

Series: Ceramic Patch

TECHNICAL DATA SHEET

**Description**: 18x18x4mm GPS/Glonass SMD Mount

feed antenna

RHCP Polarization

SMD compatible

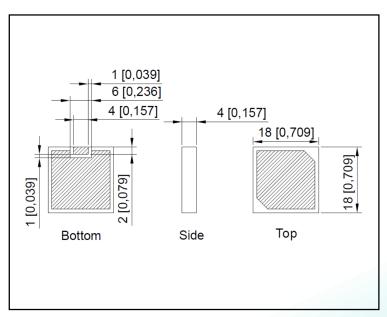
Zenith Gain +3dBiC

Tape & Reel packing

#### PART NUMBER: W3224

**Features:** 





#### All dimensions are in mm / inches

#### Issue: 2047

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## Applications:

GPS and Glonass satellite receivers

1575/1602MHz Dualband singe

Moisture Sensitive Level: MSL-1

- Tracking, Navigation, Satellite Positioning
- Fleet management
- Asset tracking



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#### **ELECTRICAL SPECIFICATIONS**

Frequency	1575.42±1.023/1602.5625±4 MHz	
Nominal Impedance	50 Ω	
Return Loss*	<-10 dB	
RHCP Gain (typical)*	2/2.5 dBiC	
Zenith Axial Ratio(typical)*	9.5	
Polarization:	RHCP	

\* Measured on 70 x 70 mm reference board

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### **MECHANICAL SPECIFICATIONS**

Material	Ceramic
Metallization	Silver
Size	18 x 18 x 4 mm
Weight	6.1 g
Mounting type	SMD

#### **ENVIRONMENTAL SPECIFICATIONS**

**Operating temperature** 

-40 / + 95 ° C

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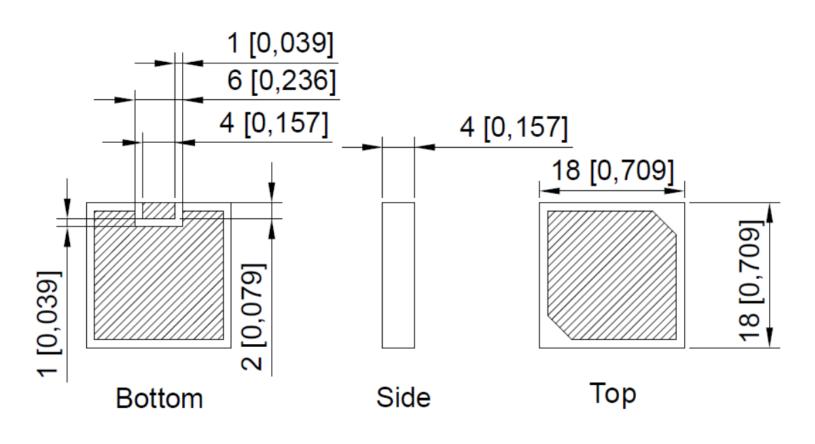


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#### **MECHANICAL DRAWING**



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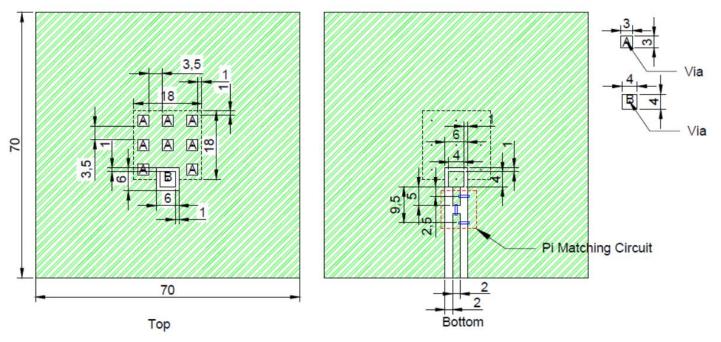
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## **OTHER SPECIFICATIONS**

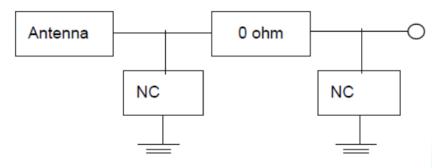
# Test Condition Ground Plane (Example for PCB 1 mm)





A. B are Solder Pads Bottom side needs  $\pi$  matching circuit. Tolerance : ± 0.2 mm

#### $\pi$ matching circuit :



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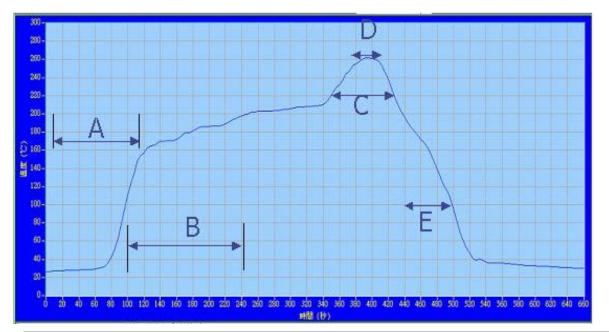
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## **OTHER SPECIFICATIONS**

# **Recommendable Reflow Soldering**



Α	Rising temperature	The normal to Preheating	60s to 120s
в	Preheating	80°C to 200°C	140s to 150
С	Temperature	220°C to 260°C to 220°C 80 to 90s	
D	Main heating	if 260°C	20s~30s
E	Regular cooling	200℃ to 100℃	$1^{\circ}$ C/s $\sim 4^{\circ}$ C/s

\* The thickness of Solder should be controlled to be higher than 0.1 mm.

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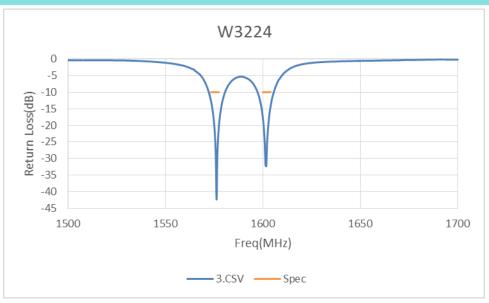


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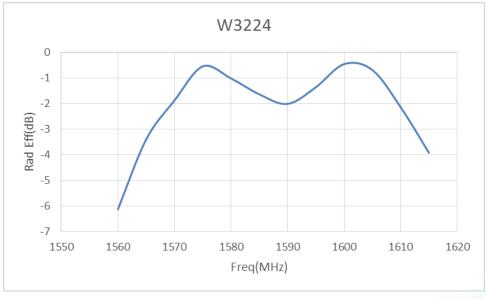
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#### CHARTS



**Return Loss** 



**Total Radiation Efficiency** 

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AGEO company

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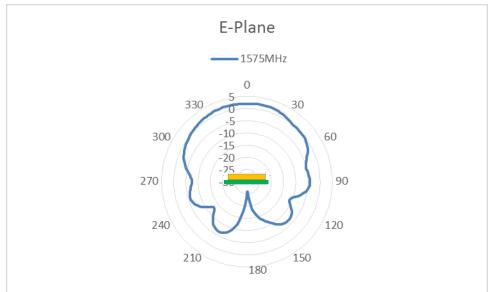
**Description**: 18x18x4mm GPS/Glonass SMD Mount

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#### CHARTS



# Zenith RHCP Gain



# GPS Radiation pattern on 70mmX70mm metal plane

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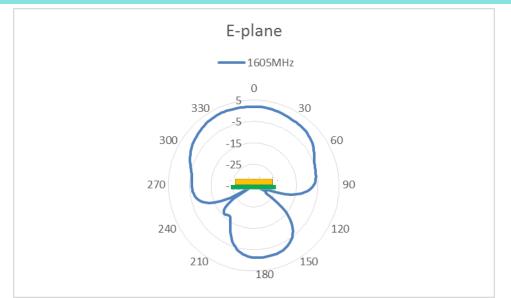


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## CHARTS



## Glonass Radiation pattern on 70mmX70mm metal plane



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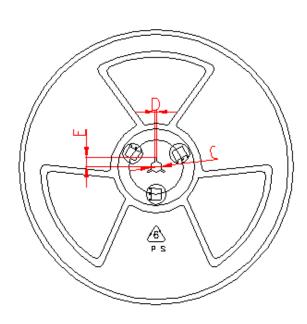
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### PACKAGING

# Reel & Tape packing 300PCS/reel



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±2.0	±4.0	±0.2	±0.2	±2.0	±2.0
330	100	13.2	2	10.75	32.4

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