

# GPS/GLONASS/Beidou Ceramic Patch Antenna



APARM3503-SG3



35.0 x 35.0 x 3.0 mm  
RoHS/RoHS II Compliant  
MSL = N/A

## Features

- Multiband GPS/GLONASS/Beidou/GNSS patch
- Low VSWR of 1.8
- Gain of 4.0/3.0/4.5 dBi
- RHCP polarization
- 35.0 x 35.0 x 3.0 mm

## Applications

- GPS/GLONASS/Galileo/Beidou applications
- IoT
- M2M
- Remote technology monitoring
- Geofencing
- Surveying and mapping systems
- Logistics

## Electrical Characteristics

Item	Spec*/**			Comments
Receiving Frequencies (MHz)	1561.098±2.046	1575.42±1.023	1602±5.0	Beidou / GPS and GLONASS
Center Frequency	1598MHz ±6.0MHz			With 93.97×61.87mm GND Plane
VSWR	1.8 :1 max			At Center Frequency
Bandwidth	35MHz			Return Loss @ -10dB
Gain @ Zenith (dBi) Typical	+4.0 dBi	+3.0 dBi	+4.5 dBi	
Impedance	50 Ω			
Operating Temperature	-40°C ~ 105°C			
Frequency Temperature Coefficient	-40°C ~ 105°C			0±20ppm / °C

\*\* The antenna has the electrical characteristics given in the Table in the temperature range of -40°C to +105°C and under the environmental conditions of +40°C and 0-95%r.h.

# GPS/GLONASS/Beidou Ceramic Patch Antenna

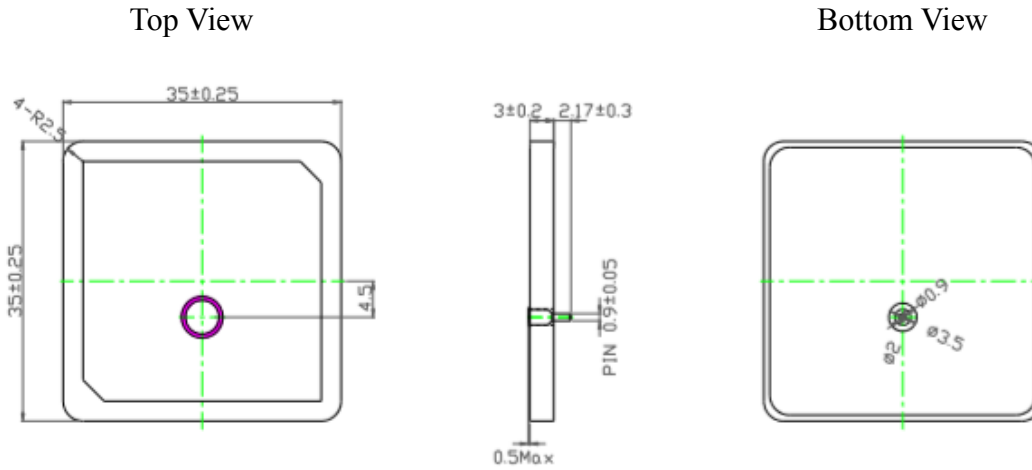


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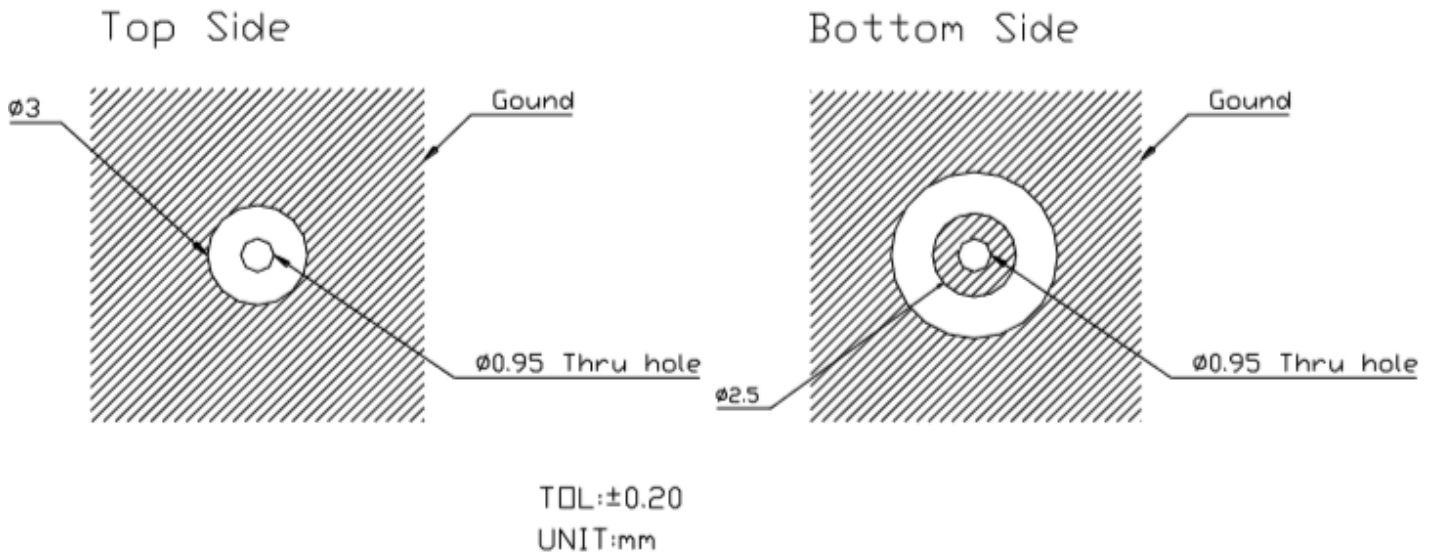
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## Outline Dimensions



Dimensions (mm)

## Layout Dimensions



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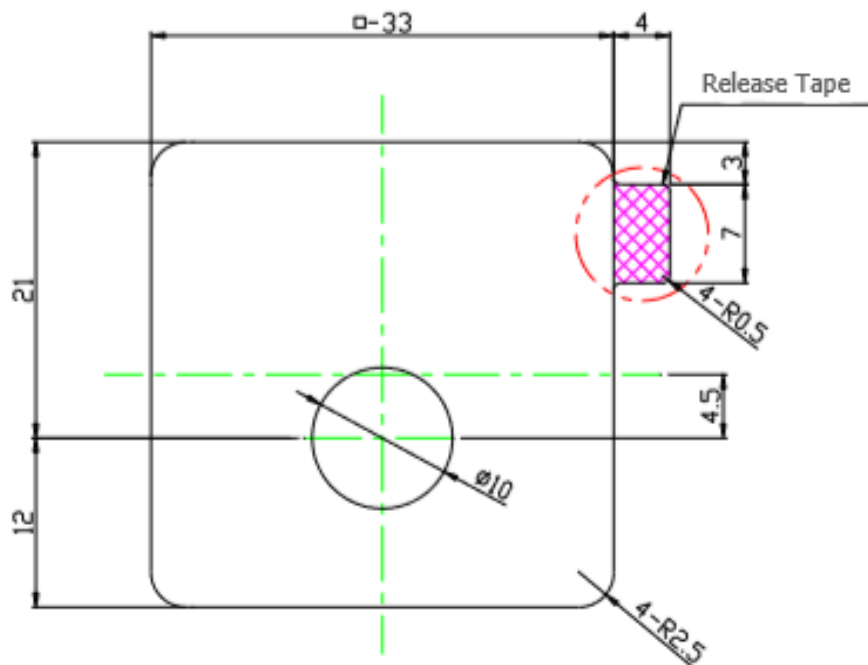


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## Tape Dimensions



Dimensions (mm)

Tape: Double coated adhesive tape for industrial use, thickness 0.12mm

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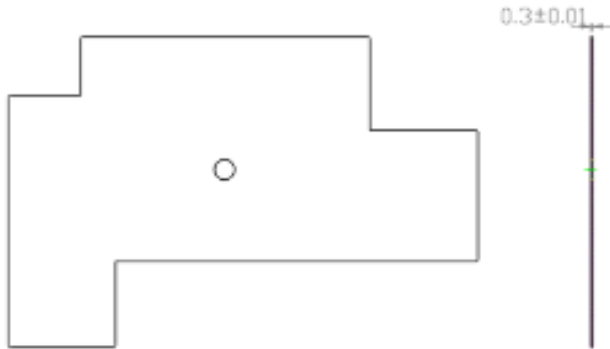


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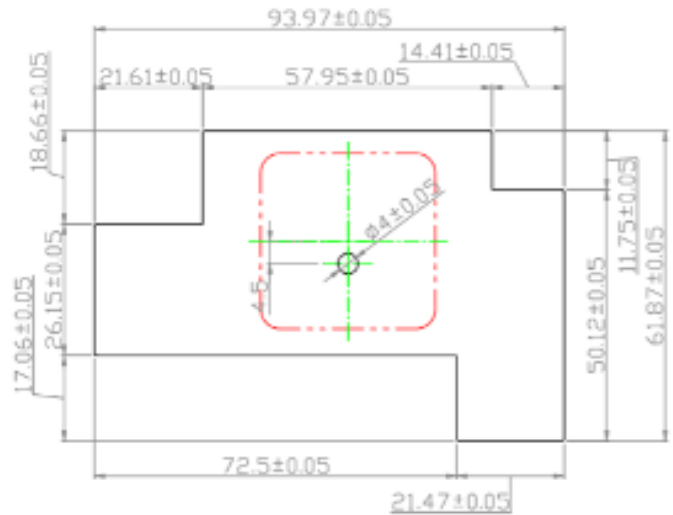


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## Fixture Dimensions



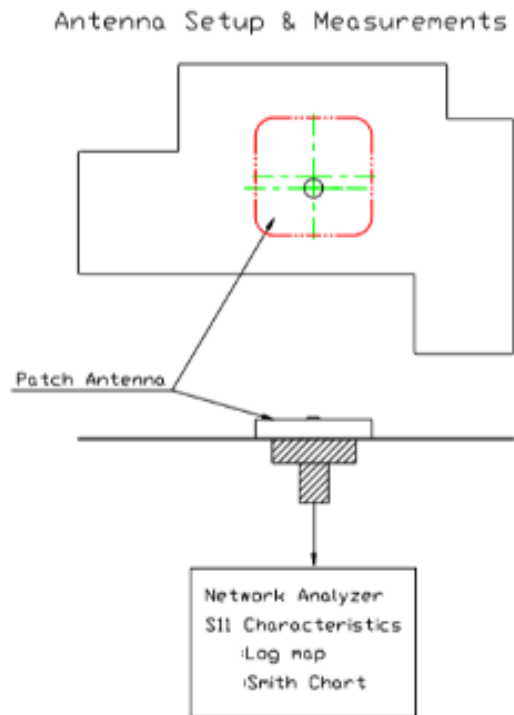
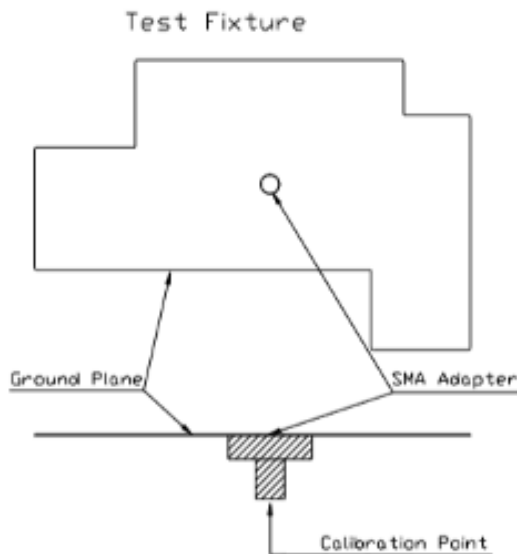
Bottom side



Top side

Dimensions (mm)

## Test Fixture Antenna Set-Up and Measurements



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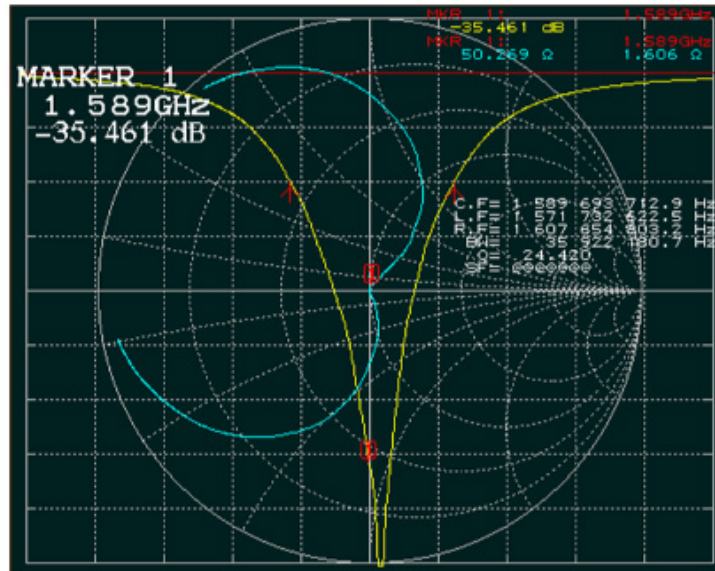


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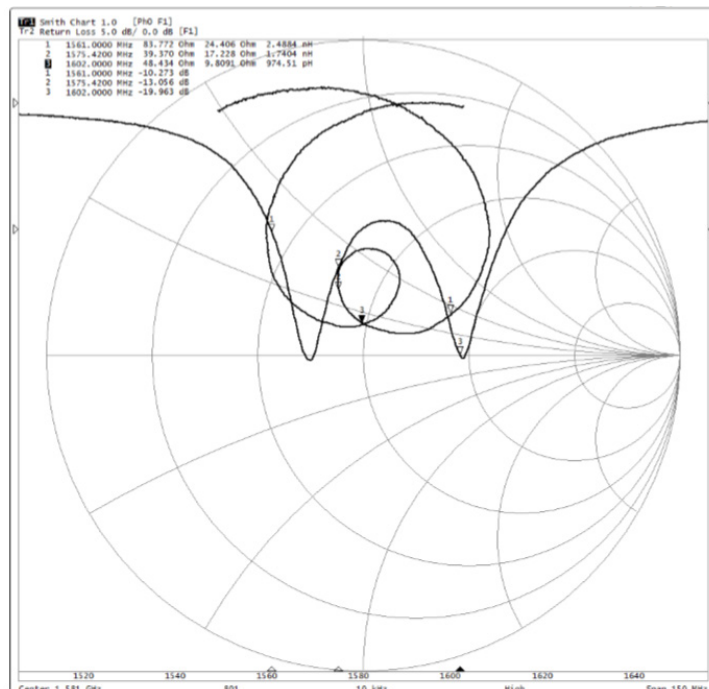


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## Antenna Response – Return Loss S11



## Antenna Response – Smith Chart



Ground Plane 70 x 70 mm



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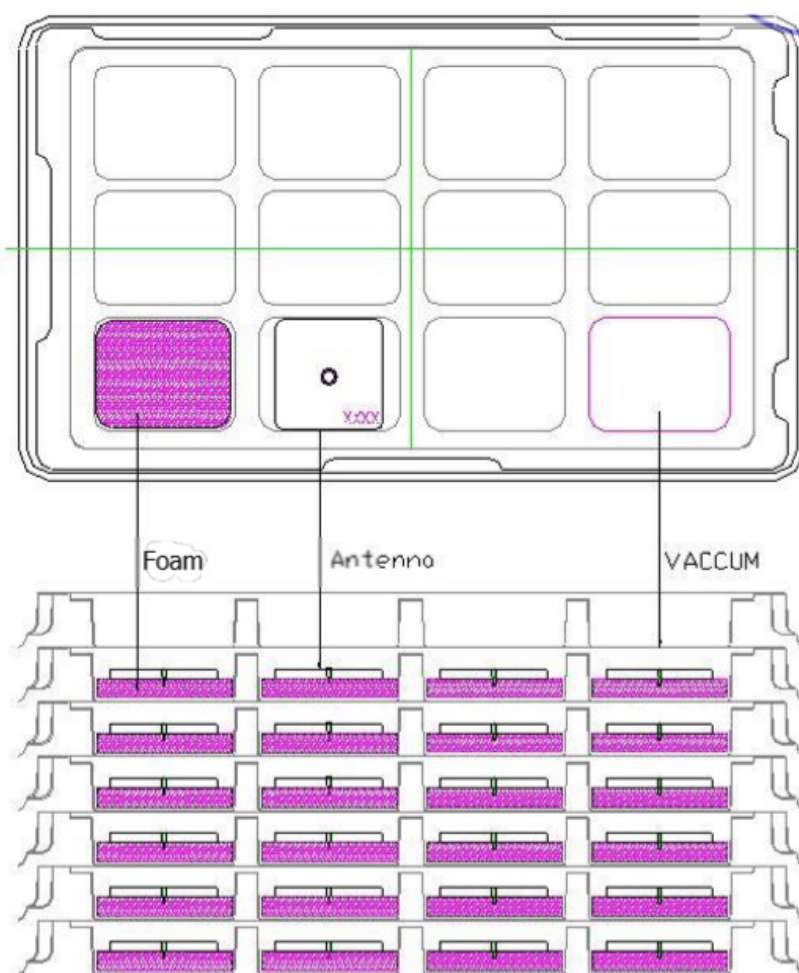
## Soldering - Feed Pin Temperature - Range

Feed pin temperature range Maximum temperature for soldering of feed pin is +290°C for 3 second

## Packaging

### DA Tray Packaging

Tray: 12pcs per Tray



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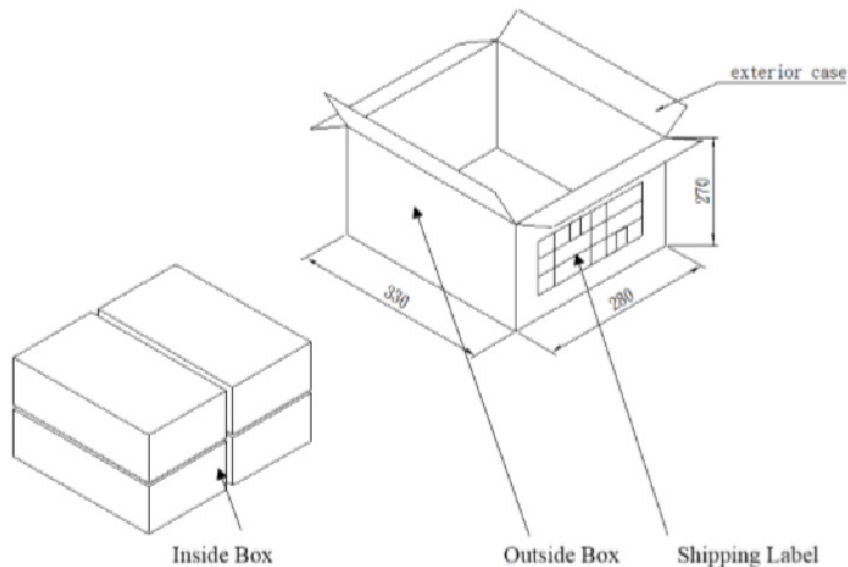
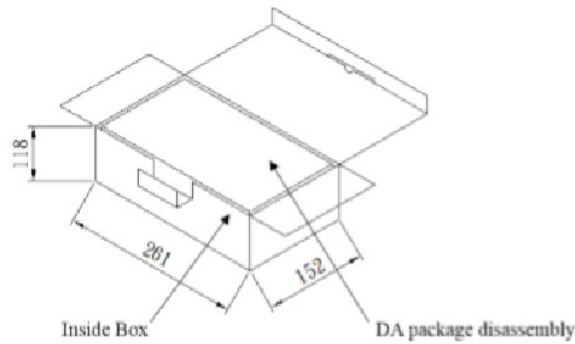
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## Carton Packaging

Inner Box: 72pcs (6 trays x 12pcs)



Outer Box : 288pcs (4 inner boxes x 72pcs)

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