

## **SPECIFICATION**

Part No. : CGGP.25.4.A.02

Product Name : 4mm thick GPS/GLONASS Patch Antenna,

1575-1610MHz

: Wide-band Operation Feature

25\*25\*4mm

5dBi Peak Gain (on 70mm\*70mm

ground-plane)

Pin type

Automotive TS16949 Production and Quality

Approved

RoHS compliant





### 1. Introduction

This 25 mm ceramic GPS/Glonass patch antenna, by means of a double resonance design, has unique wide-band operation over the whole operating bands of GPS and Glonass systems from 1575MHz to 1610MHz. It is mounted via pin and double-sided adhesive.

This antenna has been tuned for a centre position on a 70mm\*70mm ground-plane. It is manufactured and tested in a TS16949 first tier automotive approved facility. For further optimization to customer specific device environments where positioning is off centre or on different ground-plane sizes, custom tuned patch antennas can be supplied. For more details please <u>Contact Us.</u>

### 2. Specification

ELECTRICAL		
Center Frequency	$1600MHz \pm 3MHz$	
Bandwidth	15 MHz min Return Loss <-10dB	
VSWR	1.5 max	
Gain at Zenith	+5.0 dBi typ.	
Gain at 10° Elevation	-1.0 dBi typ.	
Impedance	50 ohms	
MECHANICAL		
Ceramic Dimension	25.1 x 25.1 x 4mm	
Pin Diameter	0.9mm	
Pin Length	1.8mm	
ENVIRONMENTAL		
Operation Temperature	-40°C to 105°C	
Humidity	Non-condensing 65°C 95% RH	

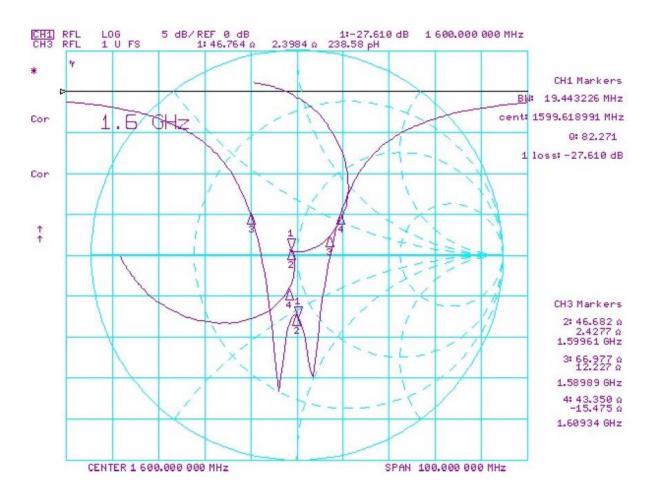
<sup>\*</sup> Antenna properties were measurement with the antenna mounted on 70mm\*70mm

Ground Plane

Taoglas Part # CGGPD.25.A



### 3. Antenna S11 Properties

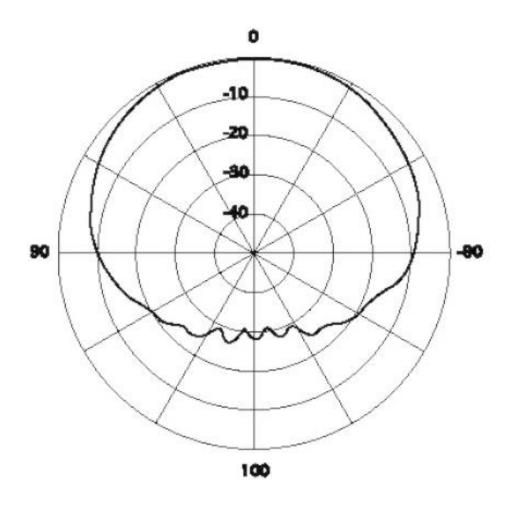




## **4. Antenna Radiation Properties**

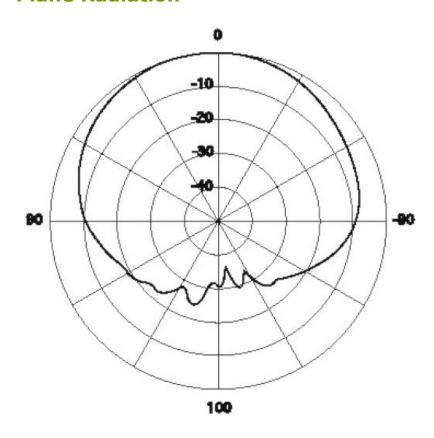


### 4.1. XZ - Plane Radiation



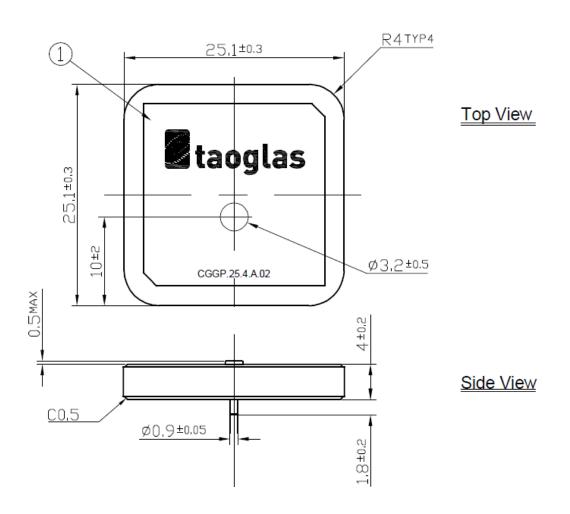


### 4.2. YZ- Plane Radiation

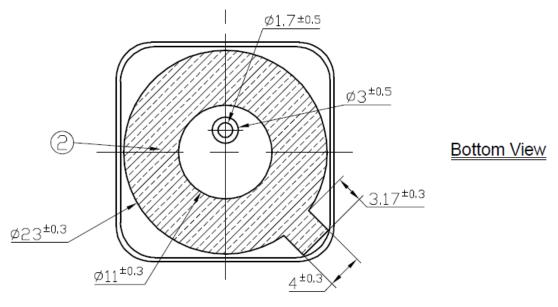




# 5. Mechanical Drawing



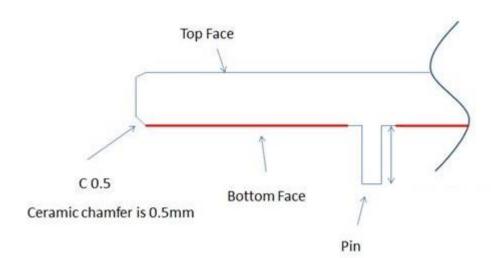




NOTES: 1. Double sided adhesive area. [/////

Unit: mm

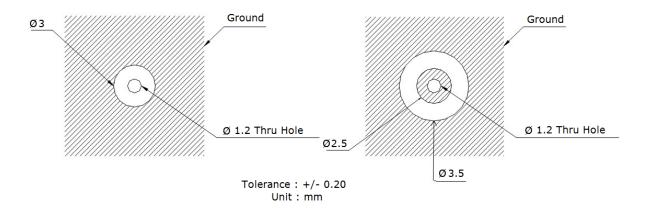
#### **5.1 Adhesive Thickness**



Red Line shows the adhesive without Liner – thickness 0.08~0.1mm

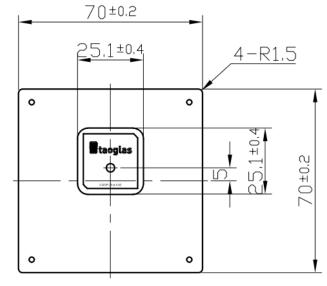


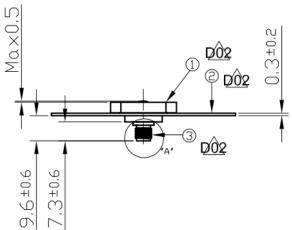
# **6. PCB Footprint Recommendation**

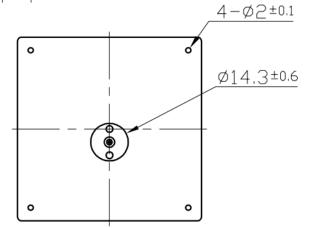


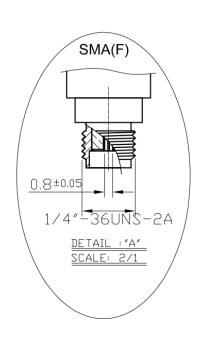


## 7. Evaluation Board (CGGPD.25.A)



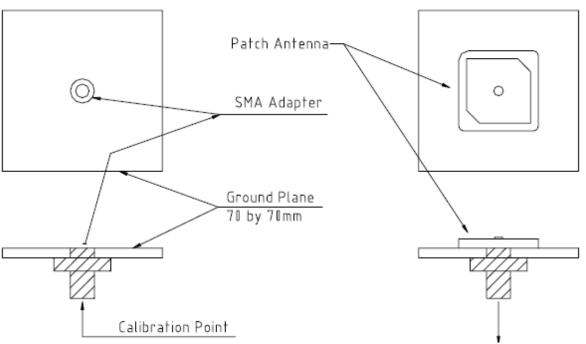






	Name	Finish	QTY
1	Patch(25x25x4mm)	Clear	1
2	Ground-Plane(70x70x0.3mm)	Ni Plated	1
3	SMA(F) ST	Gold	1



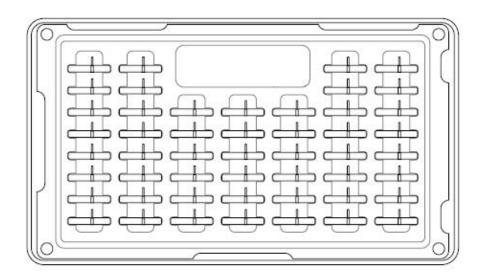




# 8. Packaging

### 8.1. Inner Tray

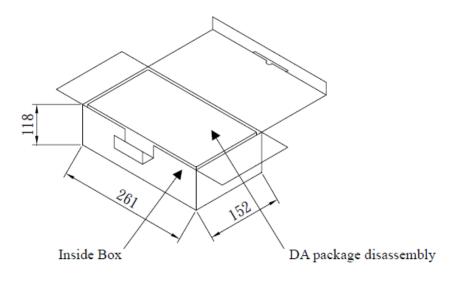


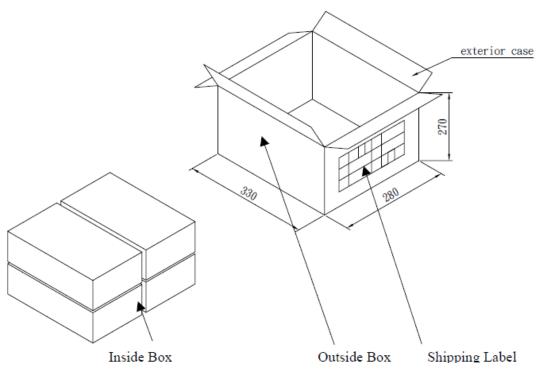


200 pieces per tray



#### 8.2. Carton





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