



**GPS/GALILEO Through Hole Patch Antenna 15mm**

**SZC-N-0G11**

GNSS: 1575.42 MHz

**Description**

A miniaturized ceramic GPS/GALILEO solution, 15 x 15 (mm) Through hole mount and double-sided adhesive ceramic patch. This antenna is tuned best paced at the center of a 50 x 50 (mm).

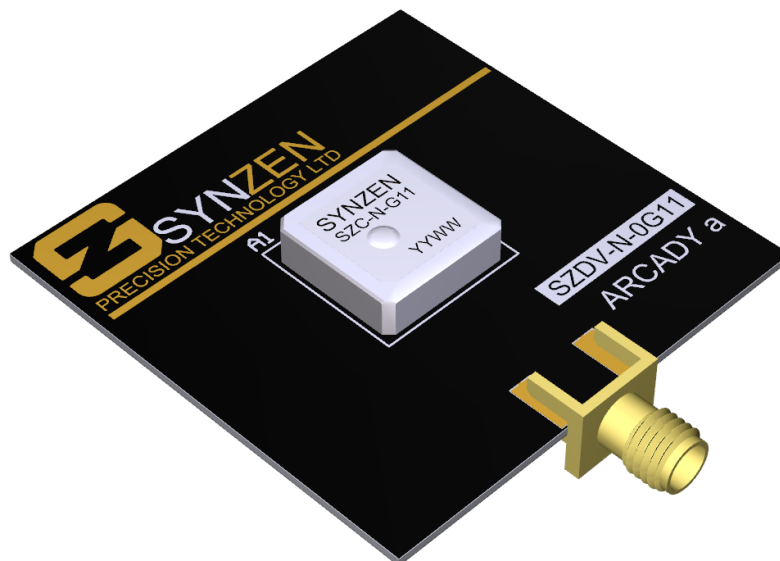
- For GPS/GALILEO constellations
- High performance
- Through hole soldering with self-adhesive backing

**Applications**

Asset Tracking  
Drones

M2M Industrial  
Telematics

Fleet Management  
Remote Monitoring





## General Specifications

### Mechanical Specifications

<b>Part Number</b>	SZC-N-0G11
<b>Name</b>	ARCADYa
<b>Dimensions</b>	15.0 x 15.0 x 4.0 (mm)
<b>Weight</b>	3g
<b>Antenna Type</b>	Through Hole Device

### RF Specifications

Frequency Range (MHz)	Efficiency (%) At centre frequency	Peak Gain (dBi)	Impedance	Polarization
1575.42±1.023	>50	1.50	50Ω	RHCP

<b>Centre Frequency</b>	1578 ±2
<b>Bandwidth</b>	≥6 MHz
<b>Axial Ratio</b>	3dB

\*All performance stated is measured of SZDV-N-0G11 evaluation kit

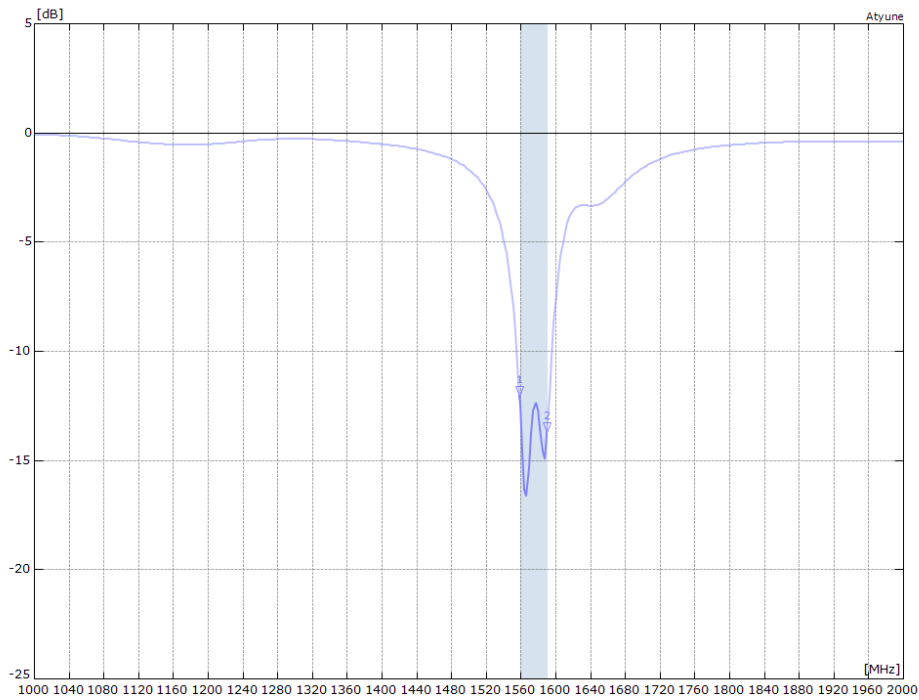
### Environmental Specifications

<b>Operational Temperature</b>	-40 to +85 (°C)
<b>Storage Temperature</b>	-10 to +40 (°C)
<b>Relative Humidity</b>	≤75%

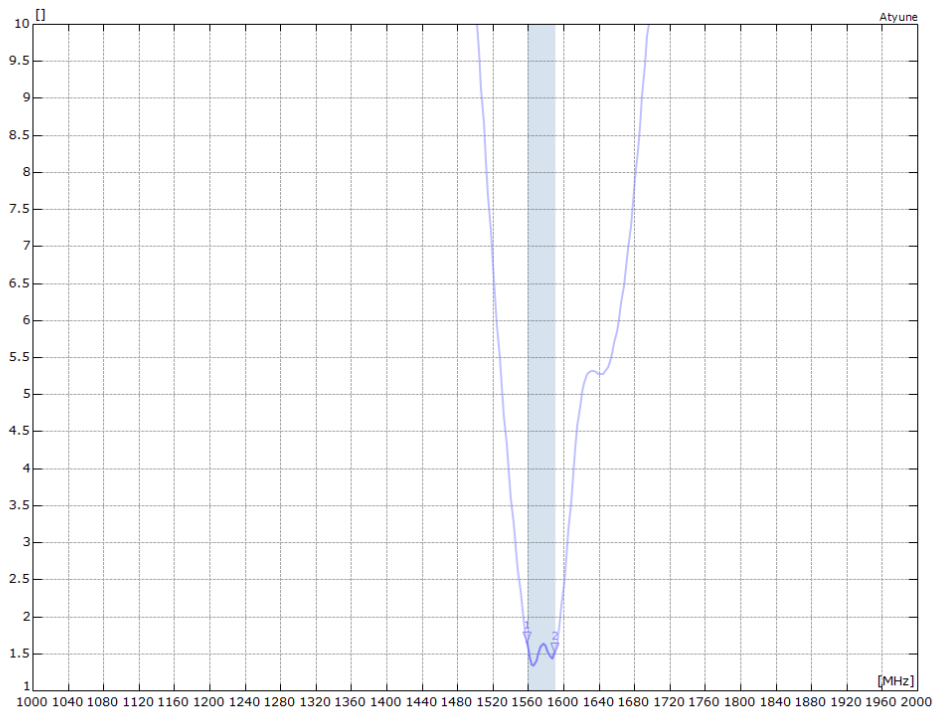


## RF Characteristics

### S11 Parameter



### VSWR

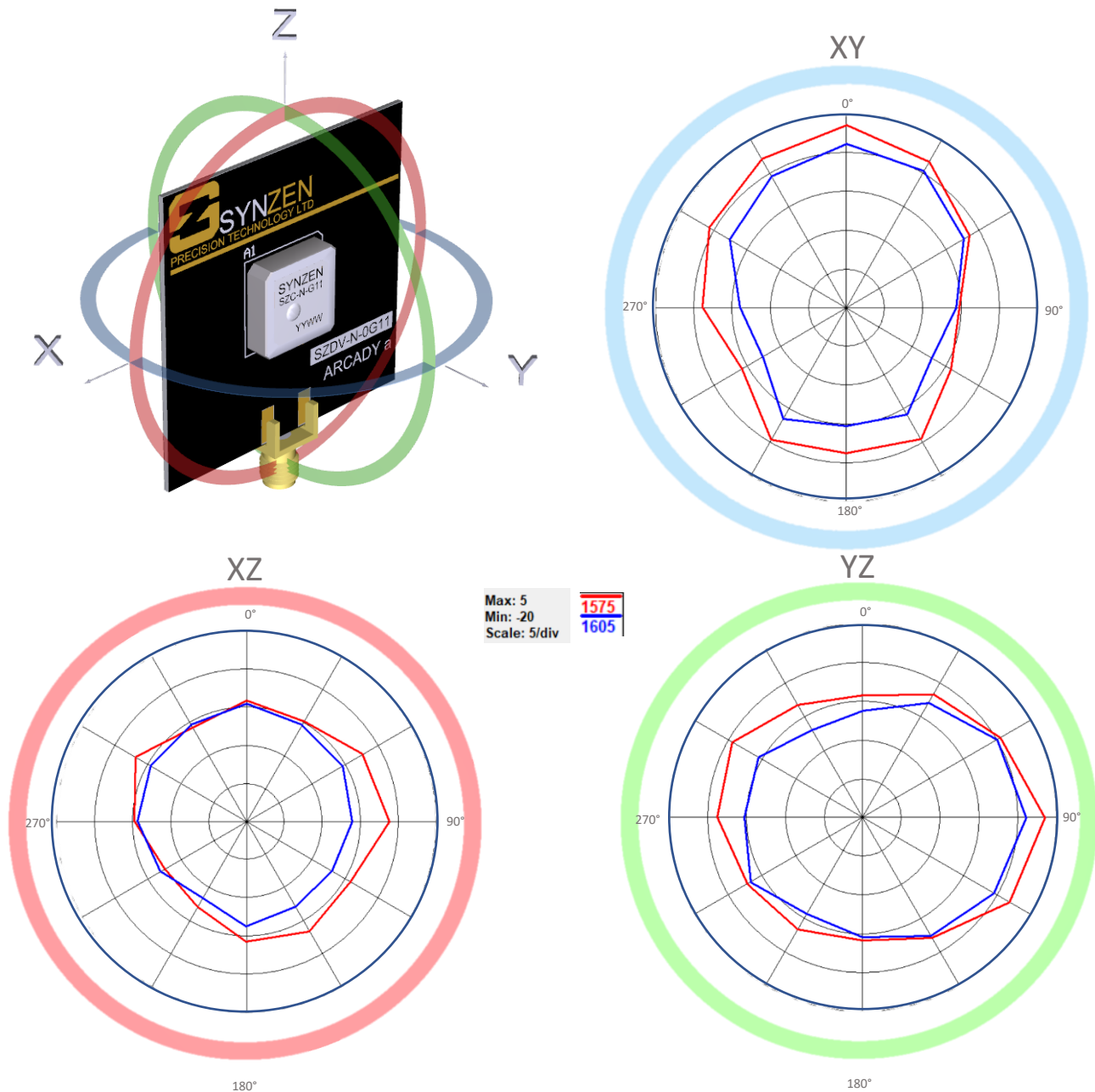




## Radiated Performance

### 2D Polar Plots

The data shown was measured on Synzen EVK (SZDV-N-0G11)

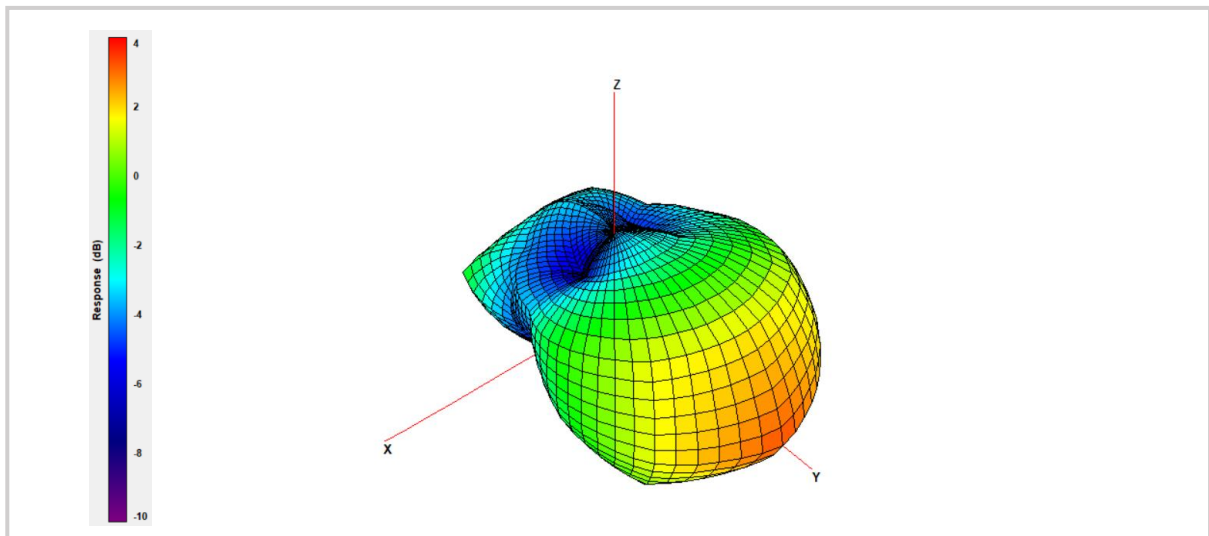
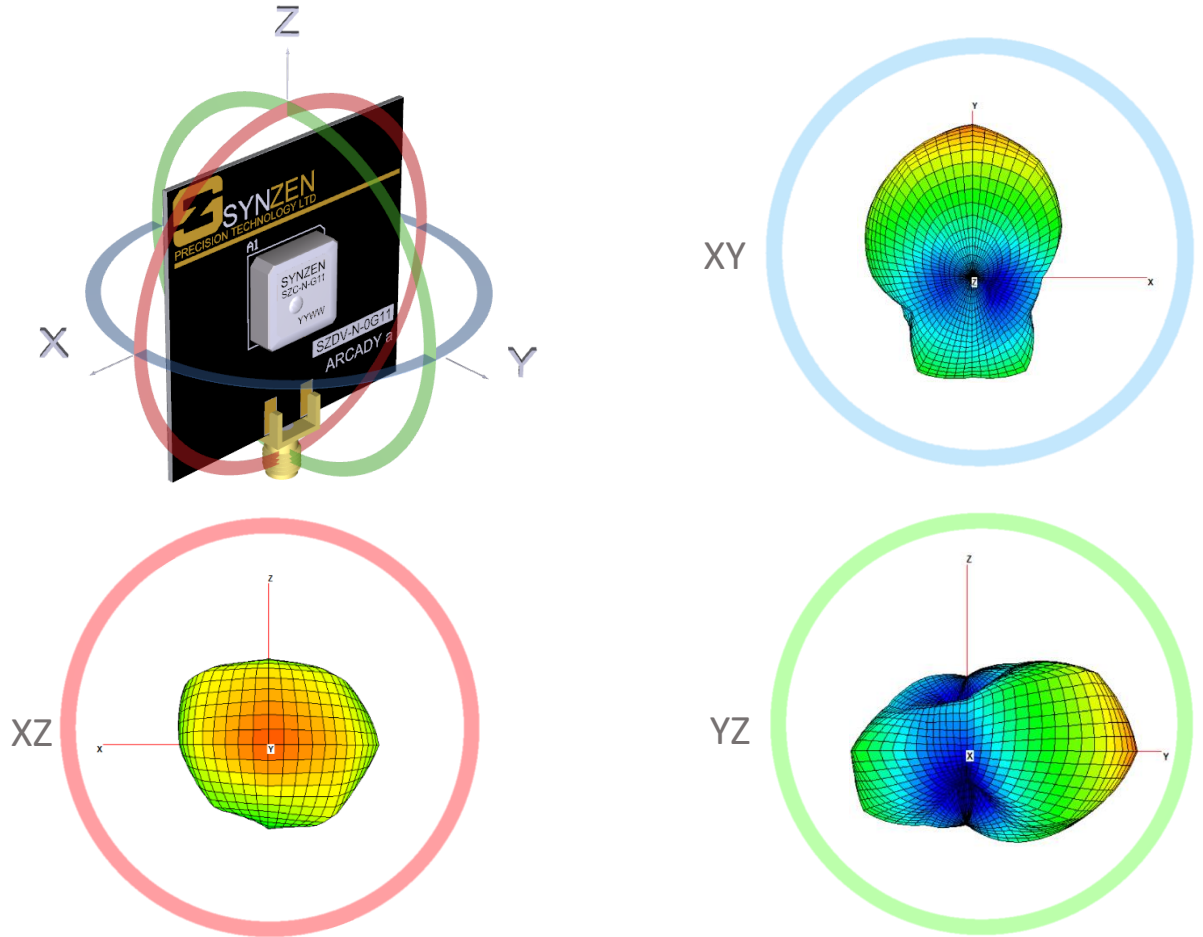




## Radiated Performance

### 3D Radiation Pattern

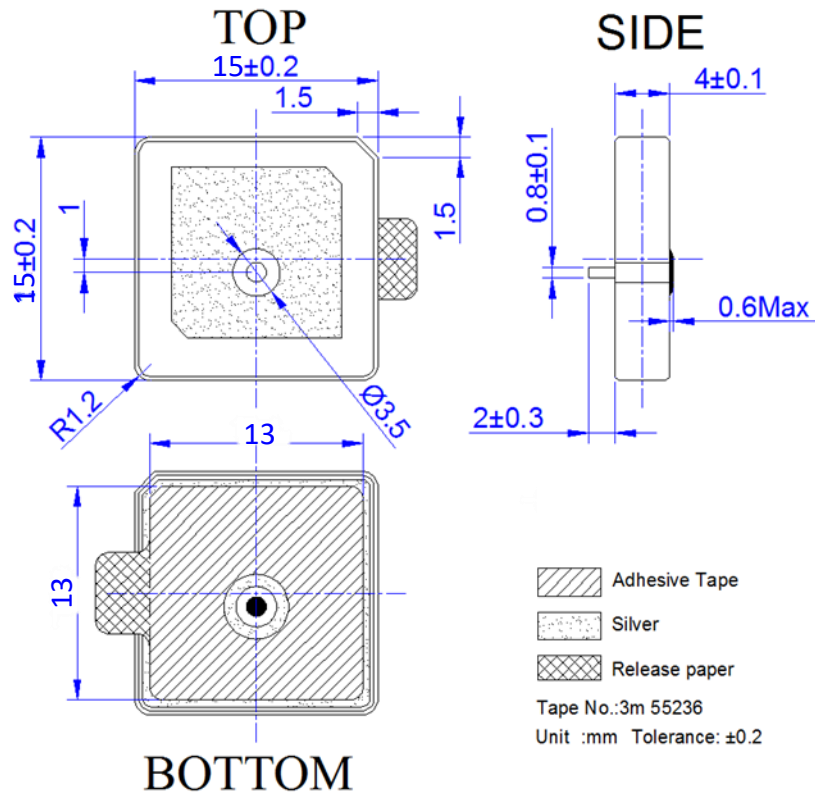
The data shown was measured on Synzen EVK (SZDV-N-0G11). The frequency point shown here is 1575MHz.





## Mechanical

### Antenna Mechanical Drawing



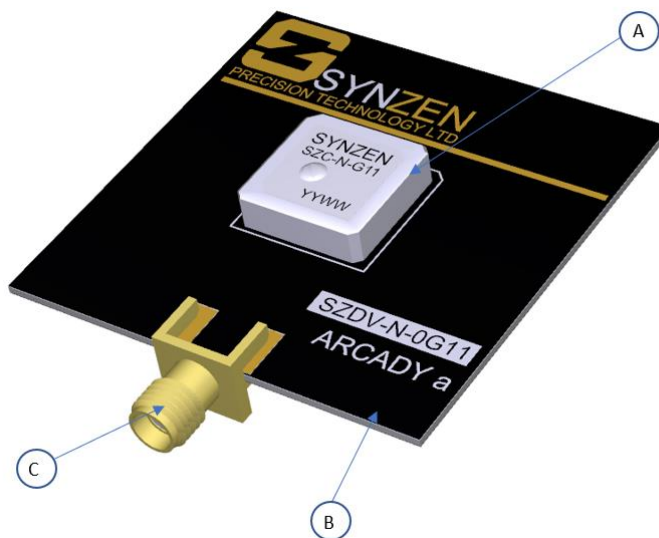
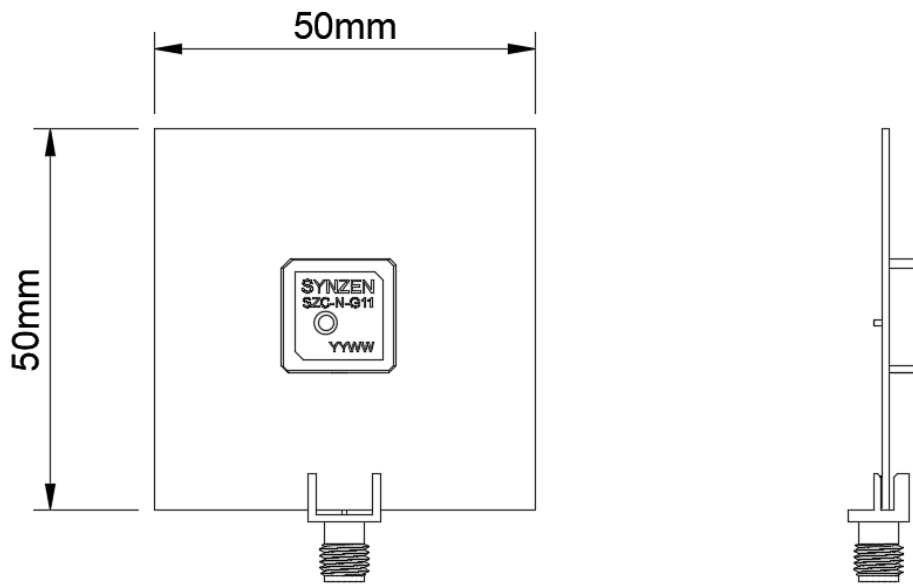
### Required Host PCB Footprint

PCB library files and DXF is available from our website [www.synzen.com.tw/products](http://www.synzen.com.tw/products).

## Evaluation Kit

### SZDV-N-0G11 Evaluation Kit

The SZDV-N-0G11 evaluation kit is a PCBA with the antenna (SZC-N-0G11) fitted and optimised with a matching network. Connection to the antenna is made using the fitted female SMA connector.



A	SZC-N-0G11 (ARCADY <sub>a</sub> )
B	Host PCB
C	SMA Connector



## Packaging

Plastic tray	Inner box	Outside box
60 Pcs/tray	300 Pcs/box	1200Pcs/box

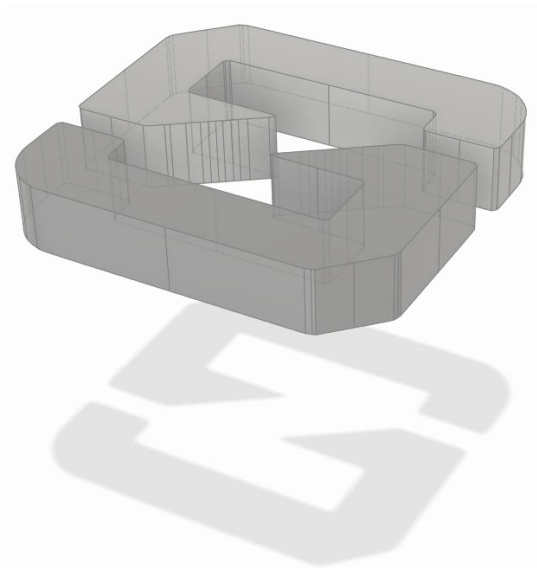
## Environmental

### Material Regulation

The antenna has been tested to conform to RoHS requirements. A certificate of conformance is available upon request.

Description	Material	Specification
Antenna Substrate	Microwave dielectric	45±2
Pin	Copper and Ag-plated	4MM
Electrode	Ag Plated	
Adhesive Type	3M 55236	S15.1*15.1
Sn	Sn:Ag:Cu	96.5:3:0.5





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