

## SPECIFICATION

Part No.	:	<b>CGGBP.35.3.A.02</b>
Product Name	:	35mm*35mm*3mm 4dBi+ GPS/GLONASS/GALILEO/BEIDOU Ceramic Patch Antenna
Features	:	Stable gain on all three GNSS applications Excellent radiation pattern coverage Dielectric Ceramic Pin (Through hole) Mount RoHS Compliant



## 1. Introduction

This CGGBP.35 35mm\*35mm embedded ceramic GPS/GLONASS/GALILEO/BEIDOU patch antenna has a wide band of operation, leading to excellent gain and radiation pattern stability on all three GNSS system bands.

Compared to using a smaller antenna, this will translate into the GNSS system having much higher location accuracy, improved reliability of lock in urban areas, better signal reception, with more satellites acquired and a quicker time to first fix.

The patch is mounted via pin and double-sided adhesive. While the antenna will work very well in most device environments (Note cannot be covered with metal enclosure), tuning and further optimization of this antenna to different ground-planes and enclosures can be done if required, also including a pin length change. These changes would be subject to possible NRE and a minimum order quantity.

[Contact](#) your local Taoglas sales office for more details.

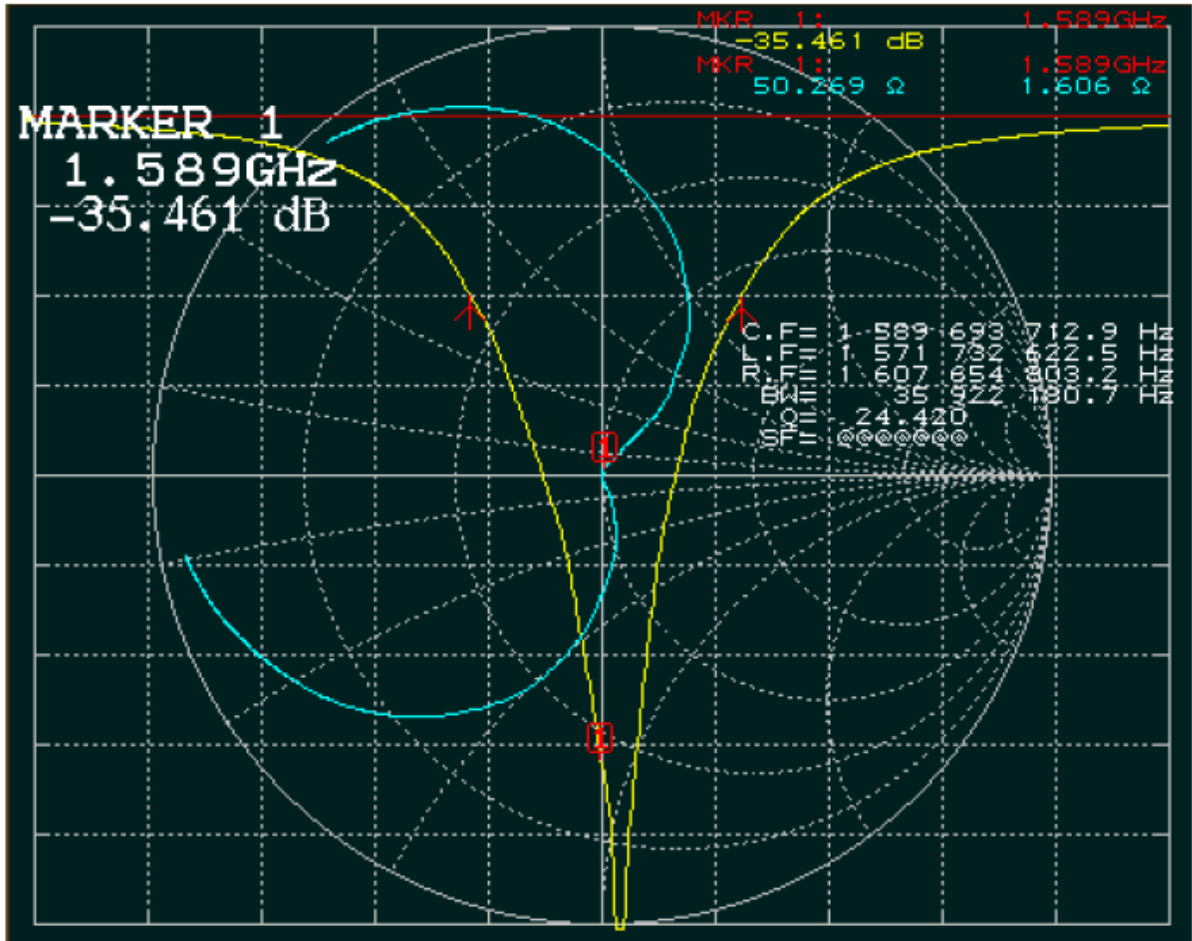
## 2. Specification

ELECTRICAL	
Frequency	BEIDOU: 1561.098MHz ± 2.046MHz GPS/GALILEO: 1575.42 ± 1.023MHz GLONASS: 1602 ± 5MHz
Centre Frequency	1589MHz ± 6MHz
VSWR	GPS/GALILEO and BEIDOU 2.5 : 1 max GLONASS 1.8 : 1 max
Bandwidth	34MHz Return Loss @-10dB
Zenith Gain	BeiDou: +4.0dBi typ. GPS/GALILEO: +3.0dBi typ. GLONASS: +4.5dBi typ.
Impedance	50 Ω
MECHANICAL	
Dimensions	35 x 35 x 3mm
Material	Ceramic
Pin Diameter	0.9mm
Pin Length	2.15mm
Weight	13.5g
ENVIRONMENTAL	
Operation Temperature	-40°C to 85°C
Storage Temperature	-40°C to 105°C
Humidity	Non-condensing 65°C 95% RH

Original Patch Specification tested on 70\*70mm ground plane

Taoglas Part # CGGBPD.35.B

### 3. Antenna S11 Properties

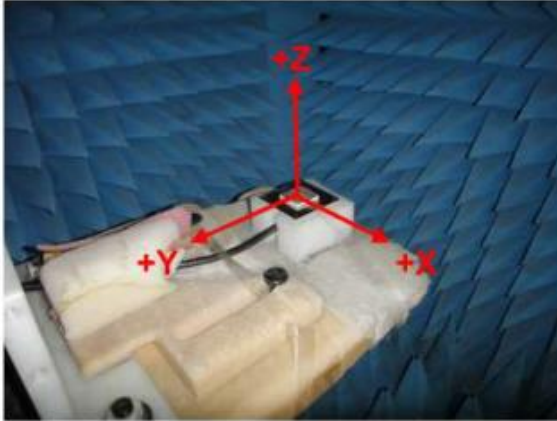


## 4. Antenna Return Loss

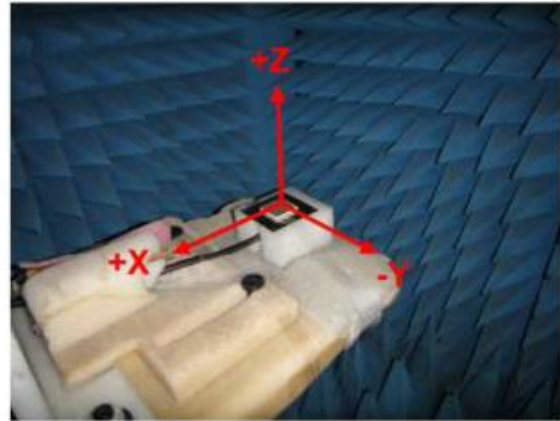


## 5. 2D Antenna Radiation

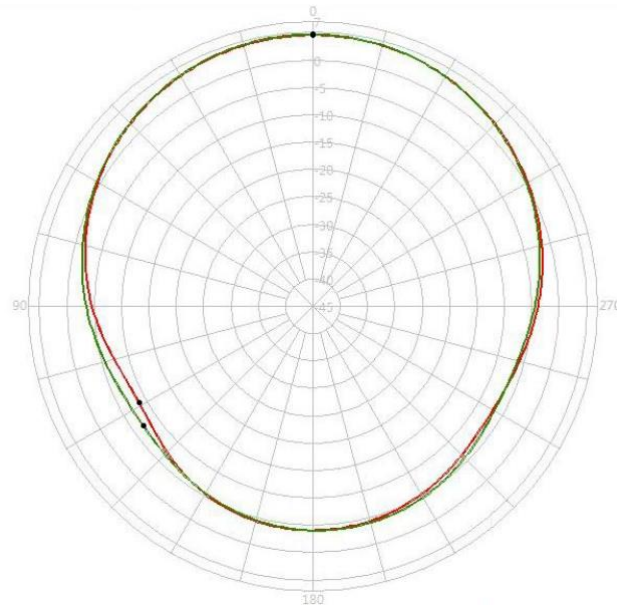
XZ-Plane



YZ-Plane

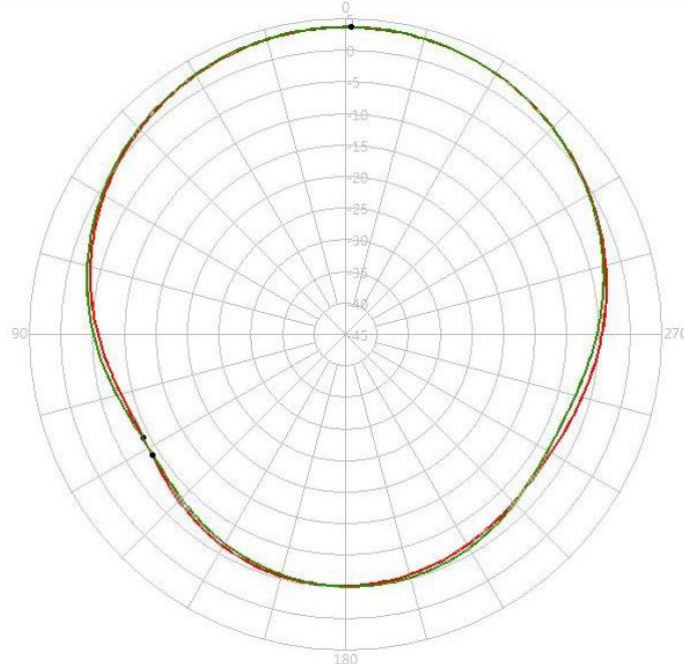


### 5.1 1561MHz Free Space



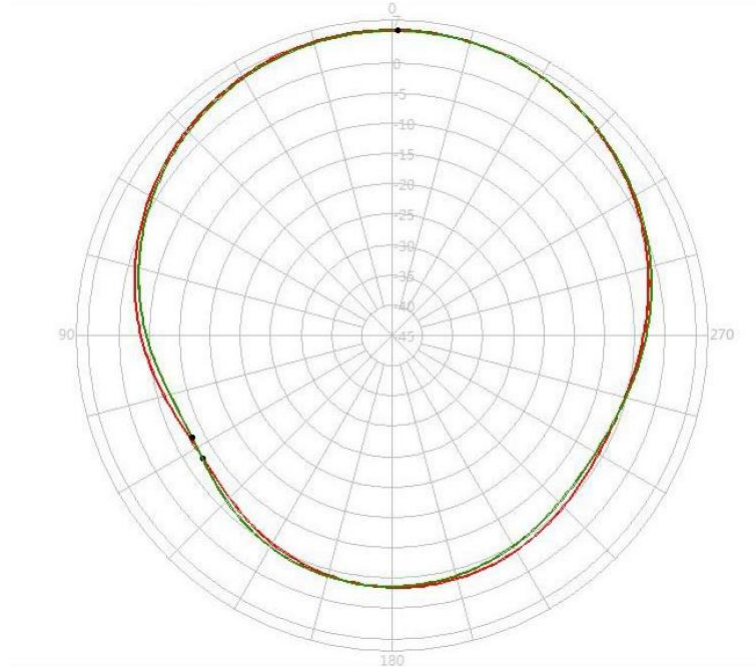
	Peak Gain (dBi)	Average Gain (dBi)
XZ Plane	4.56	-0.19
YZ Plane	4.66	-0.08

## 5.2 1575.42MHz Free Space



	Peak Gain (dBi)	Average Gain (dBi)
XZ Plane	3.66	-1.13
YZ Plane	3.72	-1.07

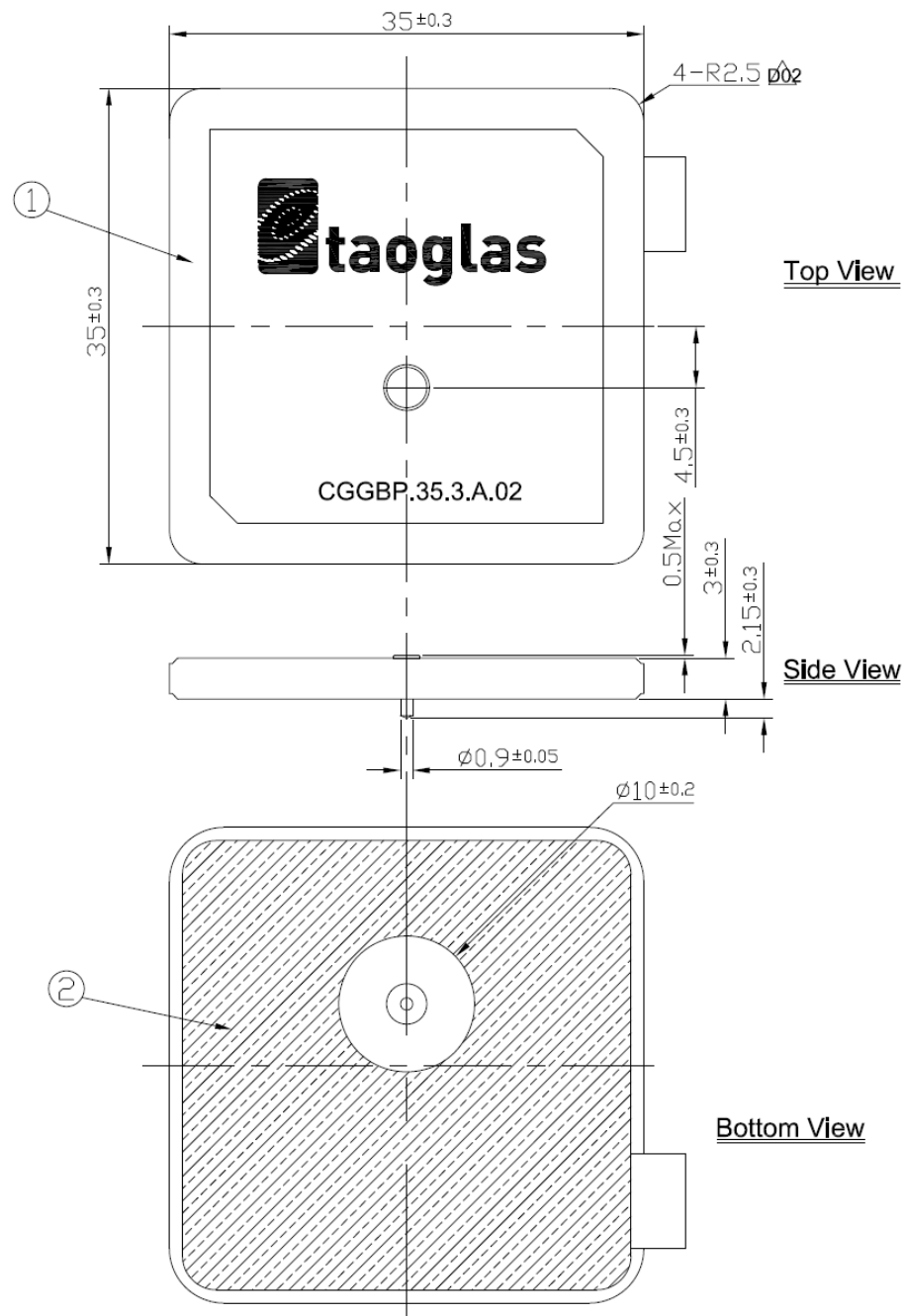
### 5.3 1602MHz Free Space



	Peak Gain (dBi)	Average Gain (dBi)
XZ Plane	5.37	0.54
YZ Plane	5.24	0.41



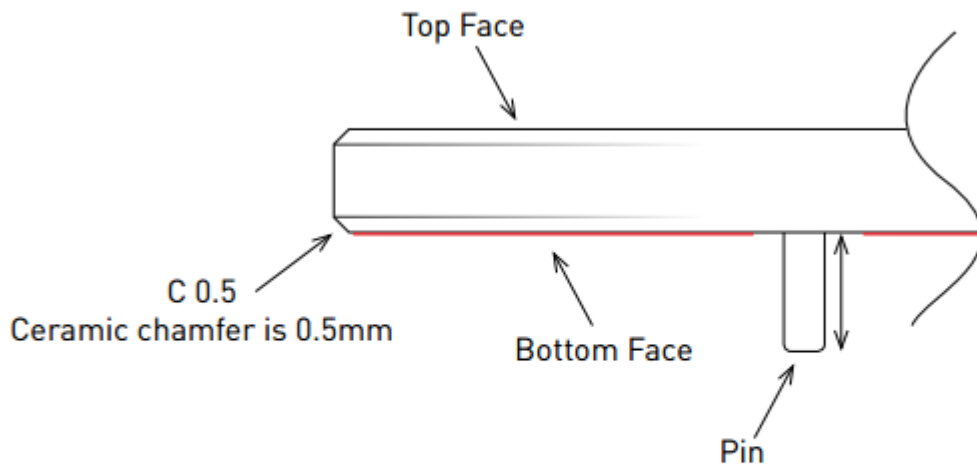
## 6. Mechanical Drawing (unit: mm)



**NOTES:**

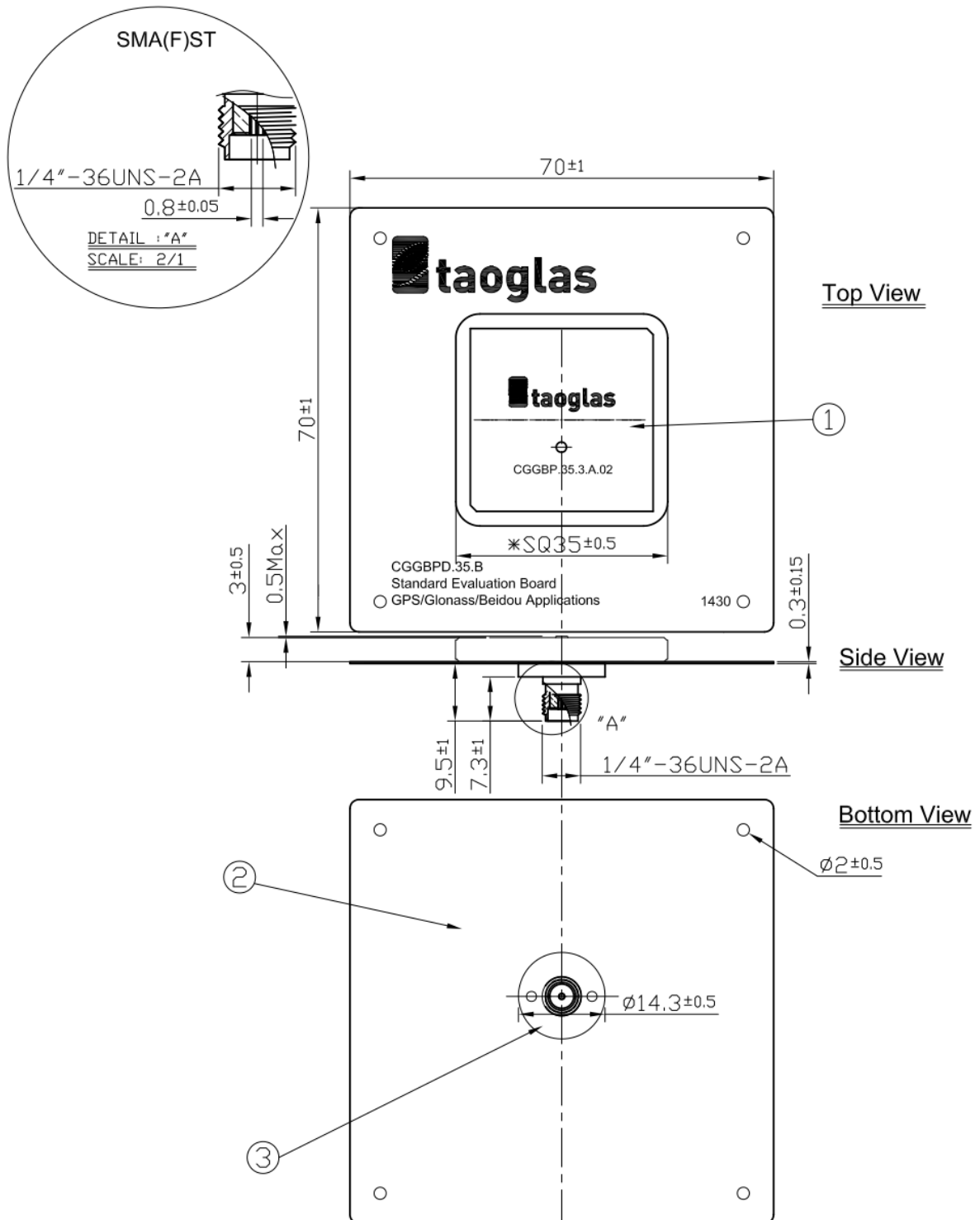
1. Double sided adhesive area 

## 6.1 Adhesive Thickness

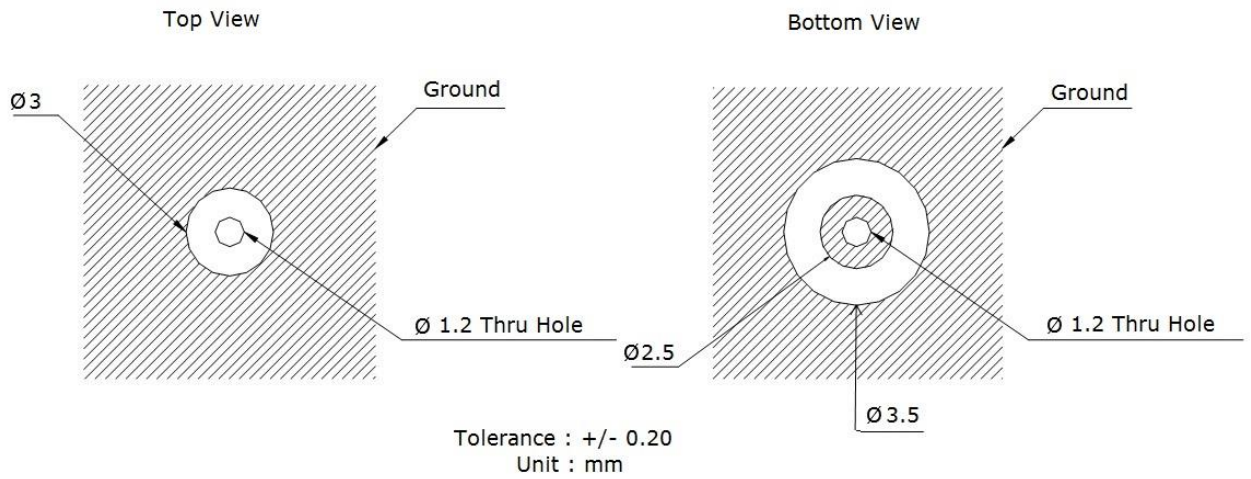


**Red Line** shows the adhesive without Liner – thickness 0.08-0.1mm

## 7. CGGBPD.35.B Evaluation Board(unit:mm)



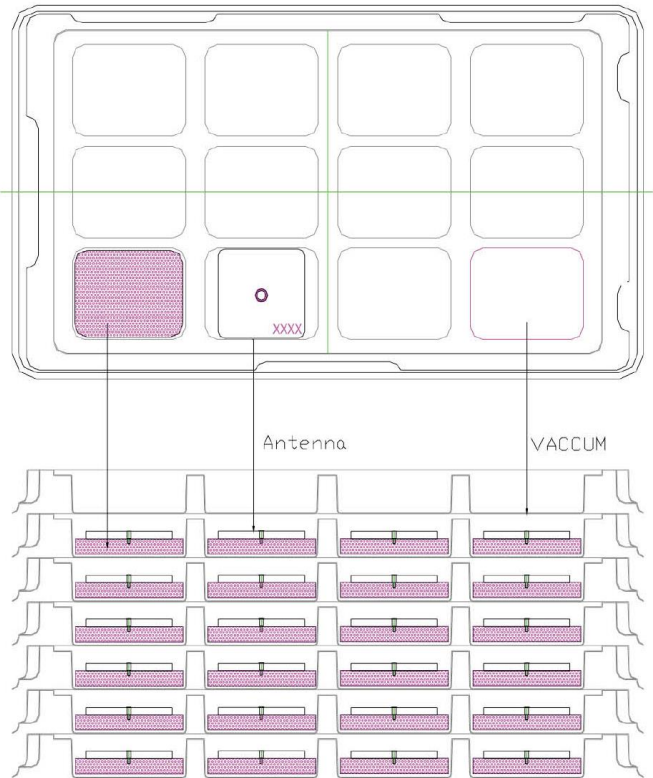
## 8. PCB Footprint Recommendation

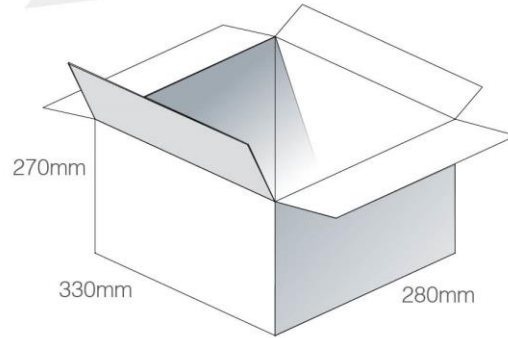
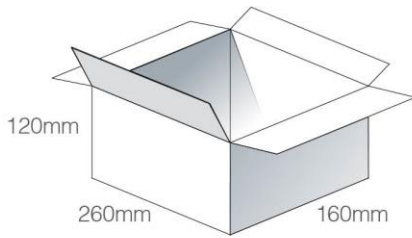


## 9. Packaging

12 Pieces CGGBP.35 per tray  
 Dimensions - Diameter 250\*150\*20mm  
 Weight - 220g

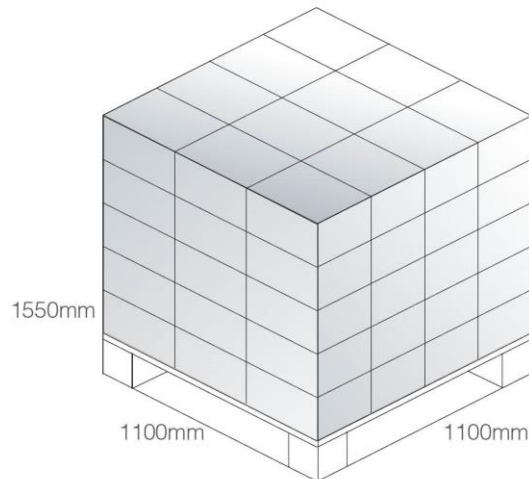
6 Trays per Small Carton  
 72 Pieces CGGBP.35 Carton  
 Dimensions - 260\*160\*120  
 Weight - 1.37Kg





4 Small Cartons per 1 Large Carton  
288 Pieces CGGBP.35 per Large Carton  
Carton Dimensions - 330\*280\*270  
Weight - 6Kg

Pallet Dimensions 1100\*1100\*1550mm  
60 Cartons per Pallet  
12 Cartons per layer  
5 Layers



Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein.

Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

Copyright © Taoglas Ltd.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Antennas](#) category:*

*Click to view products by [Taoglas](#) manufacturer:*

Other Similar products are found below :

[GAN30084EU](#) [930-033-R](#) [GW17.07.0250E](#) [1513563-1](#) [EXE902SM](#) [APAMPG-117](#) [MAF94383](#) [W3908B0100](#) [W6102B0100](#) [YE572113-30RSMM](#) [108-00014-50](#) [66089-2406](#) [A09-F8NF-M](#) [A09-F5NF-M](#) [RGFRA1903041A1T](#) [W3593B0100](#) [W3921B0100](#) [SIMNA-868](#) [SIMNA-915](#) [SIMNA-433](#) [W1044](#) [W1049B090](#) [A75-001](#) [WTL2449CQ1-FRSMM](#) [CPL9C](#) [EXB148BN](#) [0600-00060](#) [TRA9020S3PBN-001](#) [GD5W-28P-NF](#) [MA9-7N](#) [GD53-25](#) [GD5W-21P-NF](#) [C37](#) [MAF94051](#) [MA9-5N](#) [EXD420PL](#) [B1322NR](#) [QWFTB120](#) [MAF94271](#) [MAF94300](#) [GPSMB301](#) [FG4403](#) [AO-AGSM-OM54](#) [5200232](#) [MIKROE-2349](#) [WCM.01.0111](#) [MIKROE-2393](#) [MIKROE-2352](#) [MIKROE-2350](#) [MAF94153](#)