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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

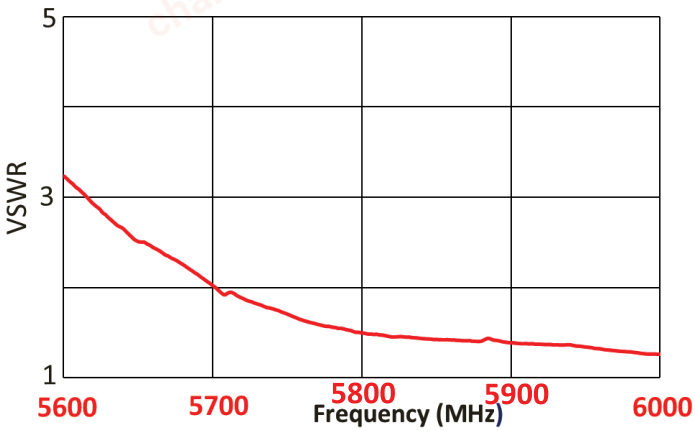
MECHANICAL SPECIFICATIONS

Size (L x W x H)	12.0 mm x 12.0 mm x 4.0 mm (L/W/H ± 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.

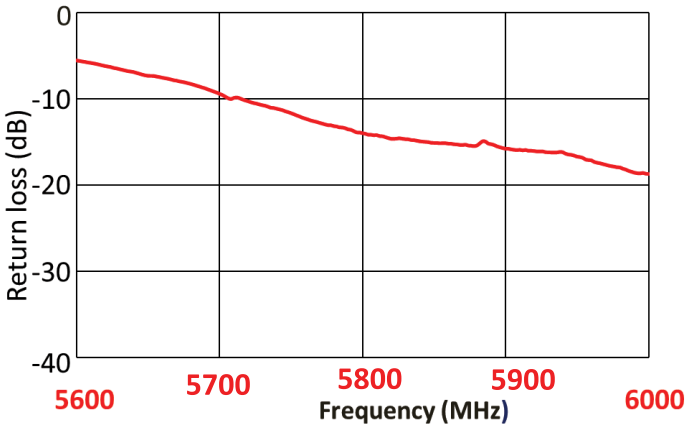
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RF DATA (SHOWN AS L000693-01 : GROUND SIZE : 50 X 50 X 1 MM.)

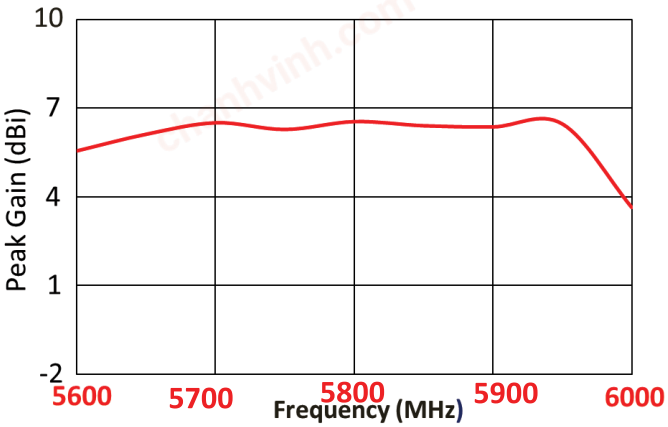
VSWR



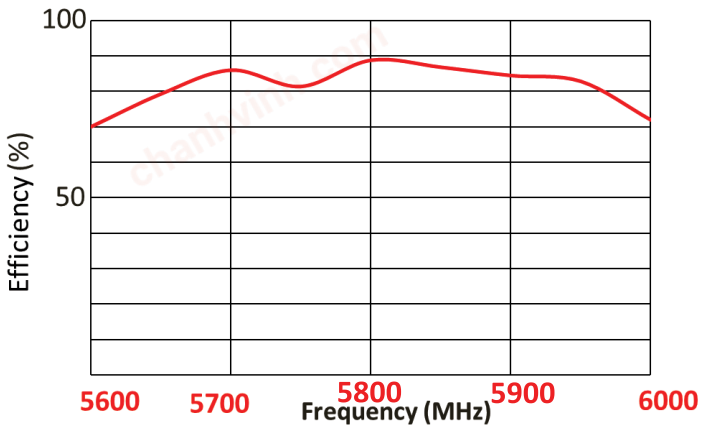
Return Loss



Peak Gain



Efficiency

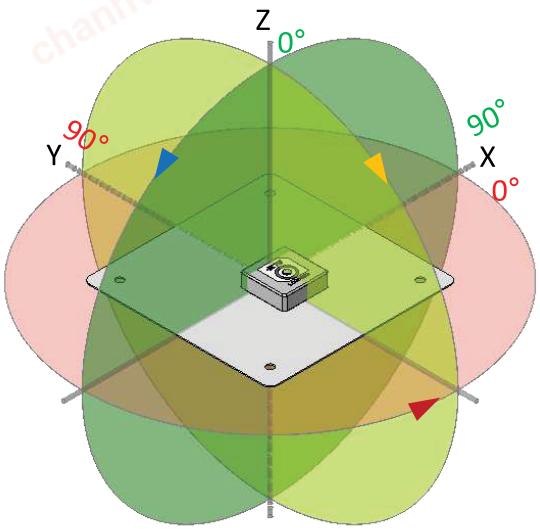


Data measured in free space and on reference ground plane of 50x50x1 mm ground plane condition, application data might vary.

CERAMIC PATCH ANTENNA, 5850-5925MHz, 12X12X4MM
Standard Antenna Solutions

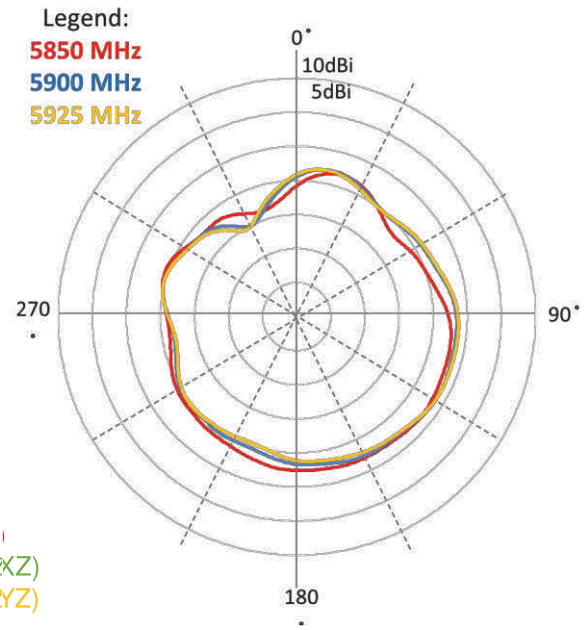
RADIATION PATTERN (SHOWN AS L000693-01 : GROUND SIZE : 50 X 50 X 1 MM.)

Test setup

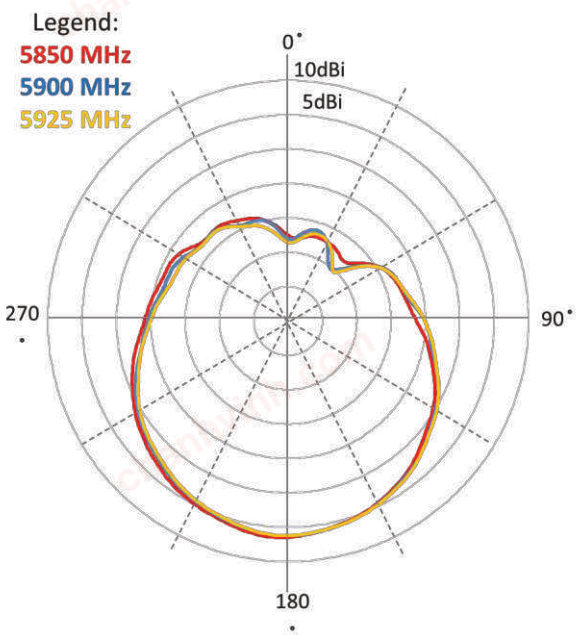


Azimuth Plane (XY)
Elevation 1 Plane (XZ)
Elevation 2 Plane (YZ)

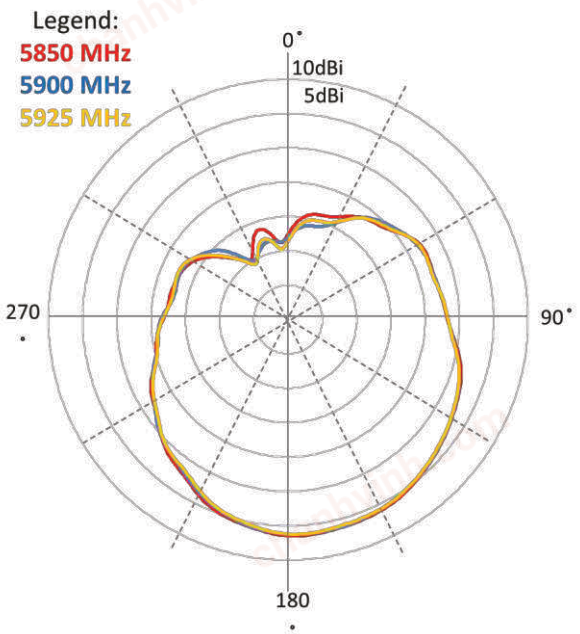
Azimuth (XY)



Elevation 1(XZ)



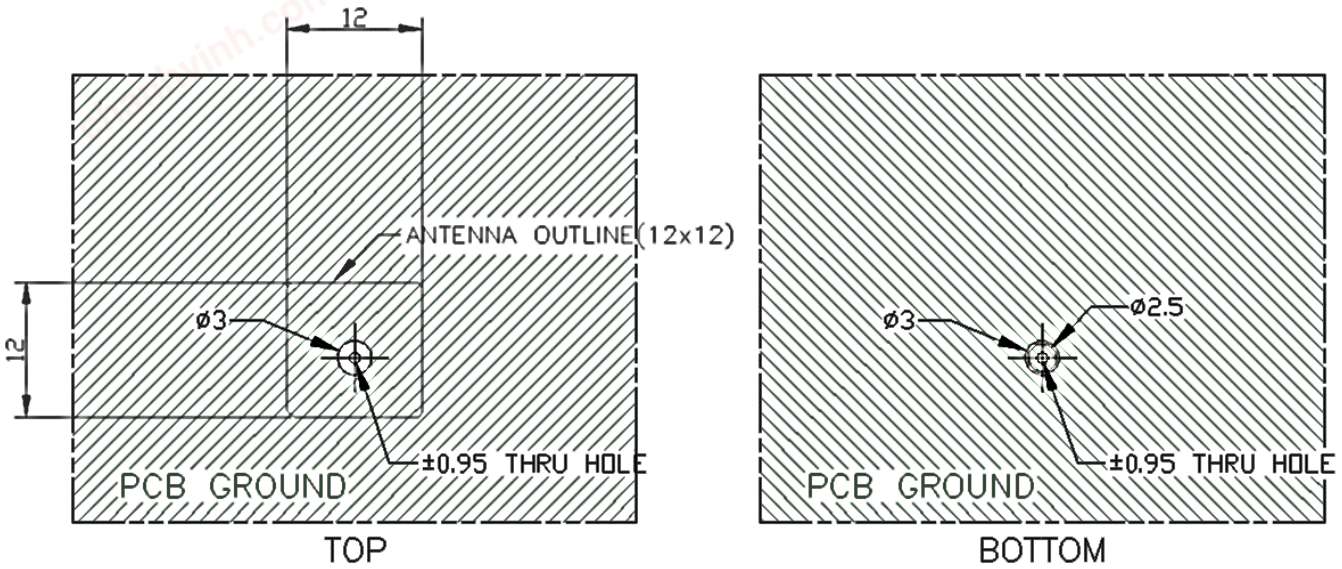
Elevation 2 (YZ)



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

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MOUNTING GUIDE



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

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

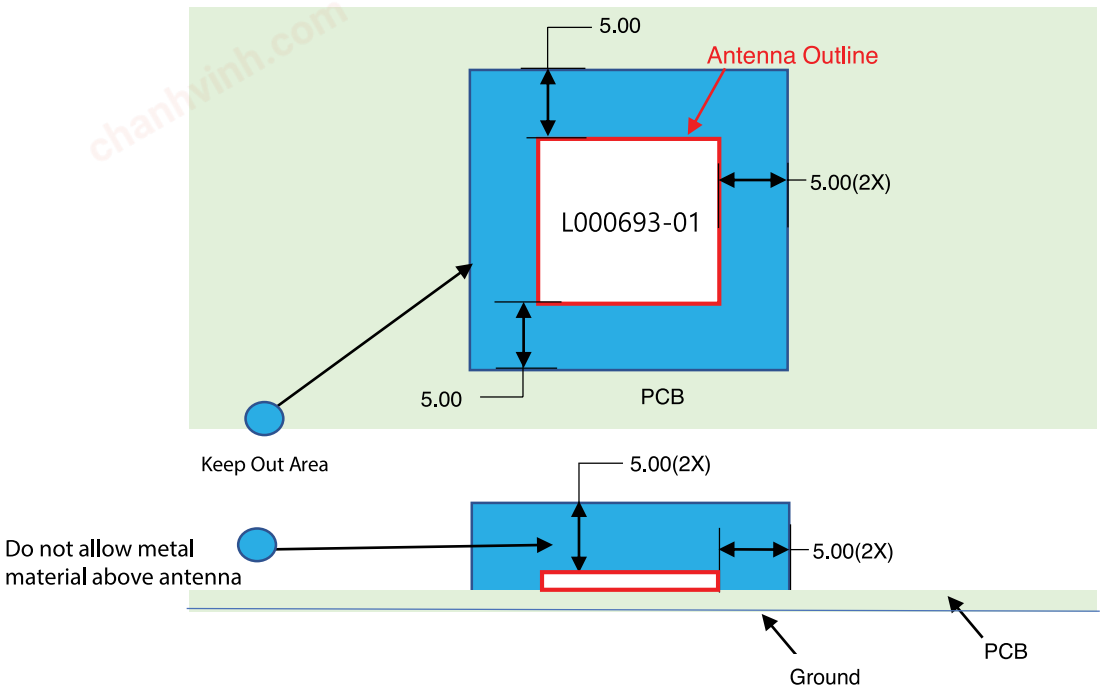
3. Tolerance : ±0.2mm

4. For more information please call TE.

Dimensions: mm
Diagram is not to scale

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KEEP OUT AREA



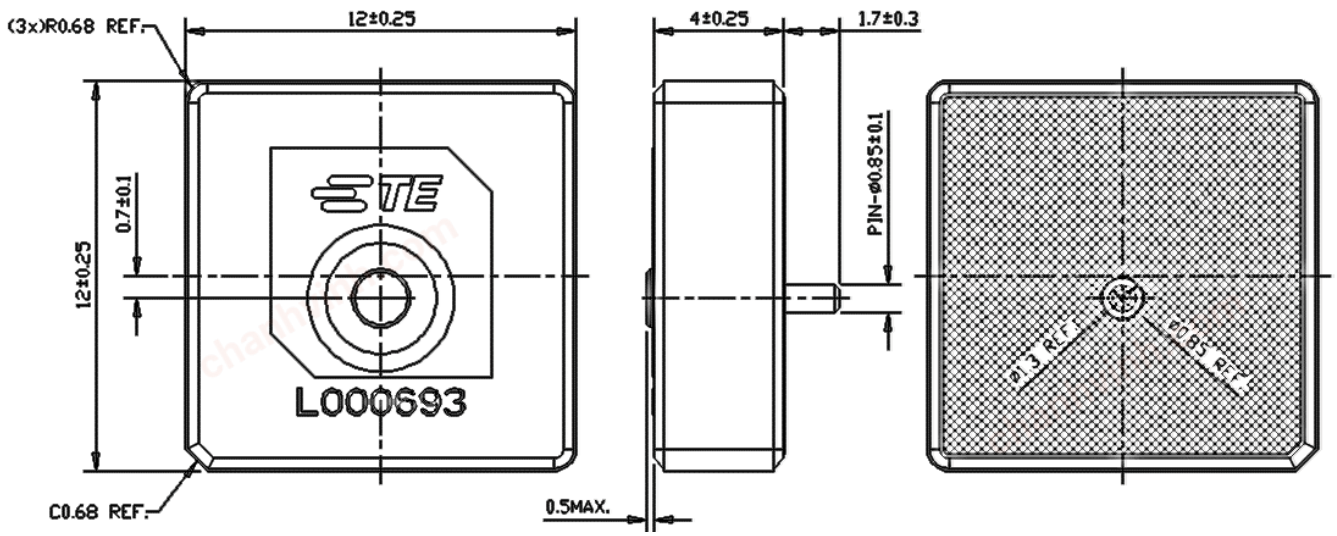
NOTES:1. Antenna designed to be mounted on PCB.

2. Area in blue above indicates Keep Out Area.

3. For more information please call TE.

Dimensions: mm
Diagram is not to scale

DIMENSIONS

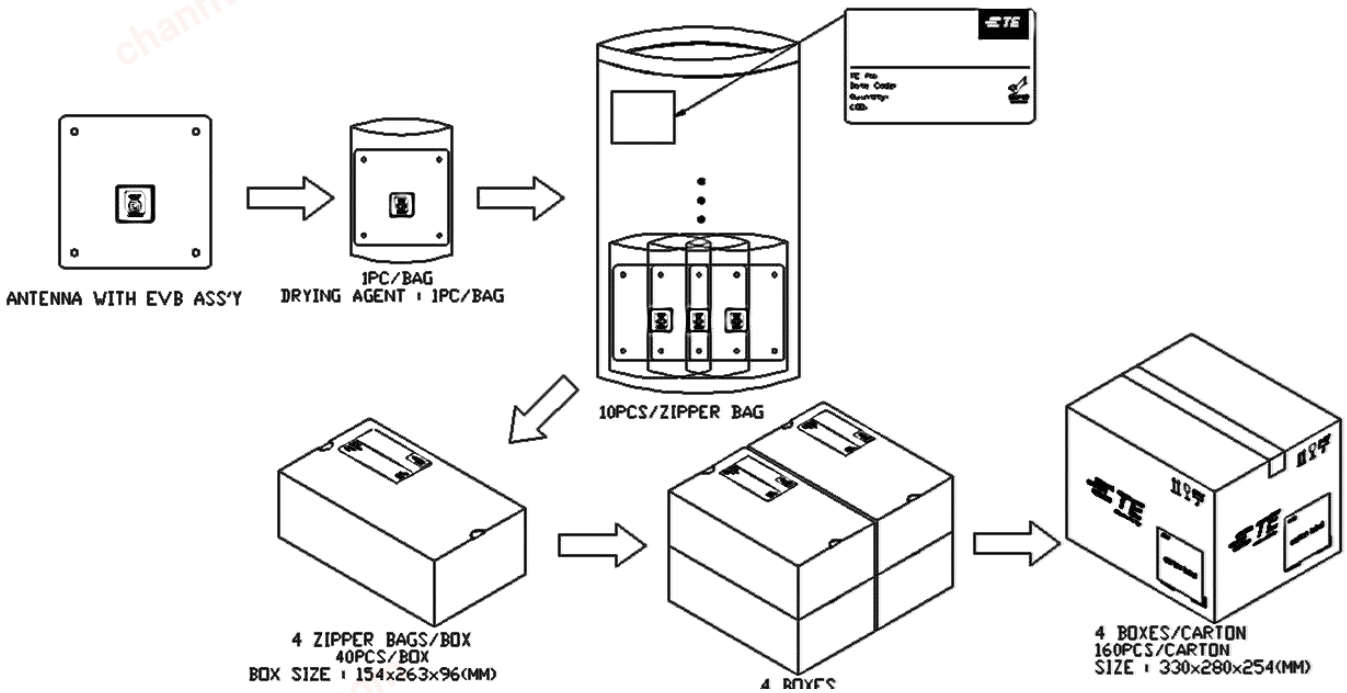


Dimensions: mm
Diagram is not to scale

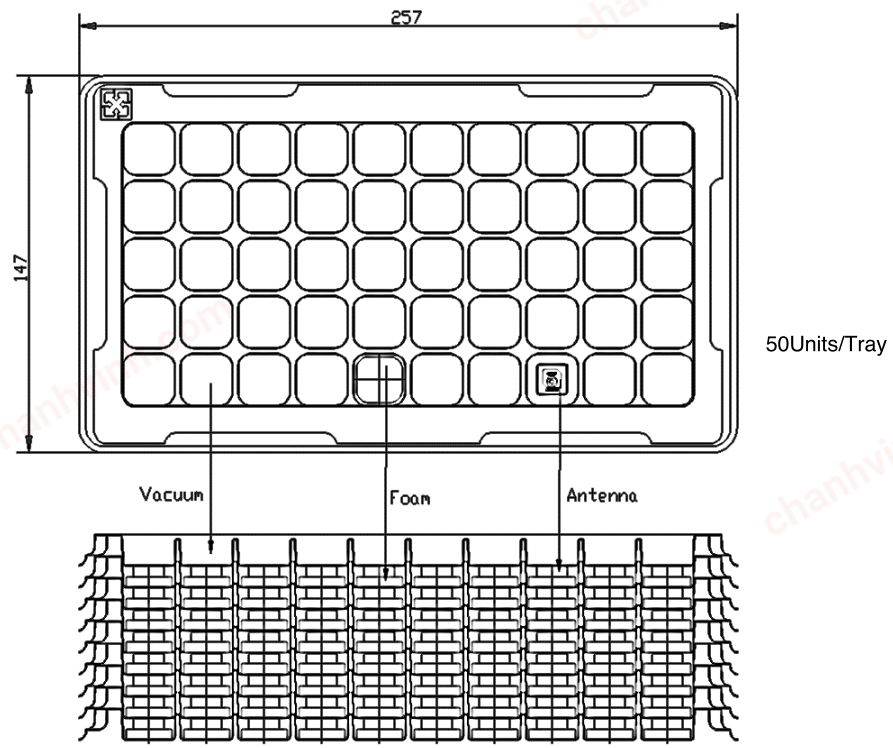
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PACKAGING

L000693-80 (BULK)



L000693-01 (TRAY)



50Units/Tray

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Standard Antenna Solutions

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