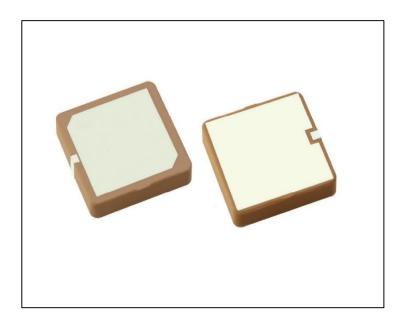


**Description**: 25x25x4mm GPS/Glonass SMD

Mount

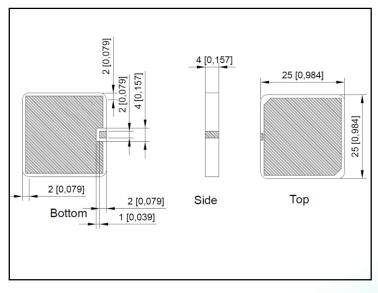
**PART NUMBER: W3225** 

**Series: Ceramic Patch** 



# Features:

- 1575/1602MHz Dualband singe feed antenna
- RHCP Polarization
- Zenith Gain +3dBiC
- · SMD compatible
- Tape & Reel packing



# **Applications:**

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

All dimensions are in mm / inches

Issue: 1652

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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**Description**: 25x25x4mm GPS/Glonass SMD

Mount

PART NUMBER: W3225

**Series: Ceramic Patch** 

### **ELECTRICAL SPECIFICATIONS**

Frequency 1575.42±1.023/1602.5625±4 MHz

Nominal Impedance 50  $\Omega$ 

Return Loss\* <-10 dB

RHCP Gain (typical)\* 3 dBiC

Zenith Axial Ratio(typical)\* 4.2

Polarization: RHCP

\* Measured on 70 x 70 mm reference board



**Description**: 25x25x4mm GPS/Glonass SMD

Mount

PART NUMBER: W3225

**Series: Ceramic Patch** 

# **MECHANICAL SPECIFICATIONS**

Material Ceramic

Metallization Silver

Size 25 x 24 x 4 mm

Weight 9.2 g

Mounting type SMD

## **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature

-40/+85 ° C





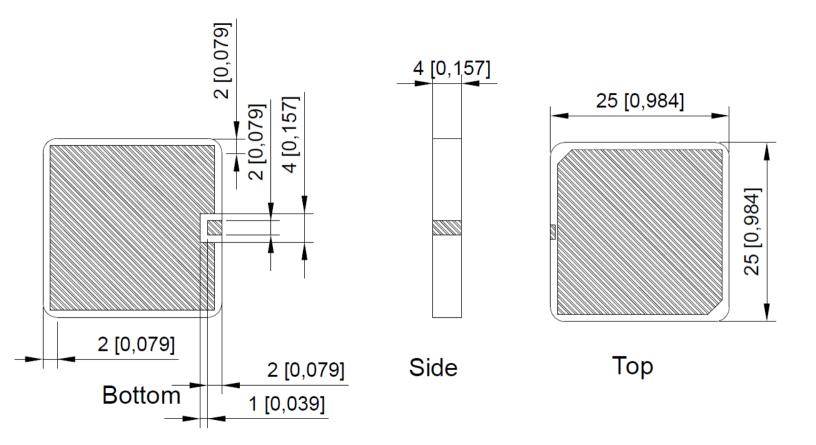
**Description**: 25x25x4mm GPS/Glonass SMD

Mount

PART NUMBER: W3225

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# **MECHANICAL DRAWING**





**Description**: 25x25x4mm GPS/Glonass SMD

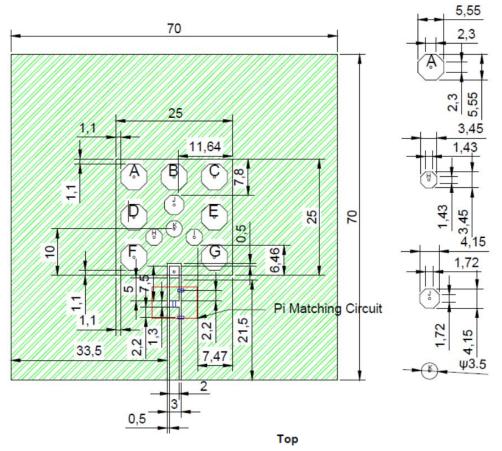
Mount

PART NUMBER: W3225

**Series: Ceramic Patch** 

## **OTHER SPECIFICATIONS**

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



A.B.C.D.E.F.G. are same soldering pads.

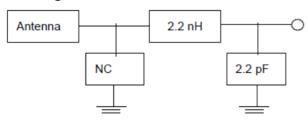
H.I are same soldering pads.

Bottom side needs  $\pi$  matching circuit.

Tolerance: ± 0.2 mm

A.B.C.D.E.F.G.H.I.J.K are ground pads

#### $\pi$ matching circuit:



Issue: 1652



Unit: mm



**Description**: 25x25x4mm GPS/Glonass SMD

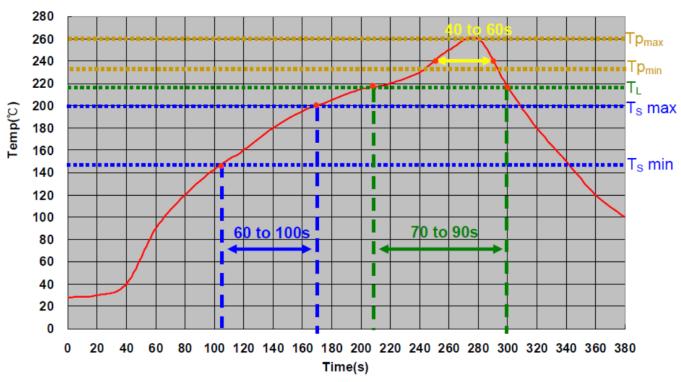
Mount

**PART NUMBER: W3225** 

**Series: Ceramic Patch** 

## **OTHER SPECIFICATIONS**

# **Recommended Reflow Soldering Profile**



Ts Min	150℃
Ts Max	200℃
Time Tsmin to Tsmax	60s to 100s
Liquidus	217℃
Time above Liquidus	70 to 90s
Minimum Peak Temperature	235℃
Maximum Peak Temperature	260℃

<sup>\*</sup> The thickness of Solder should be controlled to be higher than 0.1 mm.

Issue: 1652

ROHS



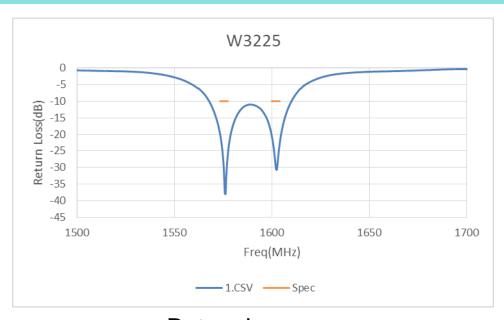
**Description**: 25x25x4mm GPS/Glonass SMD

Mount

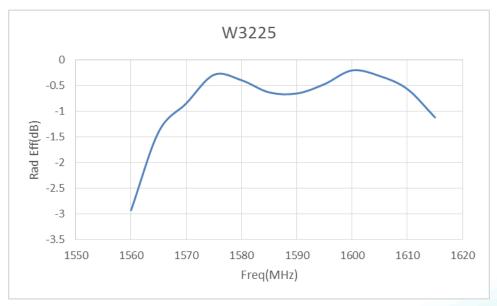
PART NUMBER: W3225

**Series: Ceramic Patch** 

## **CHARTS**



# Return Loss



**Total Radiation Efficiency** 



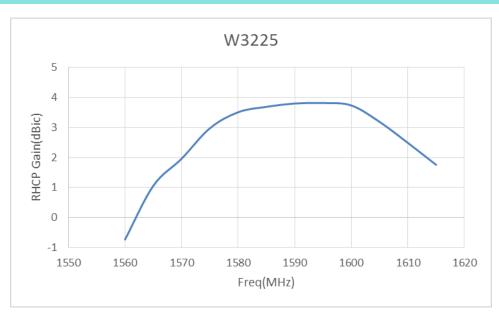
**Description**: 25x25x4mm GPS/Glonass SMD

Mount

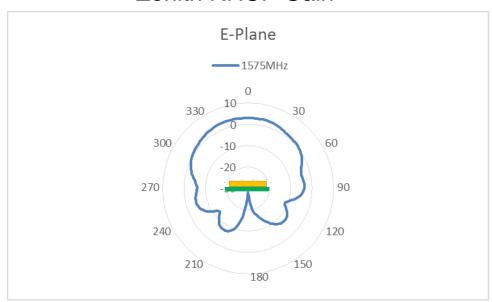
**PART NUMBER: W3225** 

**Series: Ceramic Patch** 

#### **CHARTS**



# Zenith RHCP Gain



# GPS Radiation pattern on 70mmX70mm metal plane

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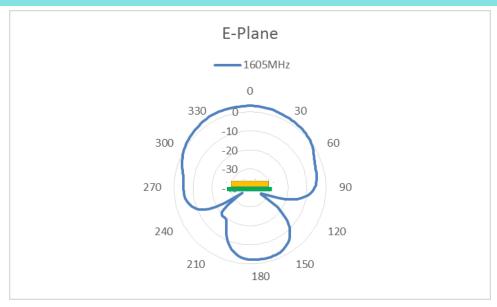
**Description**: 25x25x4mm GPS/Glonass SMD

Mount

**PART NUMBER: W3225** 

**Series: Ceramic Patch** 

## **CHARTS**



Glonass Radiation pattern on 70mmX70mm metal plane





**Description**: 25x25x4mm GPS/Glonass SMD

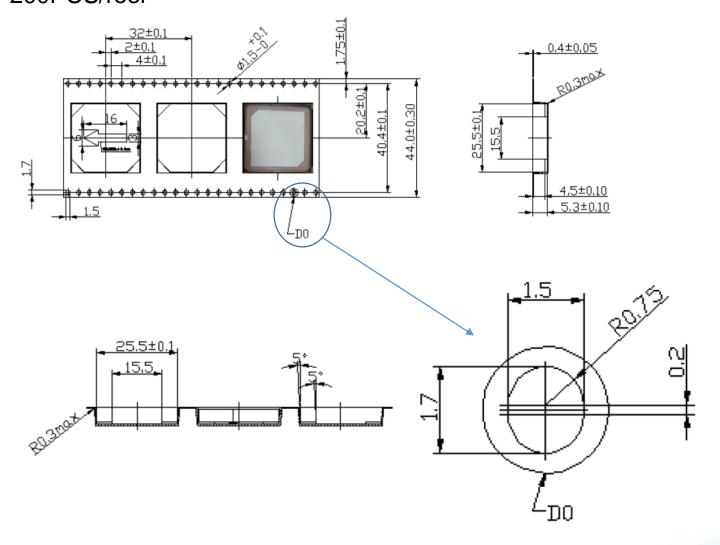
Mount

**PART NUMBER: W3225** 

# **Series: Ceramic Patch**

## **PACKAGING**

# Tape packing 200PCS/reel



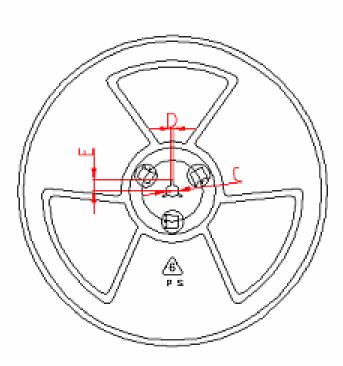


**Description**: 25x25x4mm GPS/Glonass SMD

Mount

**PART NUMBER: W3225** 

**Series: Ceramic Patch** 



Α	В	С	D	E	F
±2.0	±4.0	±0.2	±0.2	±0.25	±2.0
330	100	13.2	2	10.75	44.4

