



CERAMIC PATCH ANTENNA, 5850-5925MHz, 12X12X4MM

Part Numbers:

L000693-01

L000693-80

FEATURES

- Operates in 5850-5925MHz ISM band (Intelligent Transportation Systems) used in Vehicle-to-Everything (V2X) communication and Dedicated Short Range Communications (DSRC)
- SMD Passive Ceramic Patch Antenna; light weight and high efficiency / gain
- The following data is based on 50 x 50 x 1mm ground size
- No matching circuits required for evaluation board

RF SPECIFICATIONS

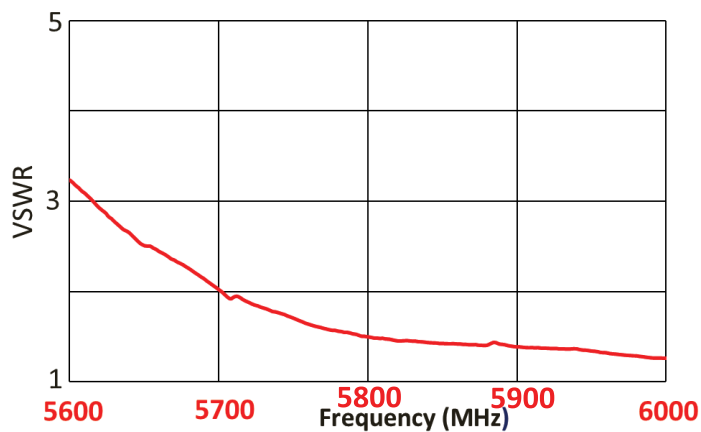
Frequency Range (MHz)	5850-5925
Bandwidth (MHz)	75 MHz
VSWR (center frequency)	<2.0:1
Peak Gain at Zenith	Typ. 4.2 dBi
Average Gain	-1.0 dB
Efficiency (%)	83%
Feed Point Impedance	50 ohms
Polarization	Right hand polarization

MECHANICAL SPECIFICATIONS

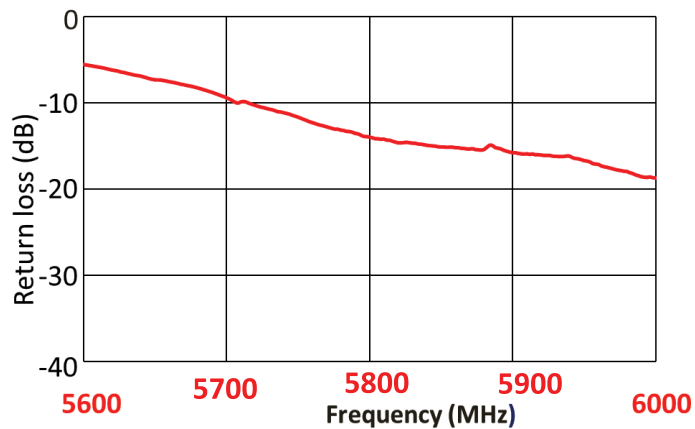
Size (L x W x H)	12.0 mm x 12.0 mm x 4.0 mm (L/W/H \pm 0.2)
Weight	< 4 g
Mounting	Through Hole and Adhesive Tape
Mating Connector	N/A
Cable	N/A
Operating Temperature	-40 to +105°C
Storage Temperature	-40 to +105°C
Dielectric Material	Ceramic
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

RF DATA (SHOWN AS L000693-01 : GROUND SIZE : 50 X 50 X 1 MM.)

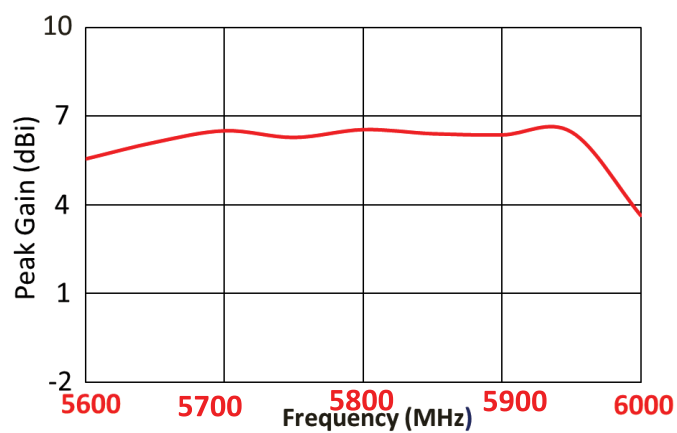
VSWR



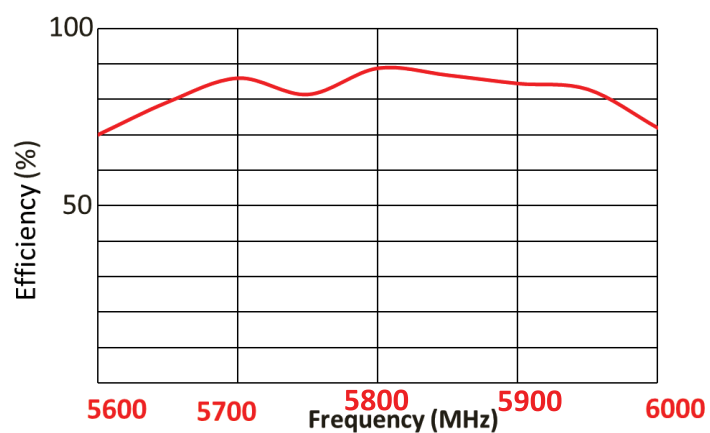
Return Loss



Peak Gain

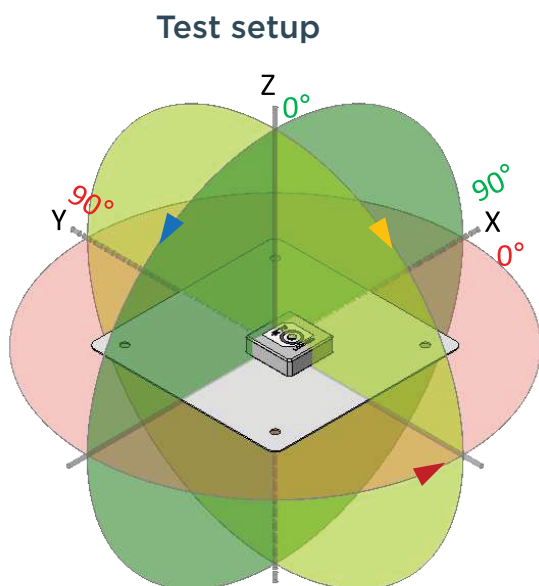


Efficiency

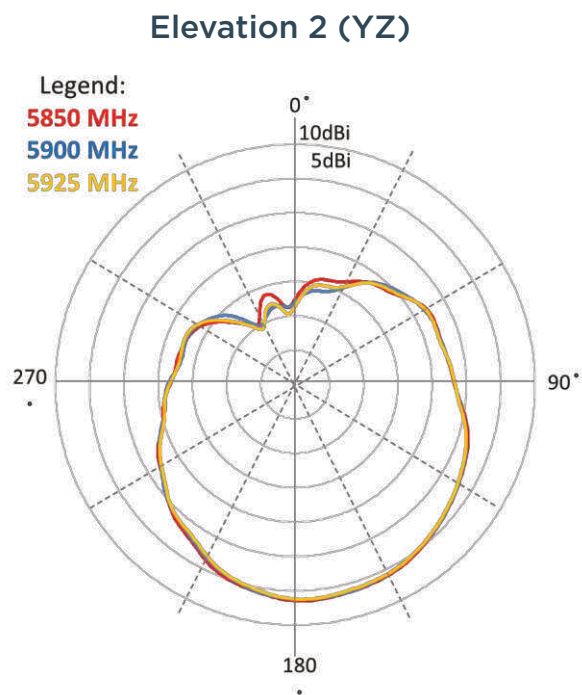
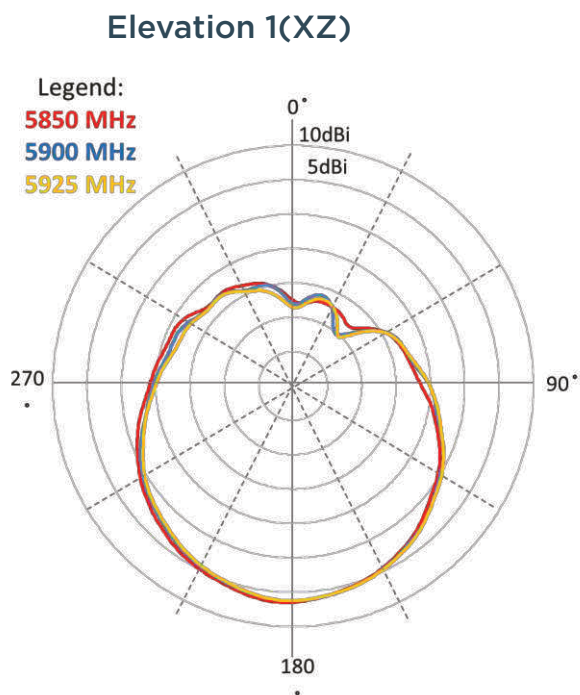
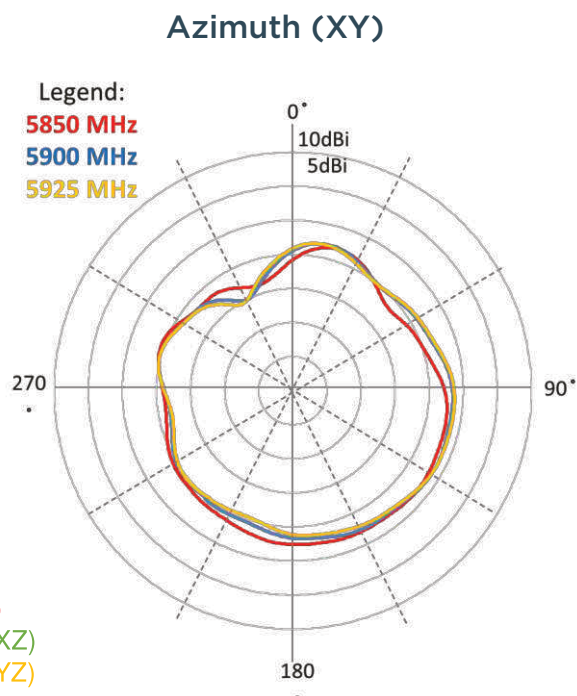


Data measured in free space and on reference ground plane of 50x50x1 mm ground plane condition, application data might vary.

RADIATION PATTERN (SHOWN AS L000693-01 : GROUND SIZE : 50 X 50 X 1 MM.)

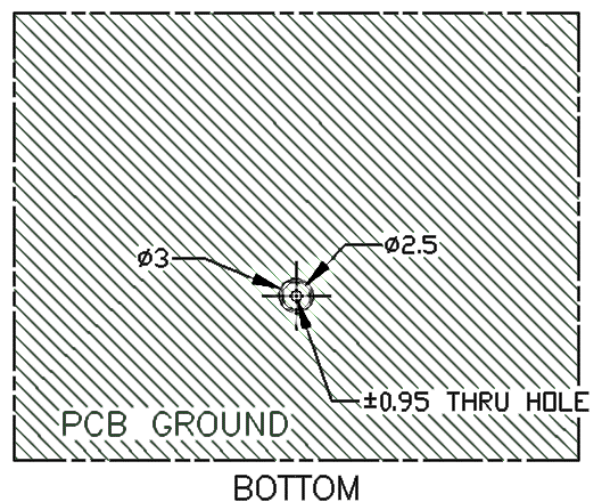
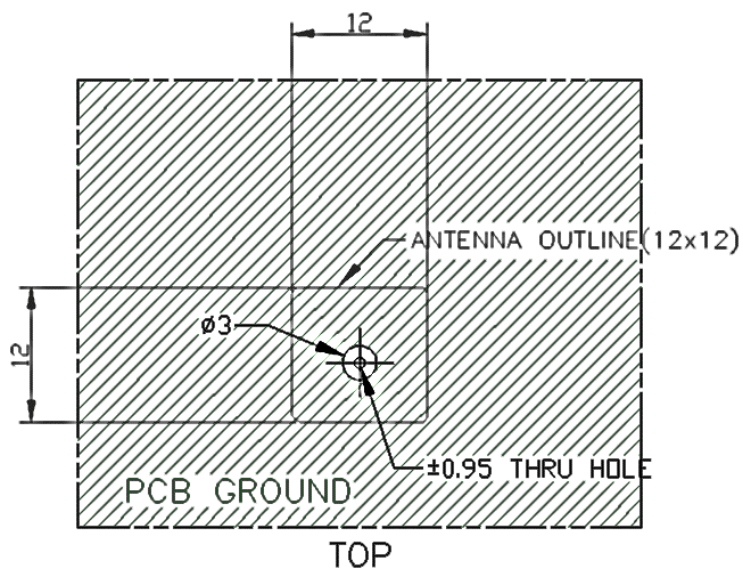


Azimuth Plane (XY) |
Elevation 1 Plane (XZ)
Elevation 2 Plane (YZ)



Data measured in free space and on reference ground plane of 50x50x1 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).

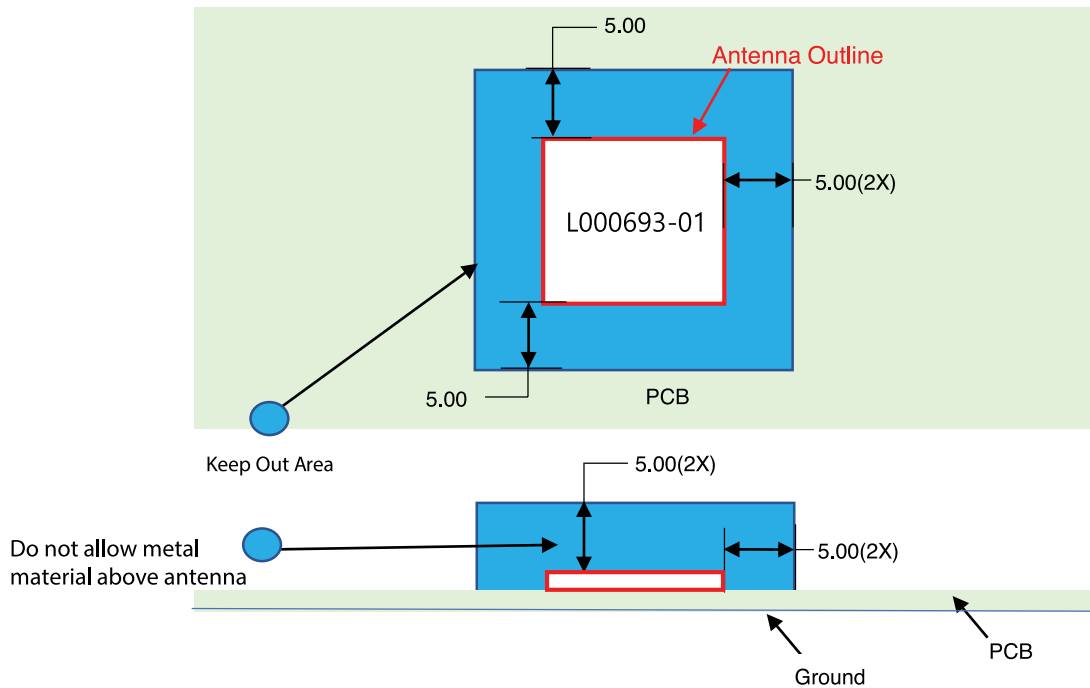
3. Tolerance : ± 0.2 mm

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.

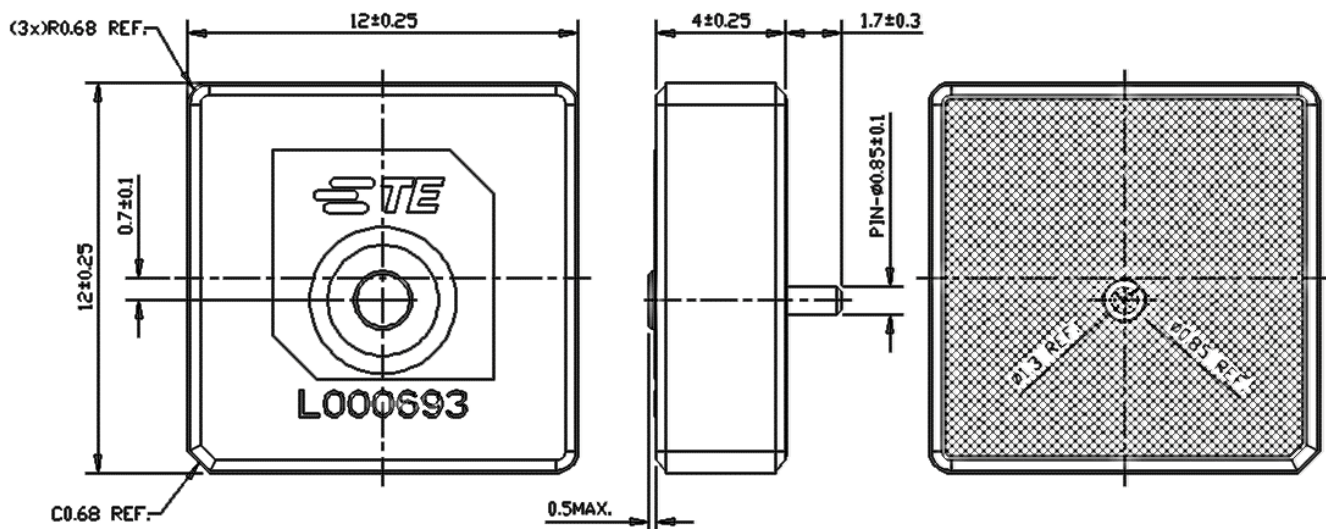
2. Area in blue above indicates Keep Out Area.

3. For more information please call TE.

Dimensions: mm

Diagram is not to scale

DIMENSIONS

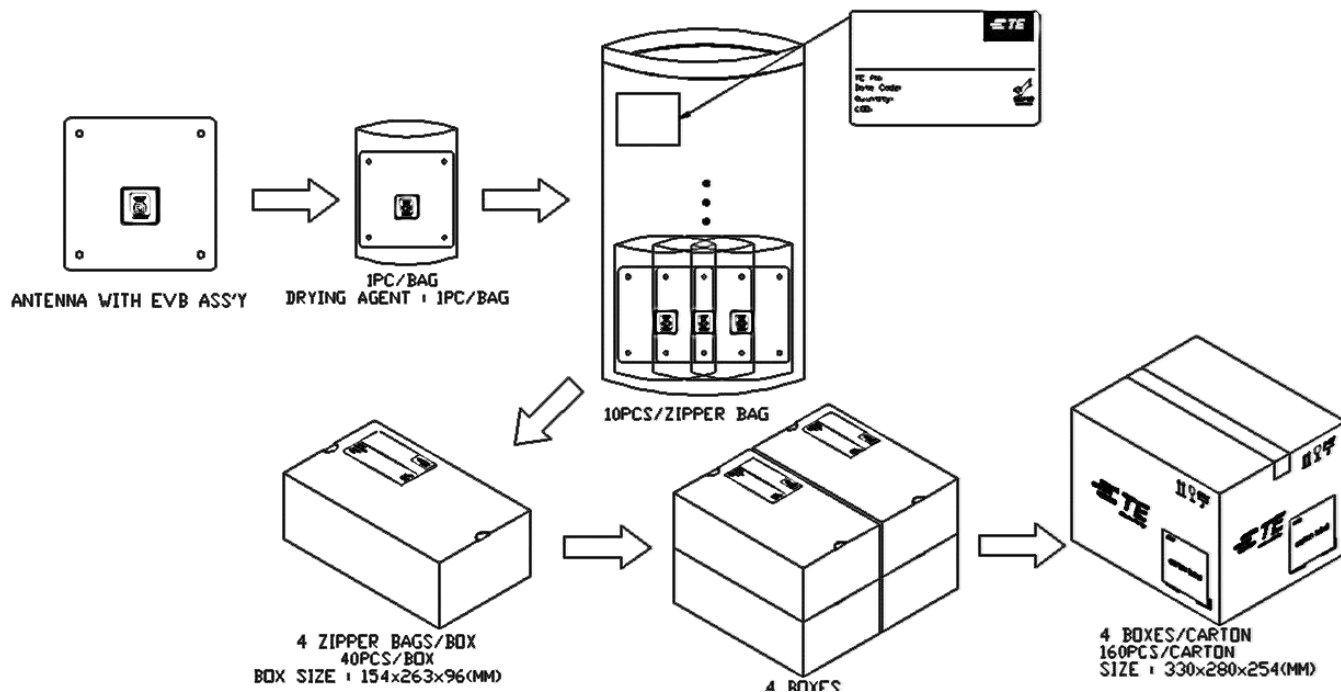


Dimensions: mm

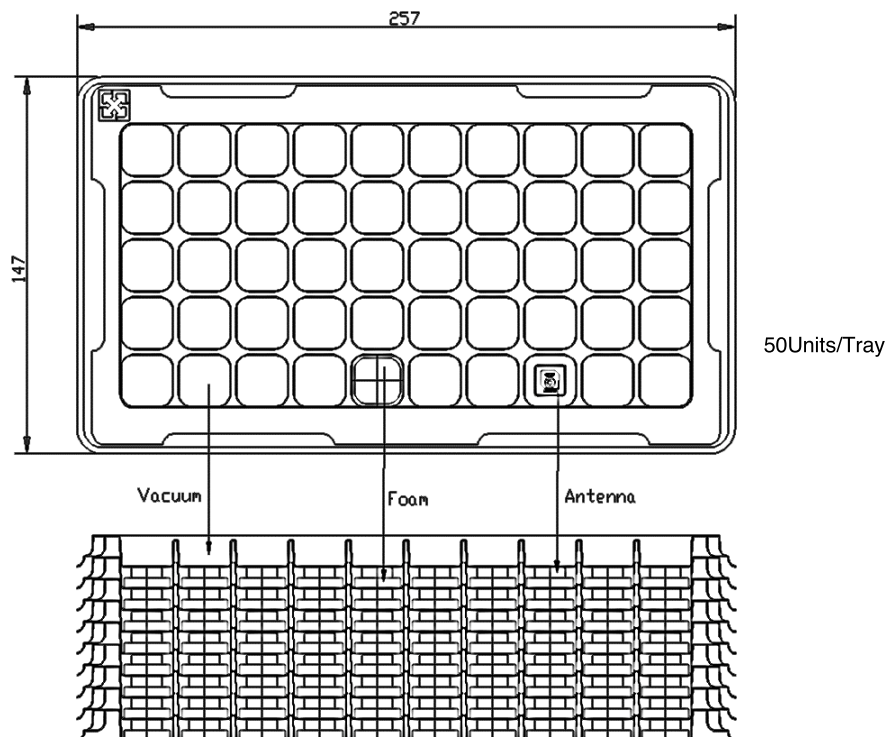
Diagram is not to scale

PACKAGING

L000693-80 (BULK)



L000693-01 (TRAY)



CERAMIC PATCH ANTENNA, 5850-5925MHZ, 12X12X4MM

Standard Antenna Solutions

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