chanhvinh.com



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 (L x W x H)	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.

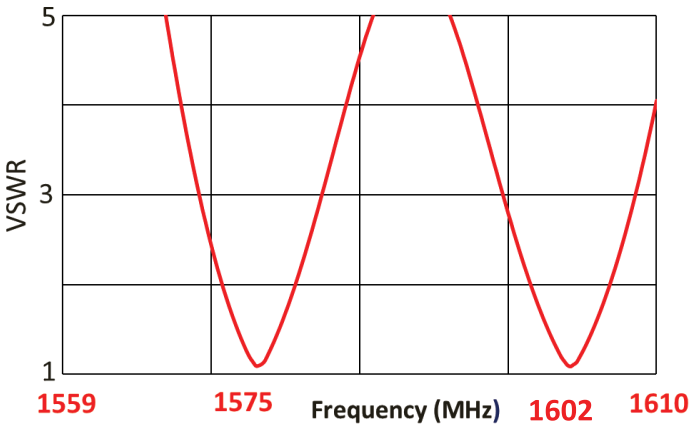
chanhvinh.com

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

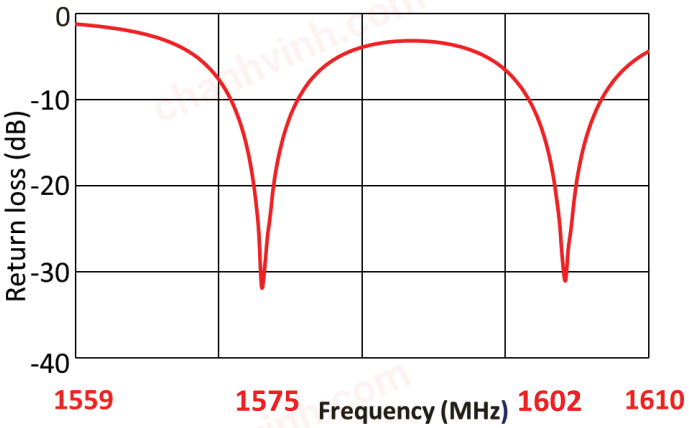
Standard Antenna Solutions

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

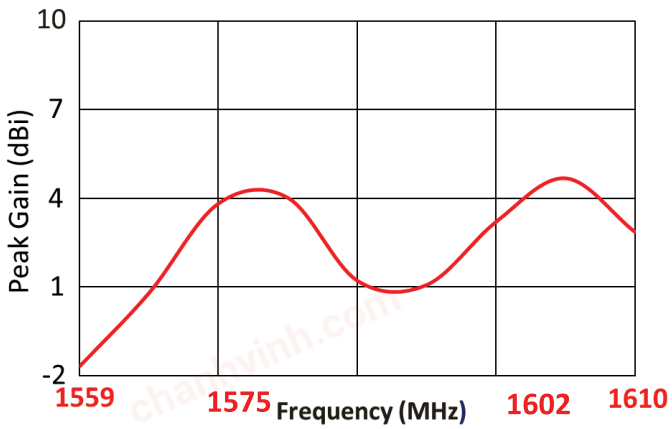
VSWR



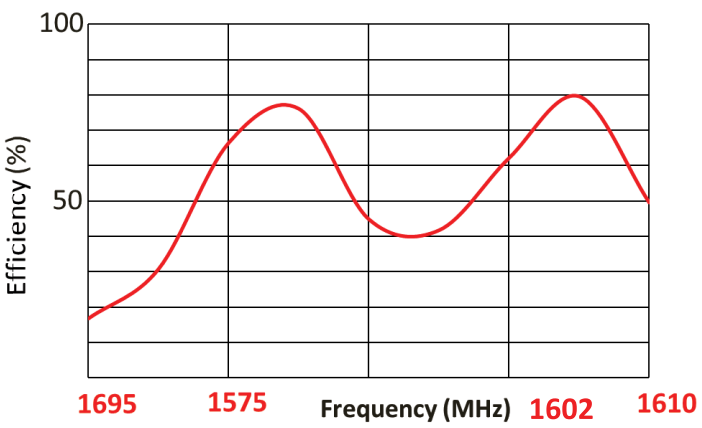
Return Loss



Peak Gain



Efficiency

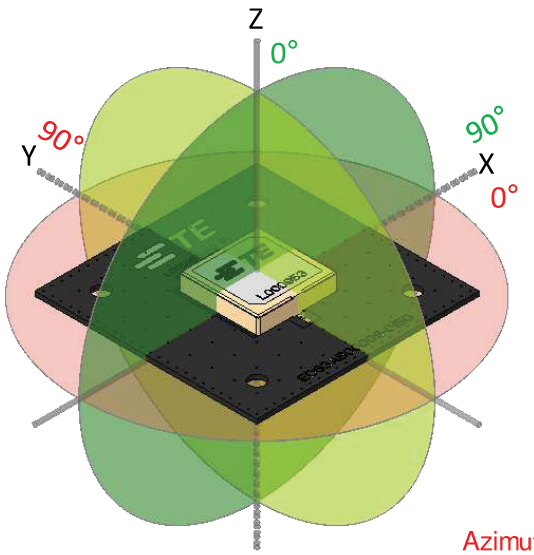


Data measured in free space and on reference ground plane of
50 x 50 x 1.0 mm ground plane condition, application data might vary.

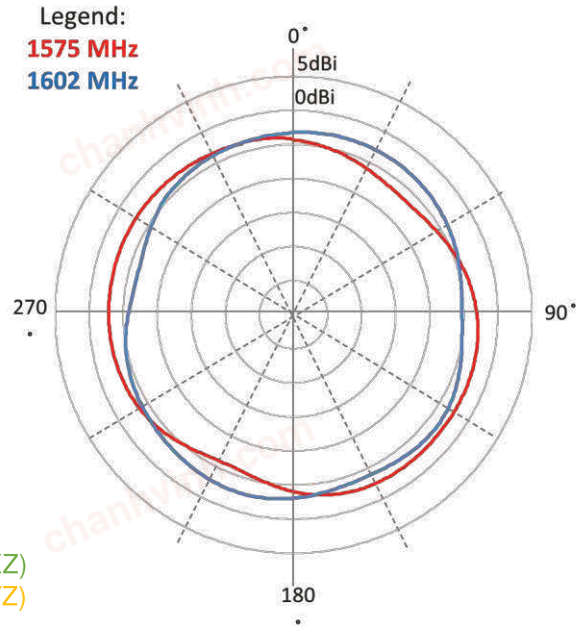
CERAMIC PATCH ANTENNA, 1575-1602MHz, SMD, 18X18X4MM
Standard Antenna Solutions

RADIATION PATTERN (SHOWN AS L000953-01: GROUND SIZE : 50 X 50 X 1.0 MM.)

Test setup

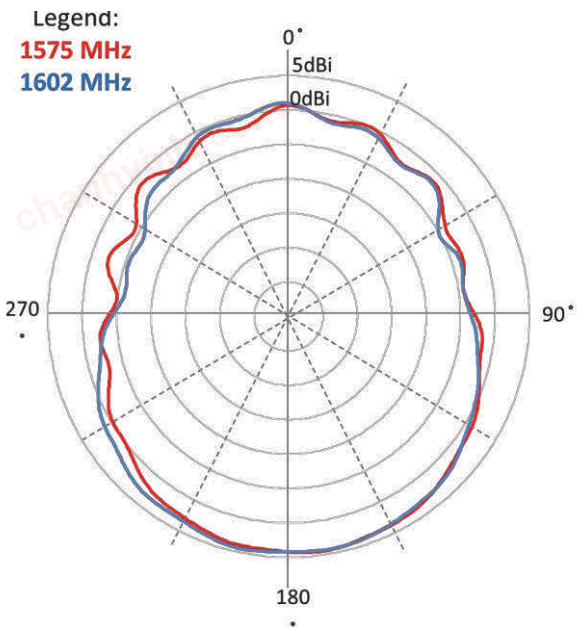


Azimuth (XY)

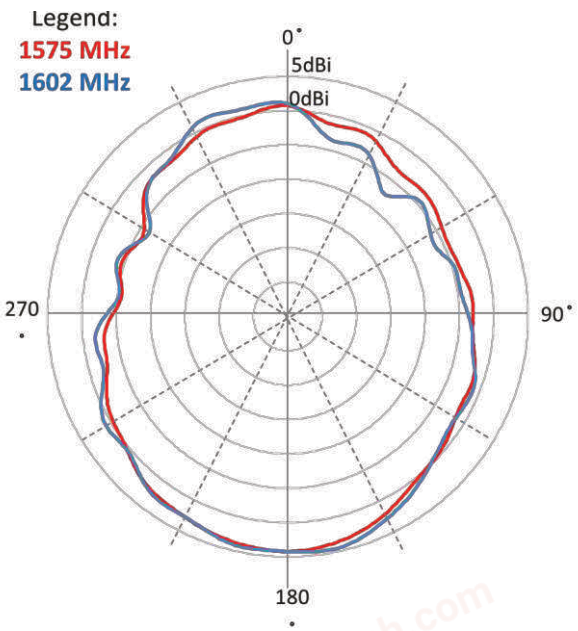


Azimuth Plane (XY)
Elevation 1 Plane (XZ)/Z)
Elevation 2 Plane (YZ)/Z)

Elevation 1 (XZ)



Elevation 2 (YZ)



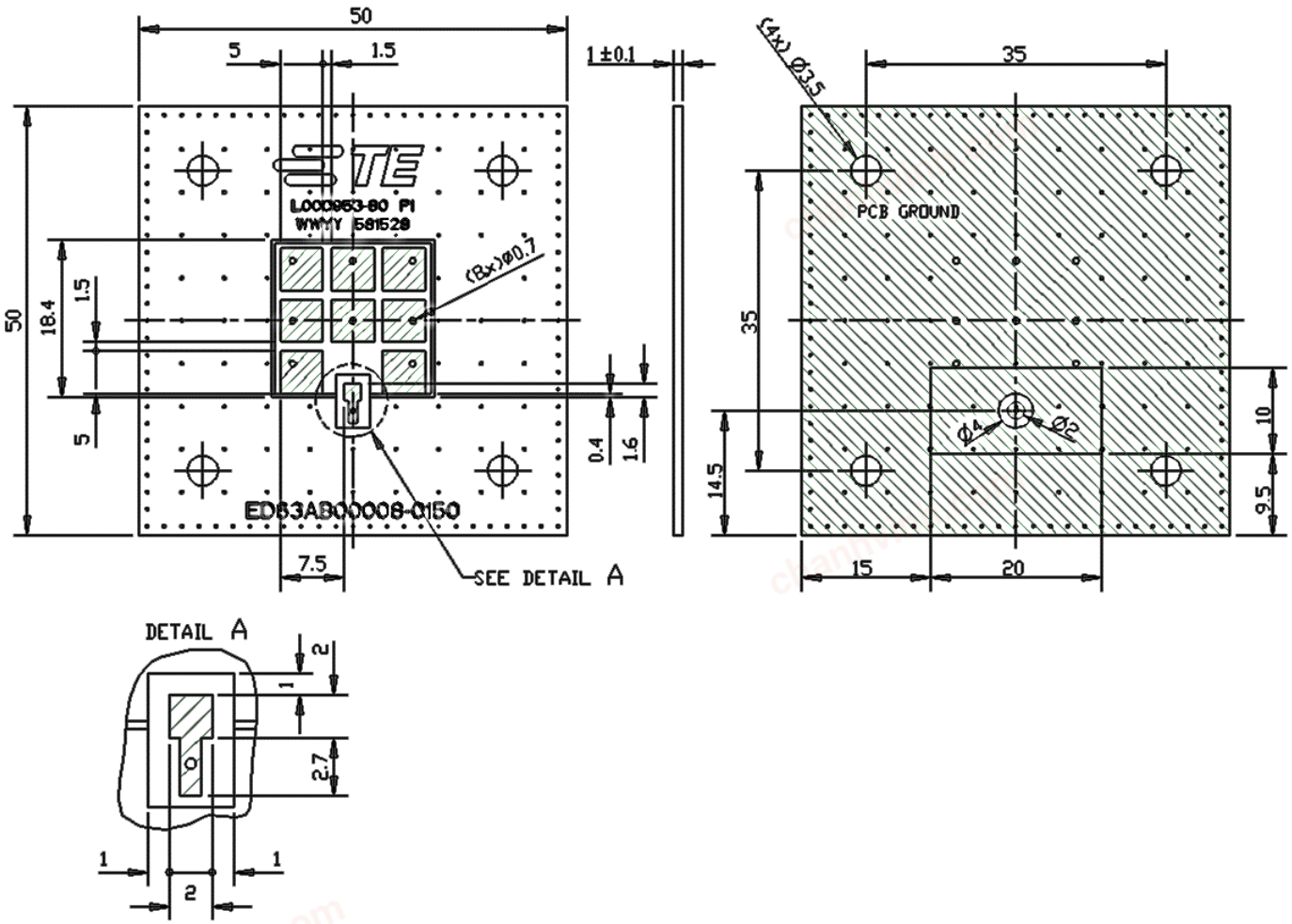
Data measured in free space and on reference ground plane of
50 x 50 x 1.0 mm ground plane condition, application data might vary.

chanhvinh.com

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

Standard Antenna Solutions

MOUNTING GUIDE



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

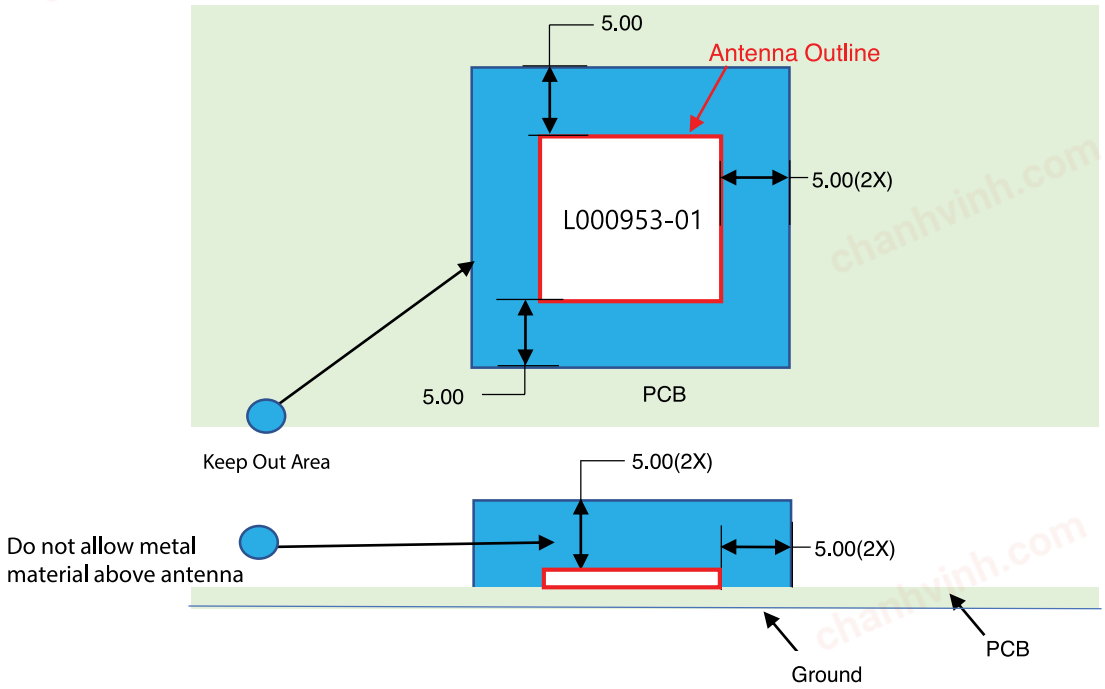
2. For more information please call TE.

3. Reference PCB Dimension(mm) - 50.0 x 50.0 x 1.0

Dimension: mm
Tolerance : ±0.2mm
Diagrams is not to scale

chanhvinh.com

KEEP OUT AREA



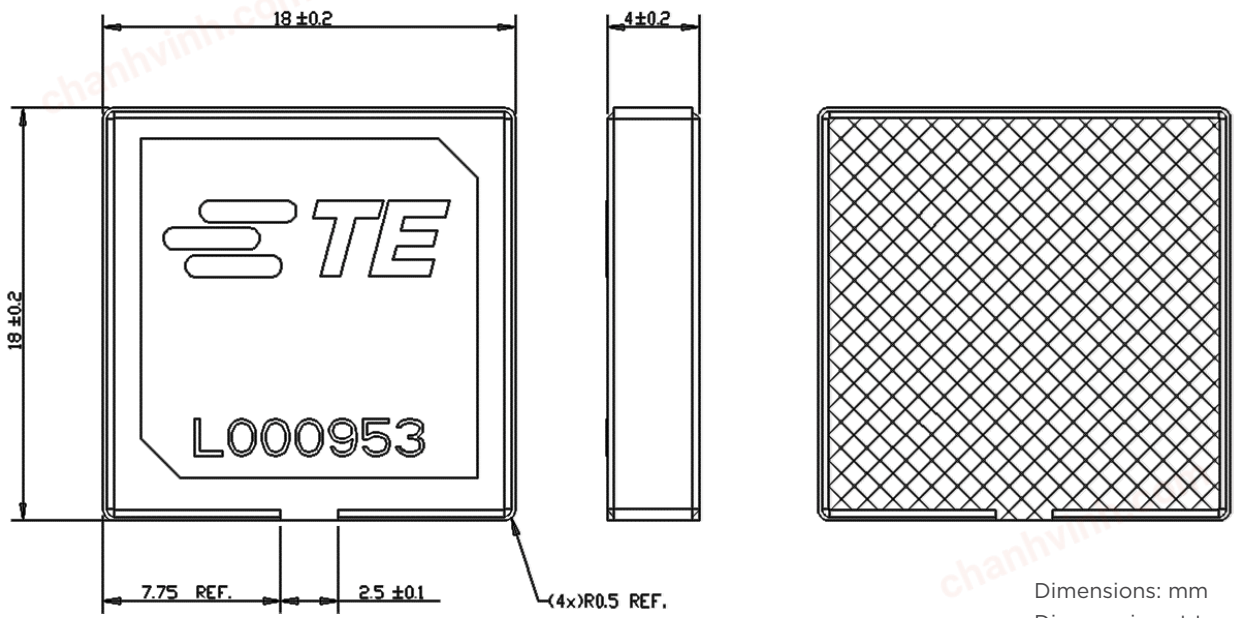
NOTES:1. Antenna designed to be mounted on PCB.

2. Area in blue above indicates Keep Out Area.

3. For more information please call TE.

Dimensions: mm
Diagram is not to scale

DIMENSIONS

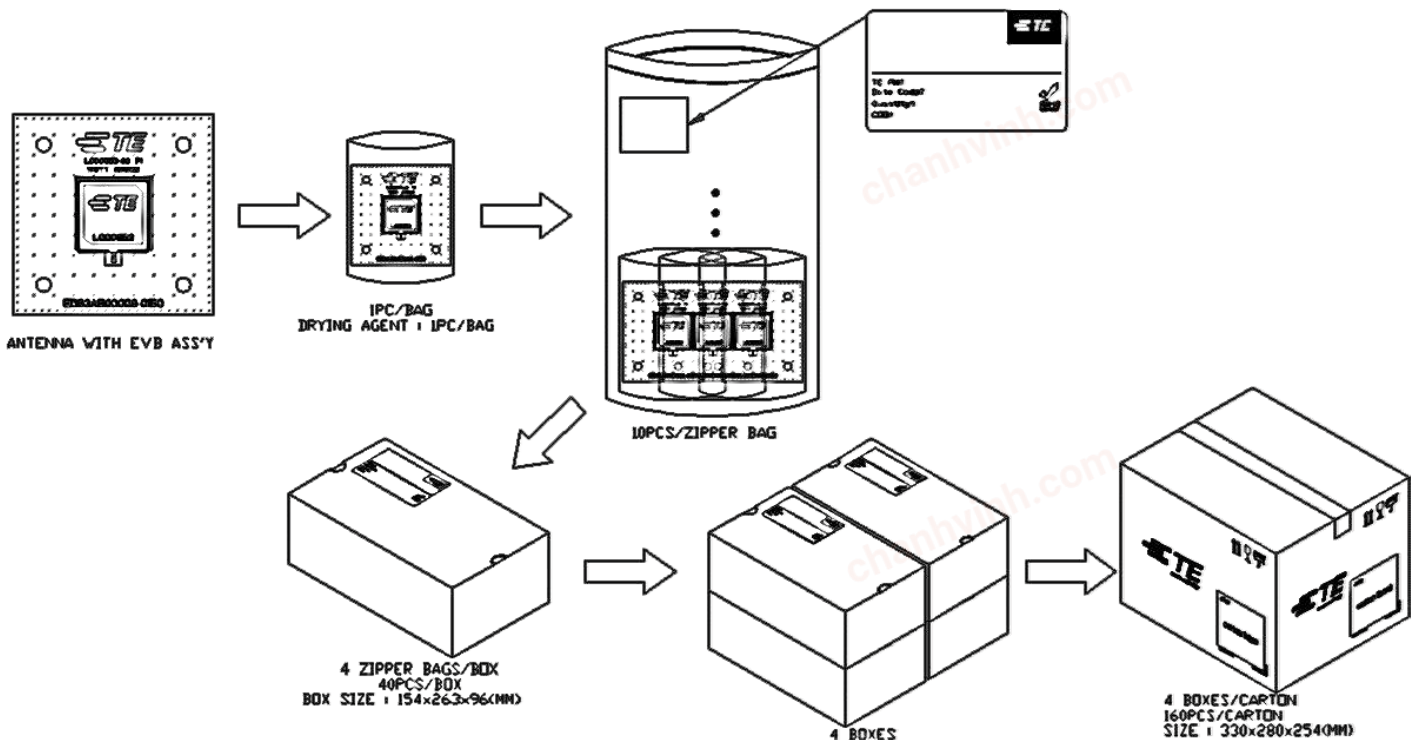


Dimensions: mm
Diagram is not to scale

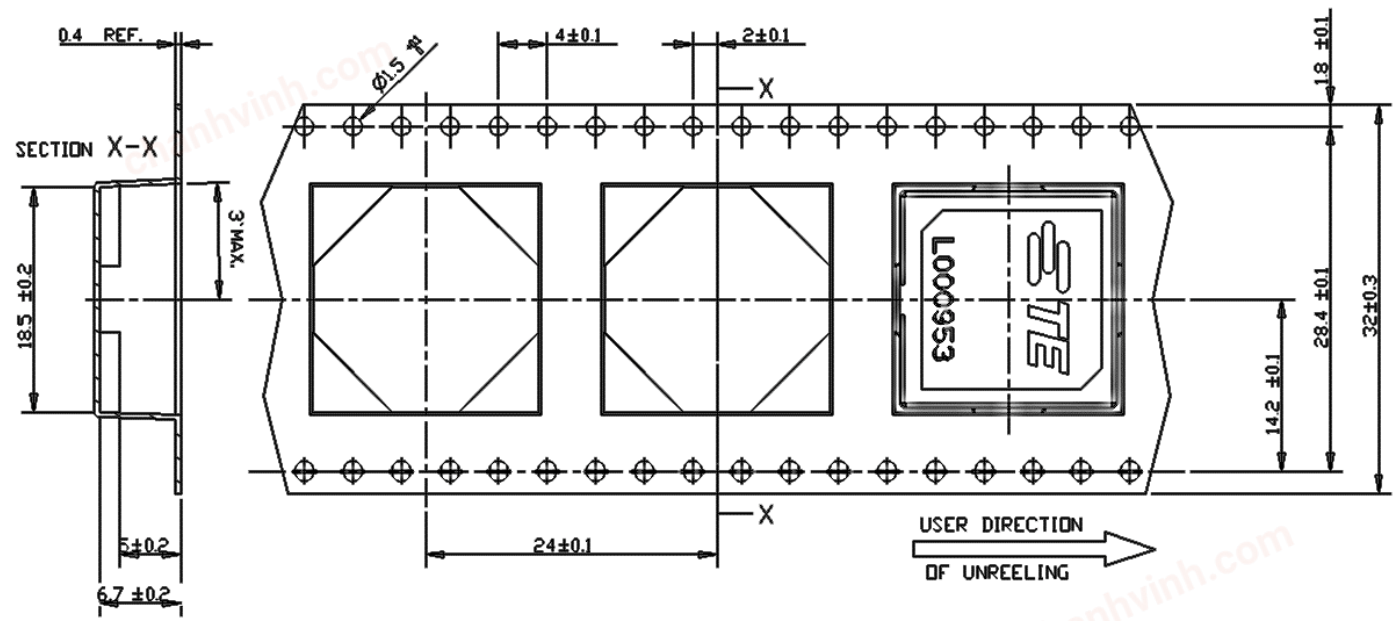
chanhvinh.com

PACKAGING

L000953-80 (BULK)



L000953-01 (REEL)



chanhvinh.com

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

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