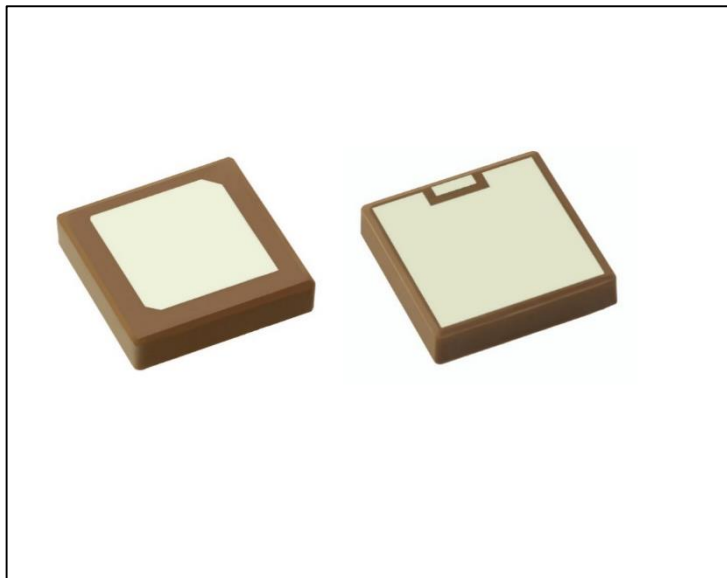


**Description:** 18x18x4mm GPS/Glonass SMD Mount

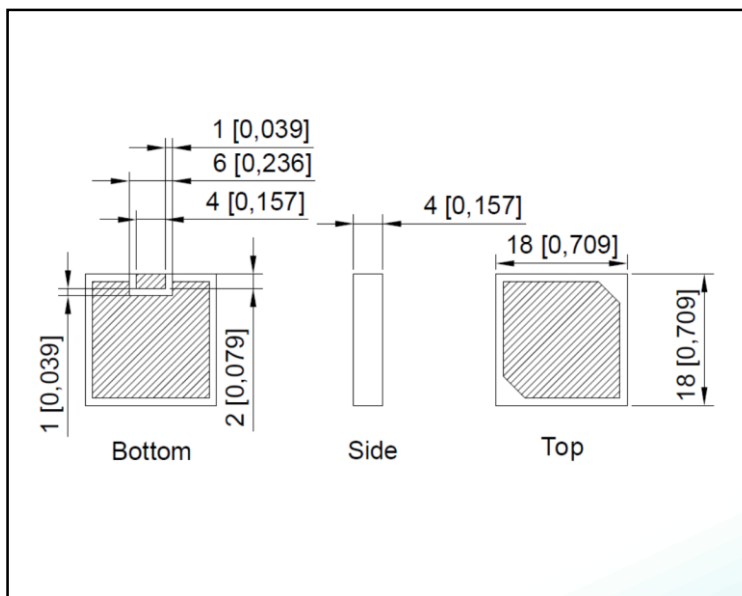
**Series:** Ceramic Patch

**PART NUMBER:** W3224



**Features:**

- 1575/1602MHz Dualband single feed antenna
- RHCP Polarization
- Zenith Gain +3dBic
- SMD compatible
- Tape & Reel packing
- Moisture sensitivity level:MSL1



**Applications:**

- GPS and Glonass satellite receivers
- Tracking, Navigation, Satellite Positioning
- Fleet management
- Asset tracking

All dimensions are in mm / inches

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Tel: 86 512 6807 9998



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

**Series:** Ceramic Patch

**PART NUMBER:** W3224

## 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

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

**Series:** Ceramic Patch

**PART NUMBER:** W3224

### MECHANICAL SPECIFICATIONS

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

### ENVIRONMENTAL SPECIFICATIONS

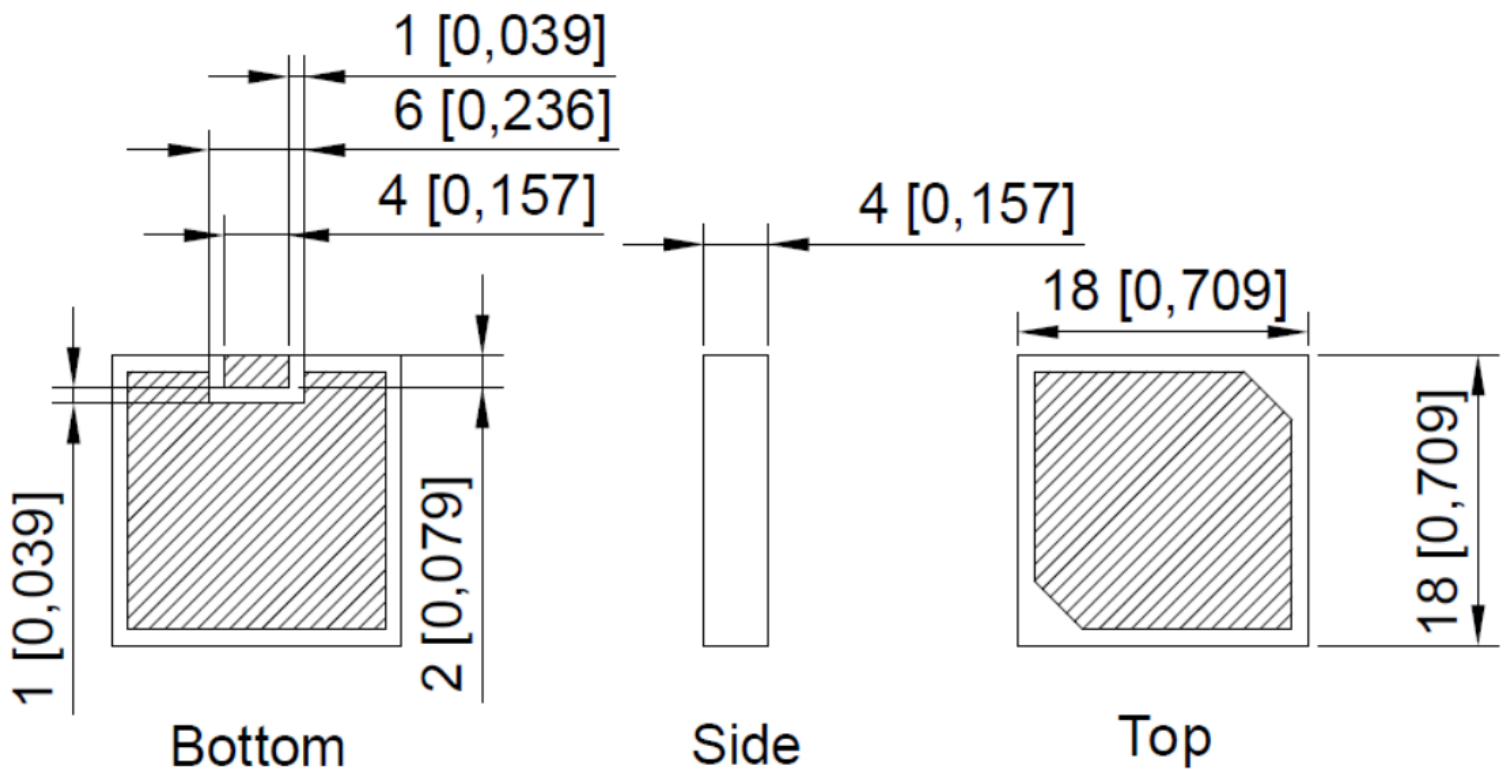
Operating temperature	-40/+85 ° C
-----------------------	-------------

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

**Series:** Ceramic Patch

**PART NUMBER:** W3224

**MECHANICAL DRAWING**



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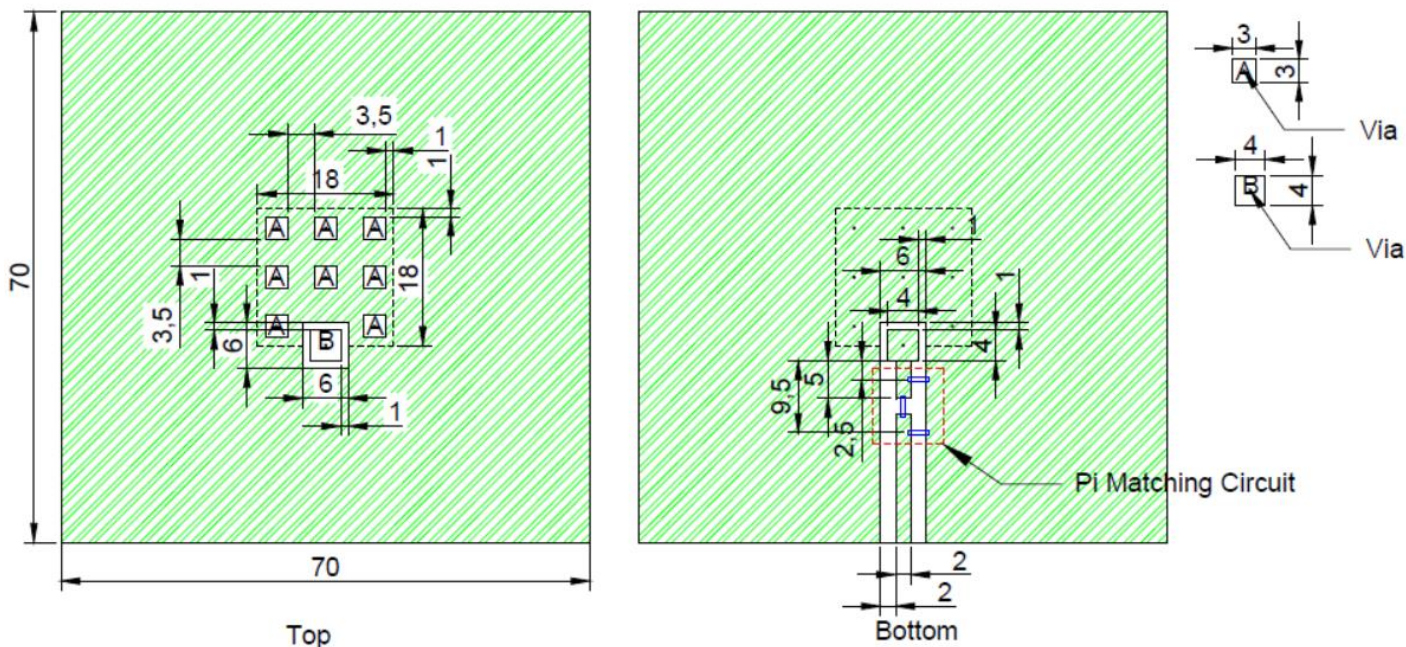
**Description:** 18x18x4mm GPS/Glonass SMD Mount

**Series:** Ceramic Patch

**PART NUMBER:** W3224

**OTHER SPECIFICATIONS**

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



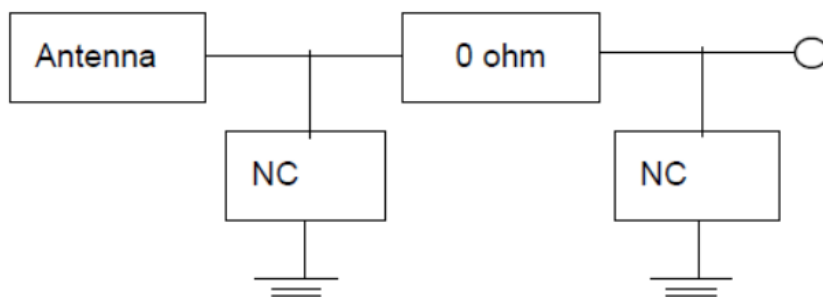
Unit : mm

A, B are Solder Pads

Bottom side needs  $\pi$  matching circuit.

Tolerance :  $\pm 0.2$  mm

$\pi$  matching circuit :



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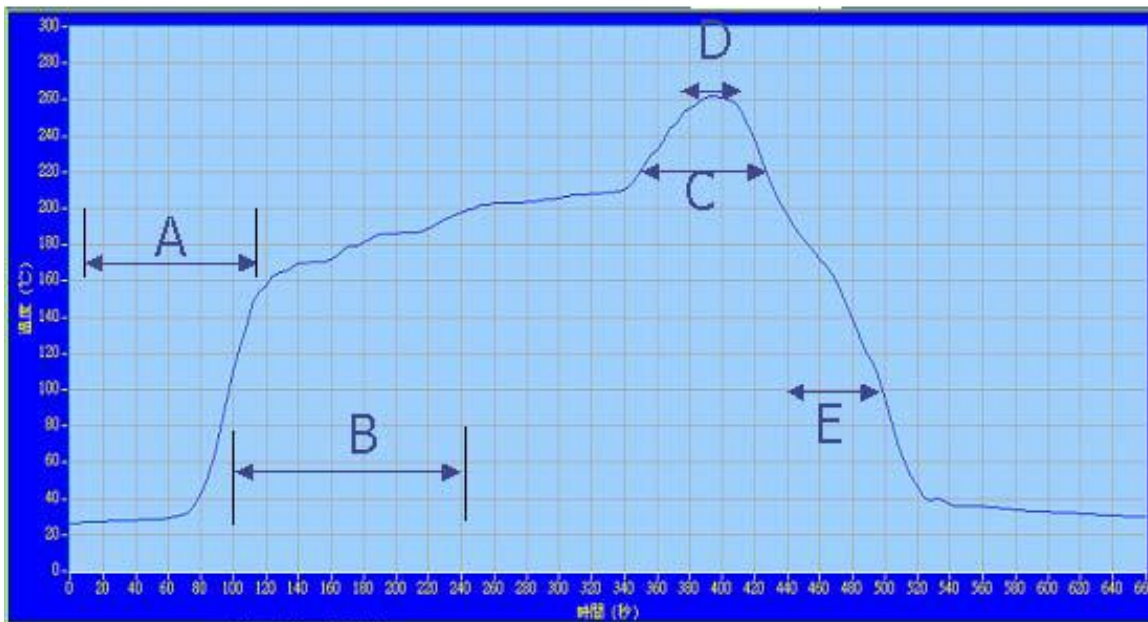
**Description:** 18x18x4mm GPS/Glonass SMD Mount

**Series:** Ceramic Patch

**PART NUMBER:** W3224

**OTHER SPECIFICATIONS**

**Recommendable Reflow Soldering**



A	Rising temperature	The normal to Preheating	60s to 120s
B	Preheating	80°C to 200°C	140s to 150
C	Temperature	220°C to 260°C to 220°C	80 to 90s
D	Main heating	if 260°C	20s~30s
E	Regular cooling	200°C to 100°C	1°C/s ~ 4°C/s

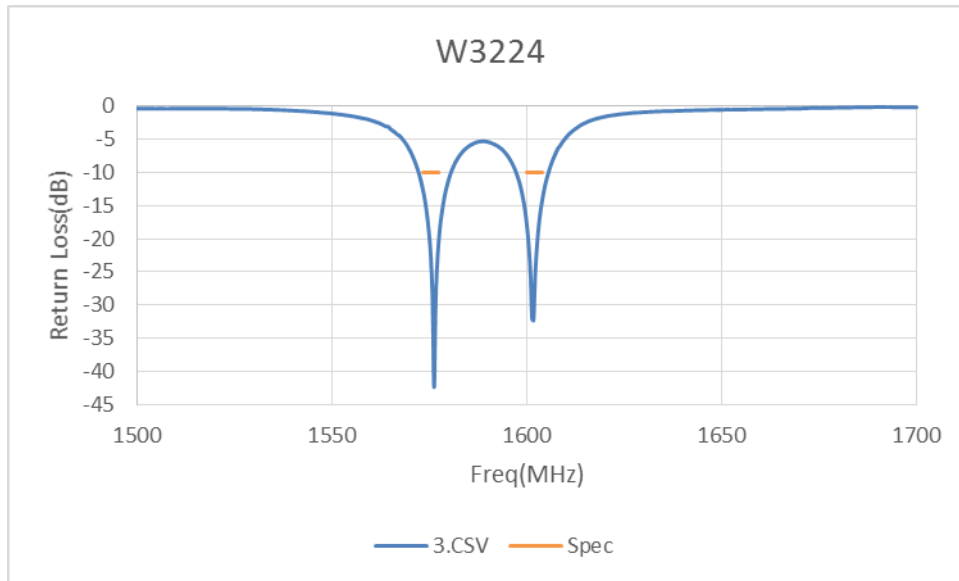
\* The thickness of Solder should be controlled to be higher than 0.1 mm.

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

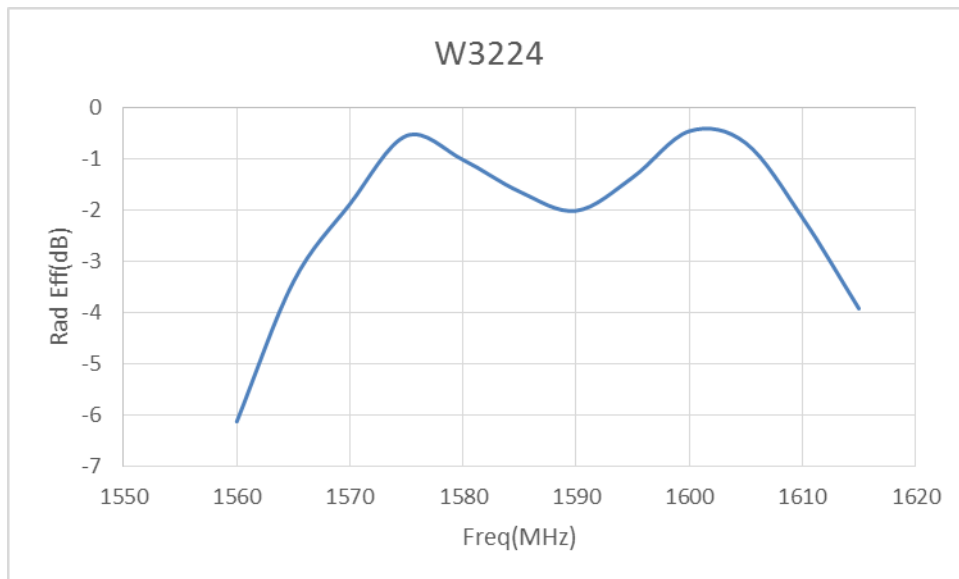
**Series:** Ceramic Patch

**PART NUMBER:** W3224

**CHARTS**



**Return Loss**



**Total Radiation Efficiency**

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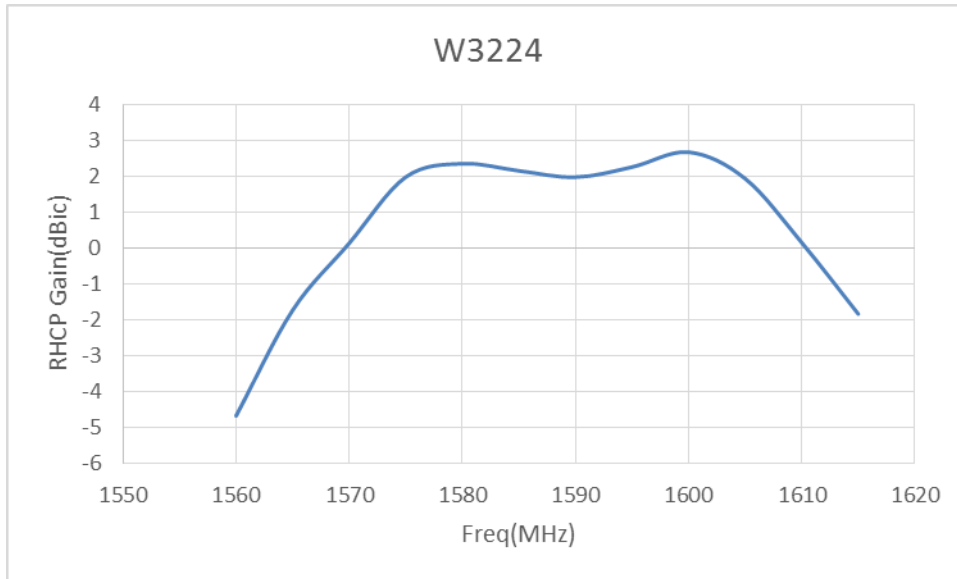
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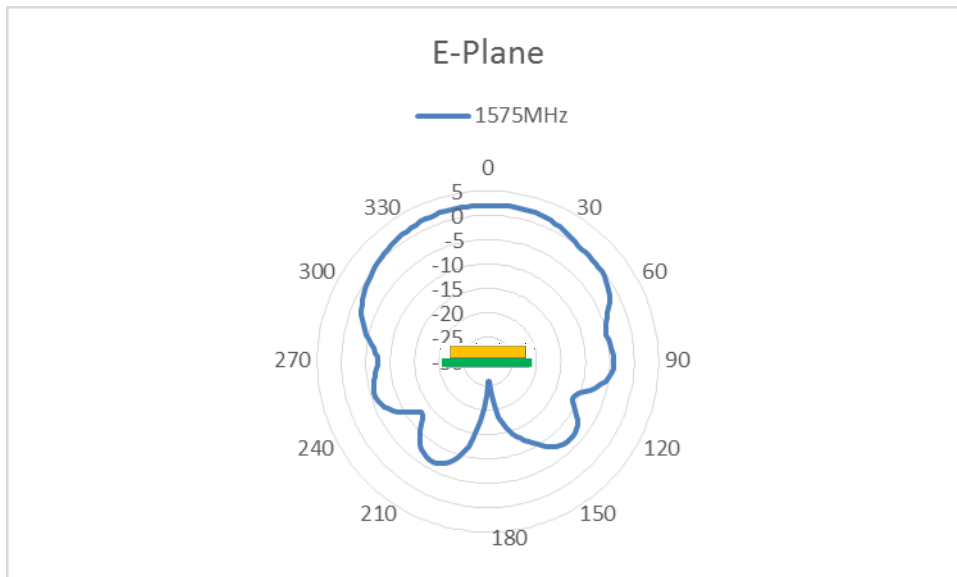
**Series:** Ceramic Patch

**PART NUMBER:** W3224

**CHARTS**



**Zenith RHCP Gain**



**GPS Radiation pattern on 70mmX70mm metal plane**

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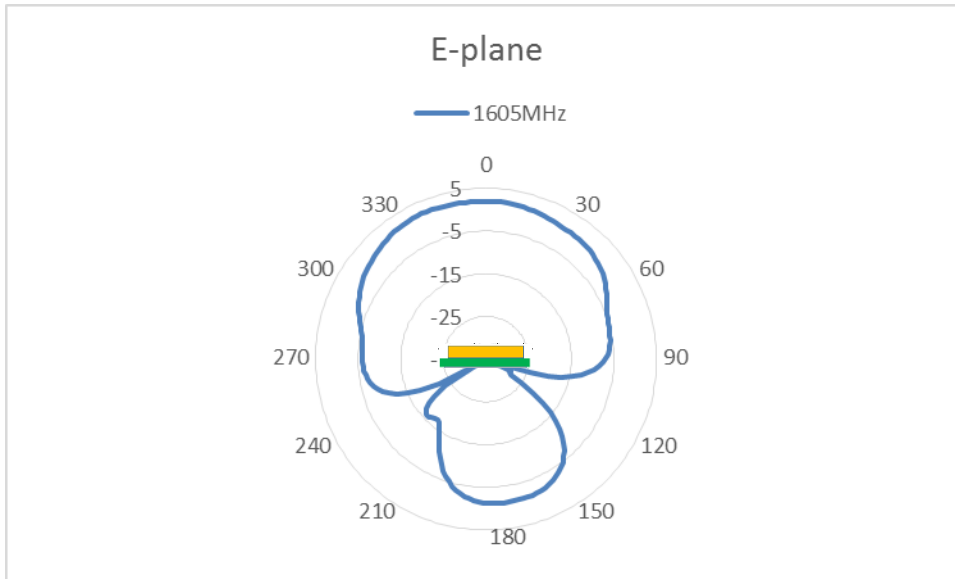


**Description:** 18x18x4mm GPS/Glonass SMD Mount

**Series:** Ceramic Patch

**PART NUMBER:** W3224

**CHARTS**



Glonass Radiation pattern on 70mmX70mm metal plane

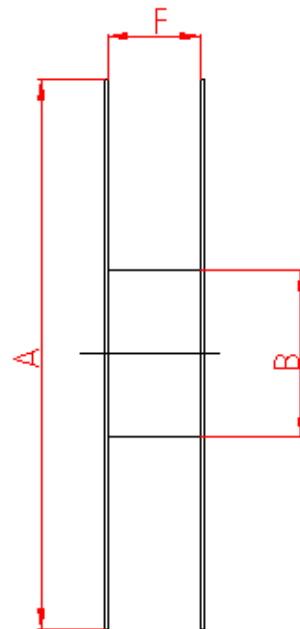
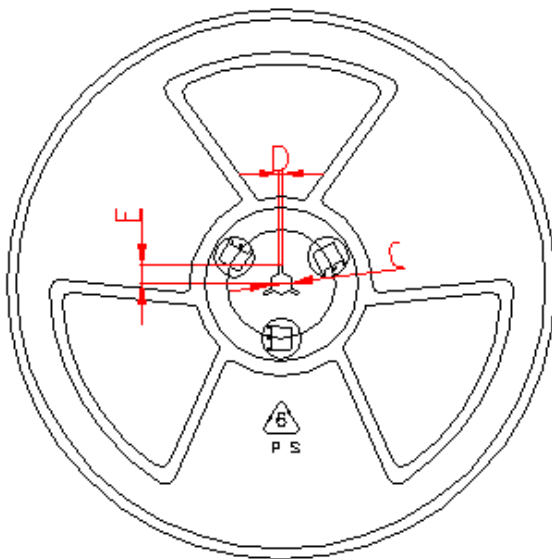
**Description:** 18x18x4mm GPS/Glonass SMD Mount

**Series:** Ceramic Patch

**PART NUMBER:** W3224

**PACKAGING**

Tape packing  
300PCS/reel



A	B	C	D	E	F
±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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