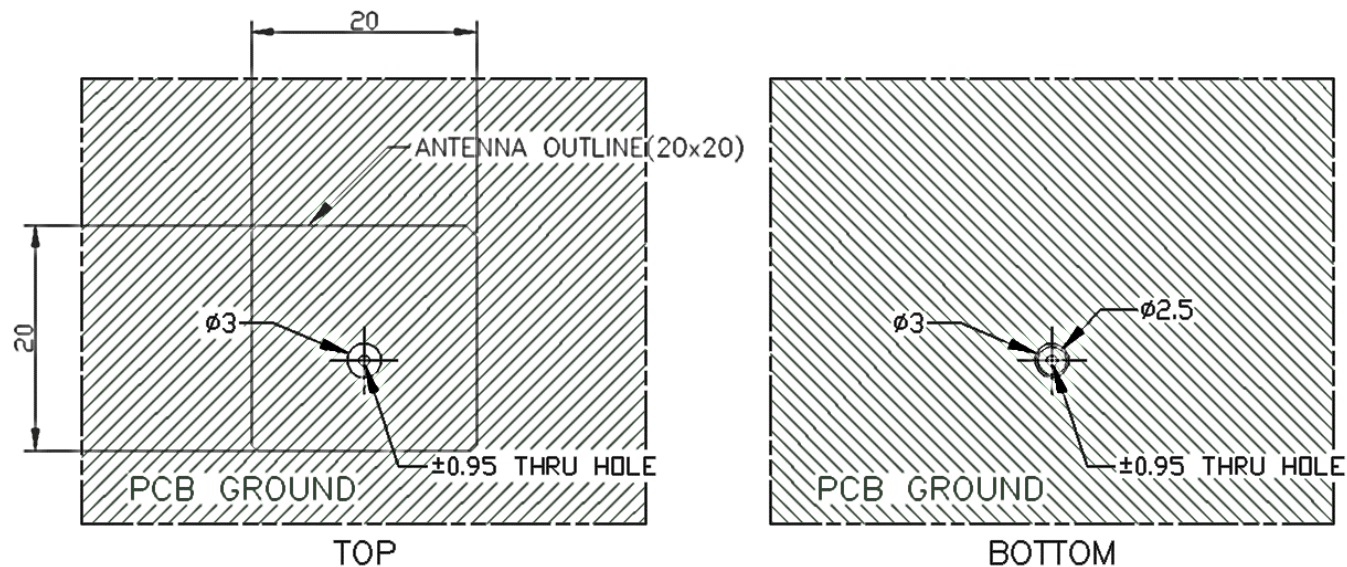


Elevation 2 (YZ)



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).

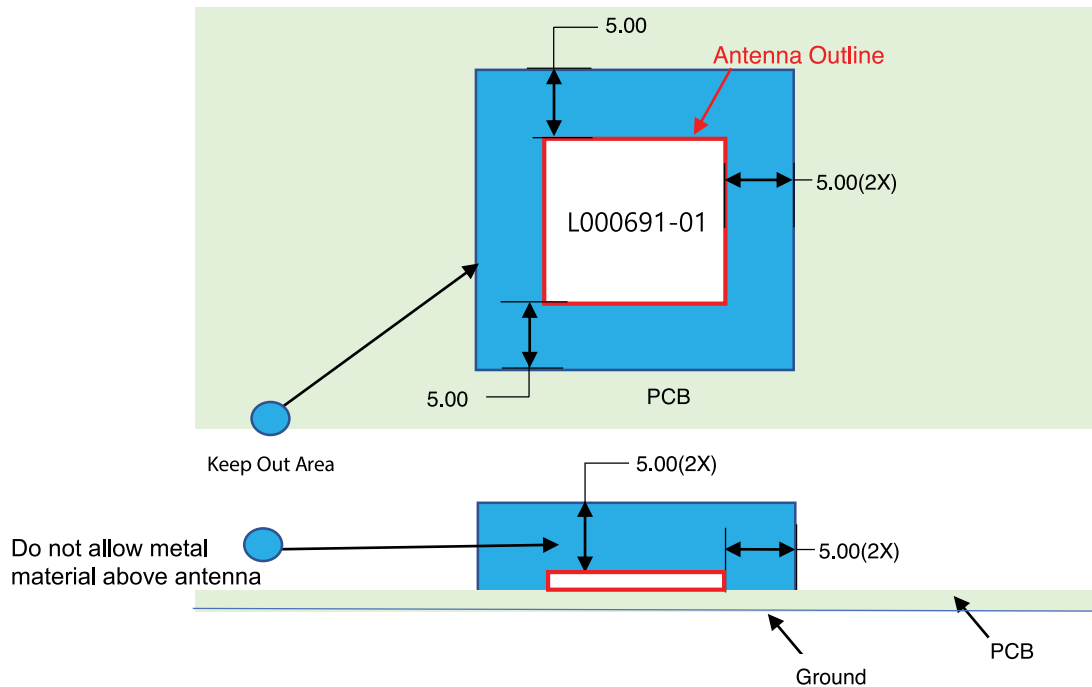
3. Tolerance : $\pm 0.2\text{mm}$

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.

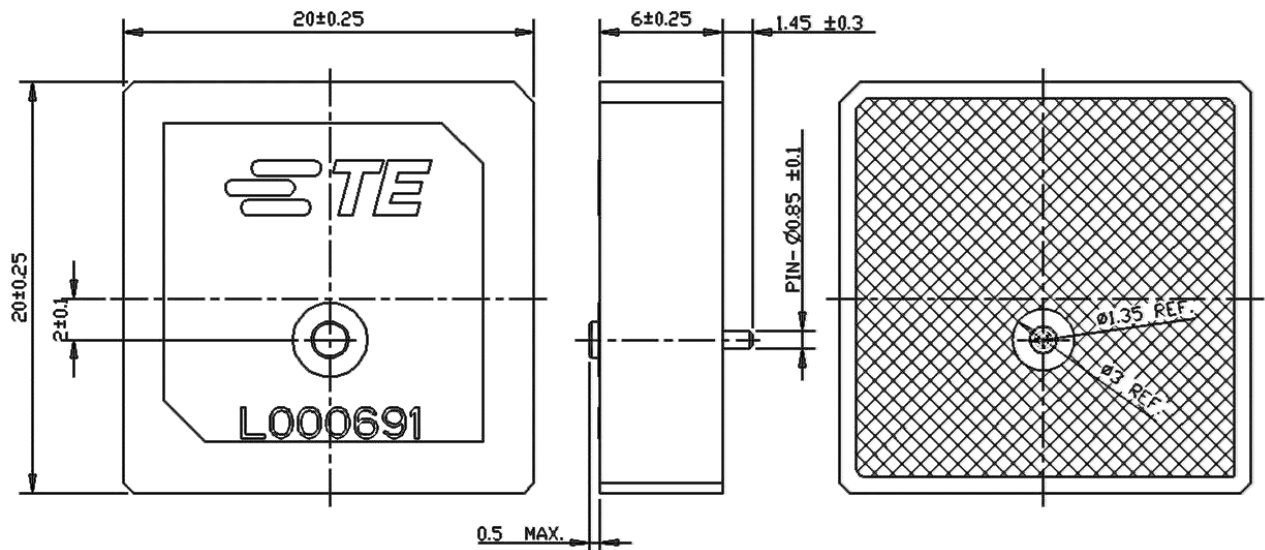
2. Area in blue above indicates Keep Out Area.

3. For more information please call TE.

Dimensions: mm

Diagram is not to scale

DIMENSIONS

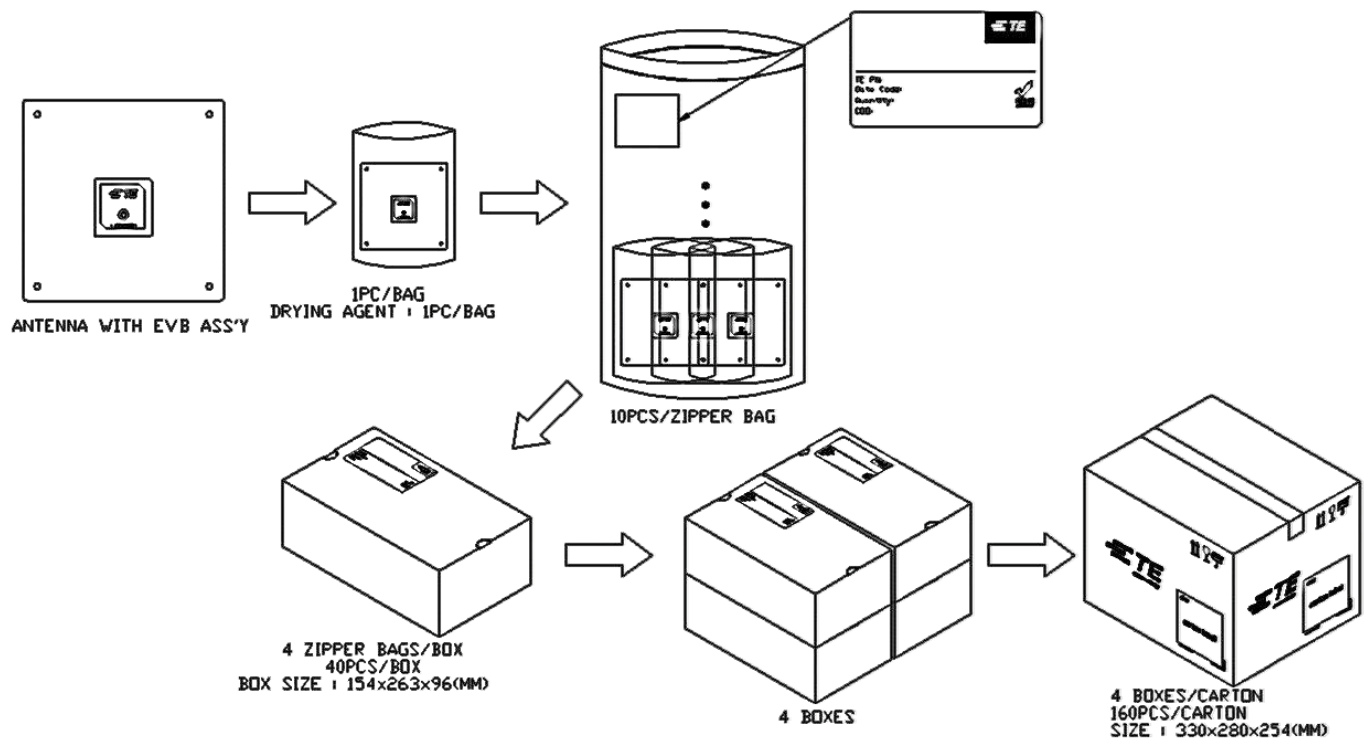


Dimensions: mm

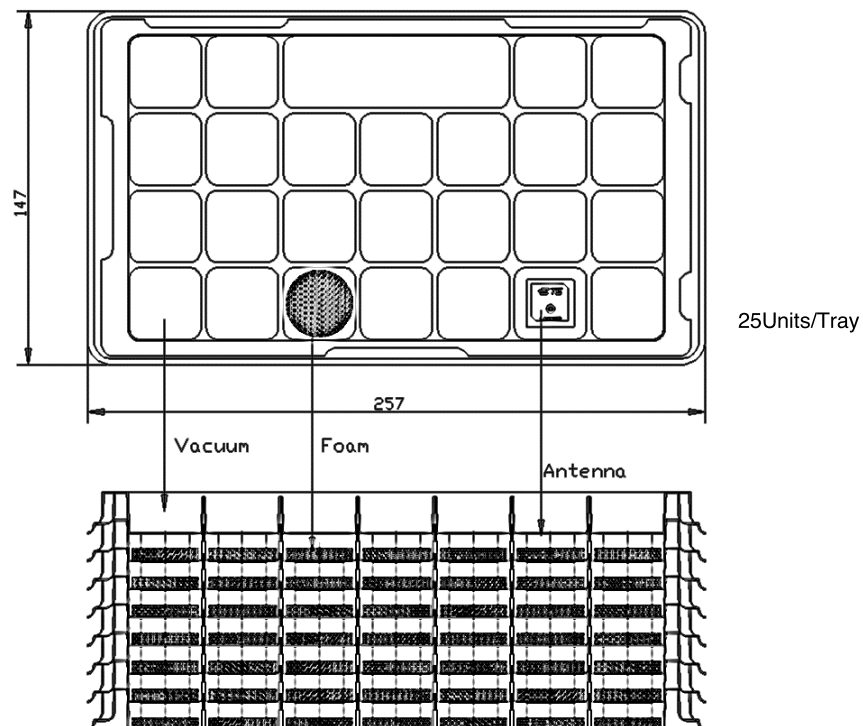
Diagram is not to scale

PACKAGING

L000691-80 (BULK)



L000691-01 (TRAY)



CERAMIC PATCH ANTENNA, 1561-1602MHz, 20X20X6MM

Standard Antenna Solutions

TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

For phone numbers in other countries, go to te.com/support-center

te.com

TE, TE Connectivity, TE connectivity (logo), and Splatch are trademarks owned or licensed by the TE Connectivity plc. family of companies. Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application. Antenna performance may vary. TE is a component manufacturer, and customer and/or end-user is responsible for all end-use compliance and regulatory requirements.

© 2024 TE Connectivity. All Rights Reserved.

11-24