



GNSS Ceramic Through Hole Antenna 18mm

SZC-N-0G10

GNSS: 1575.42 / 1602 MHz

Description

An embedded ceramic GNSS SMD solution, 18 x 18 (mm) Through hole mount ceramic patch. This antenna is tuned best placed at the center of a 50 x 50 (mm).

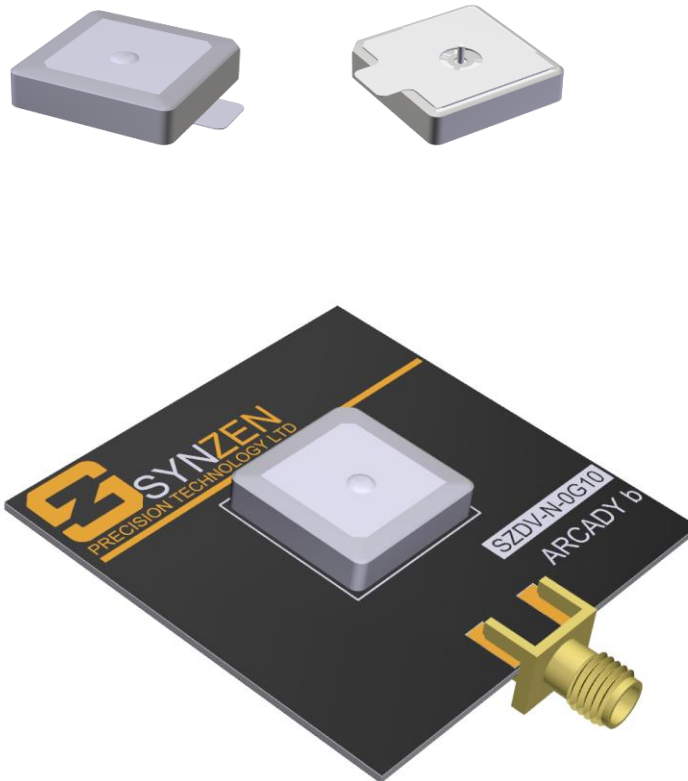
- For GPS/GLONASS/GALILEO constellations
- High performance
- Through hole soldering with self-adhesive backing

Applications

Asset Tracking
Drones

M2M Industrial
Telematics

Fleet Management
Remote Monitoring





General Specifications

Mechanical Specifications

Part Number	SZC-N-0G10
Name	ARCADYb
Dimensions	18.0 x 18.0 x 4.0 (mm)
Weight	5g
Antenna Type	Through Hole Device

RF Specifications

Frequency Range (MHz)	Efficiency (%) At centre frequency	Peak Gain (dBi)	Impedance	Polarization
1575.42±3	>75	3.7	50Ω	RHCP
1602±5	>75	3.50		

*All performance stated is measured of SZDV-N-0G10 evaluation kit

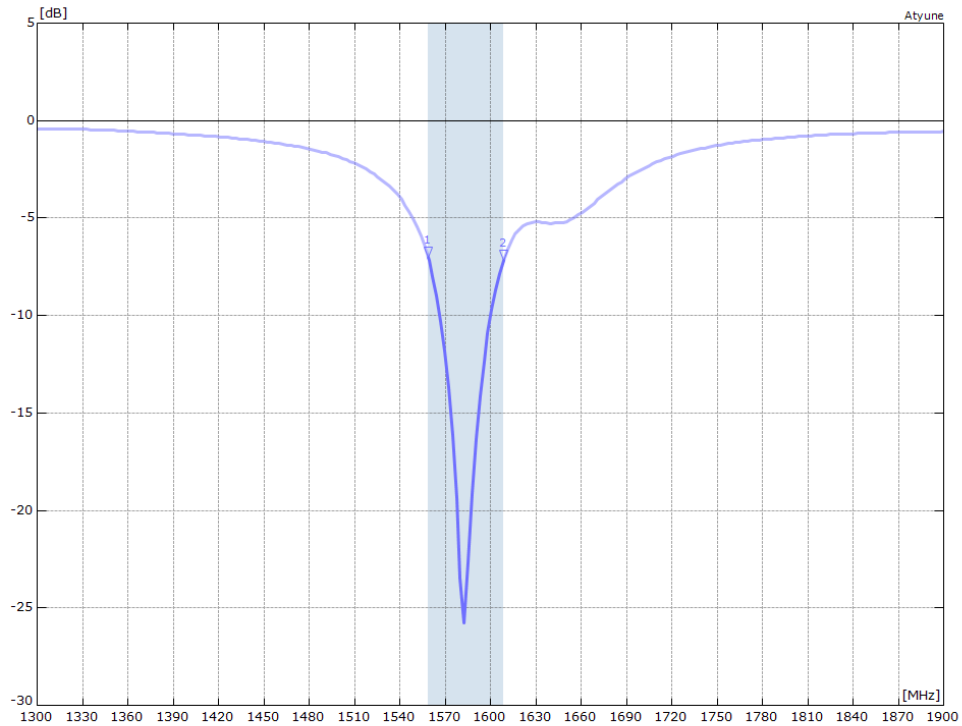
Environmental Specifications

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

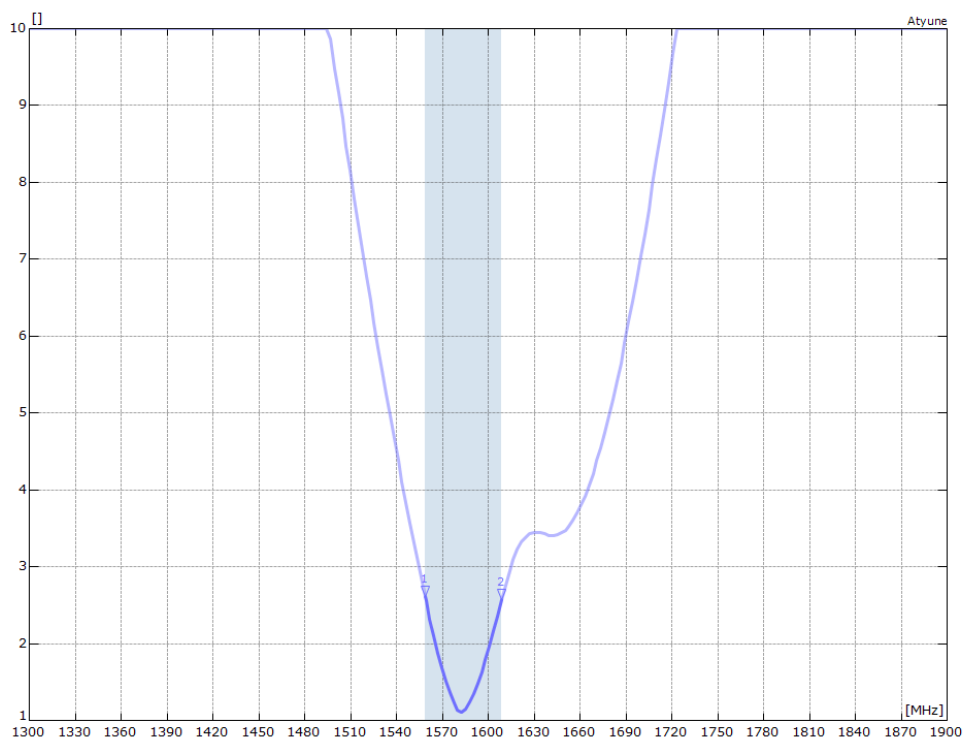


RF Characteristics

S11 Parameter



VSWR

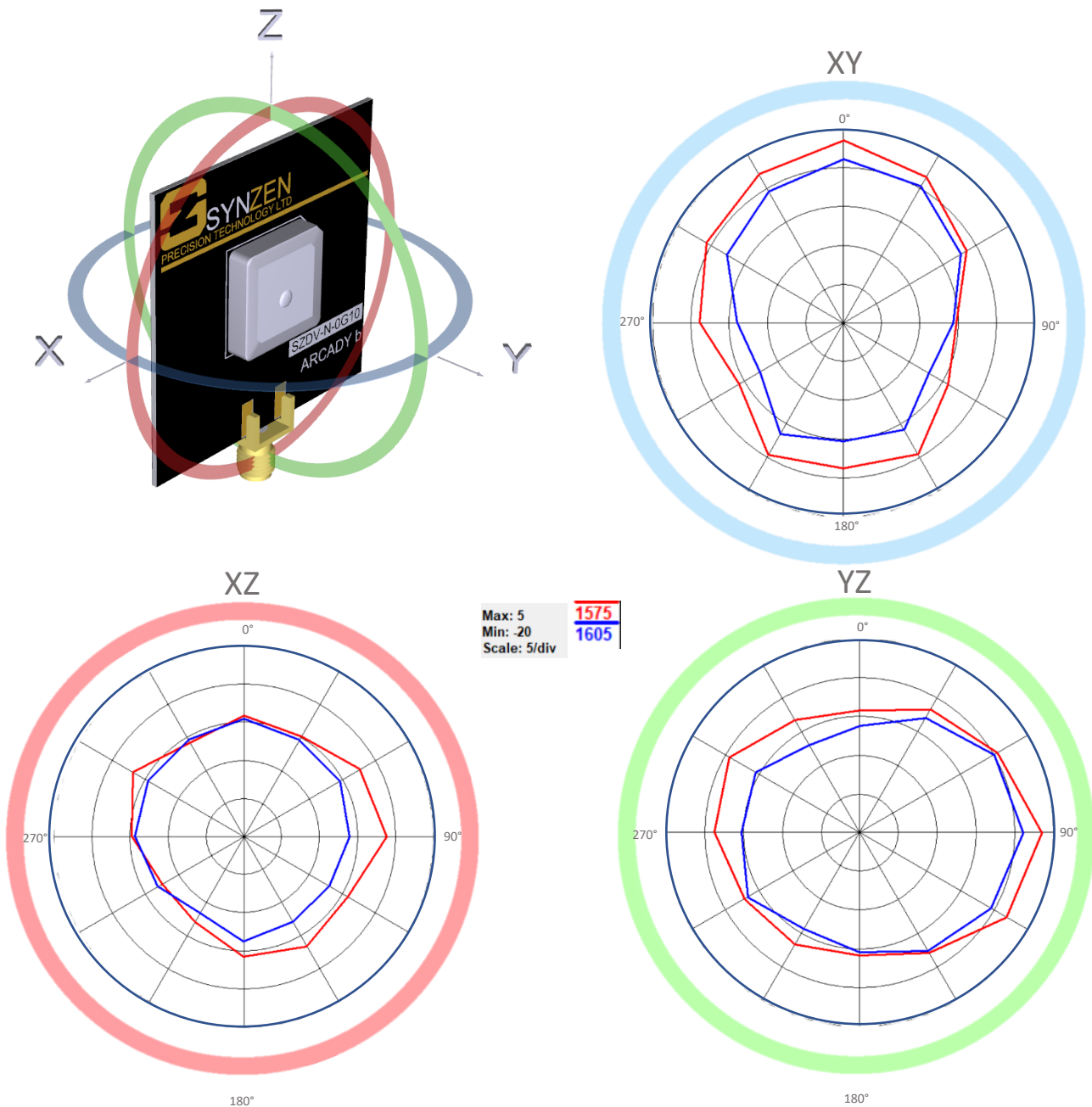




Radiated Performance

2D Polar Plots

The data shown was measured on Synzen EVK (SZDV-N-0G10)

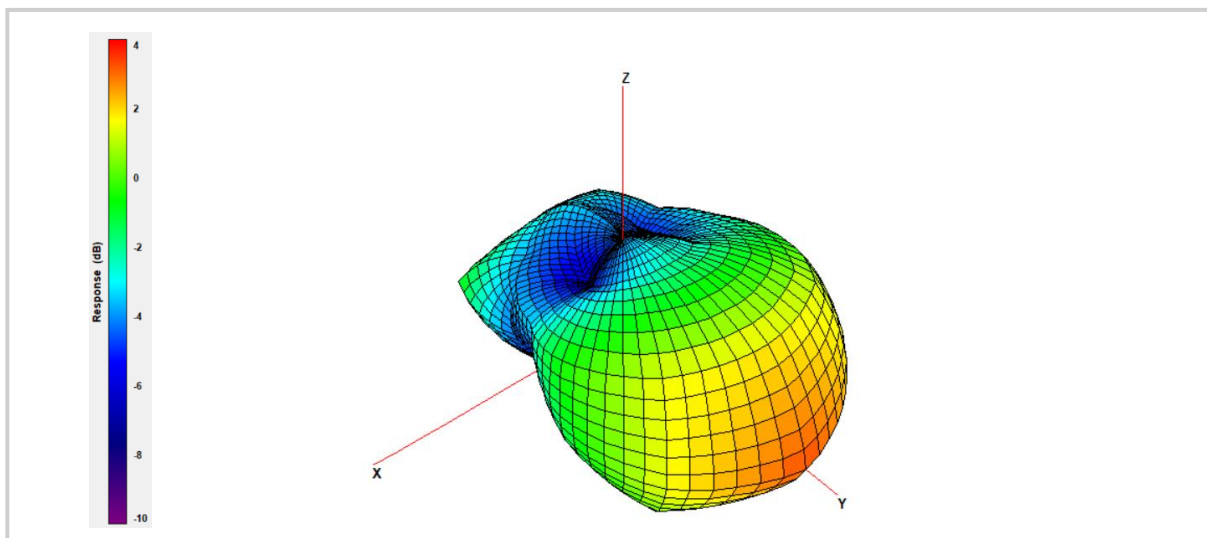
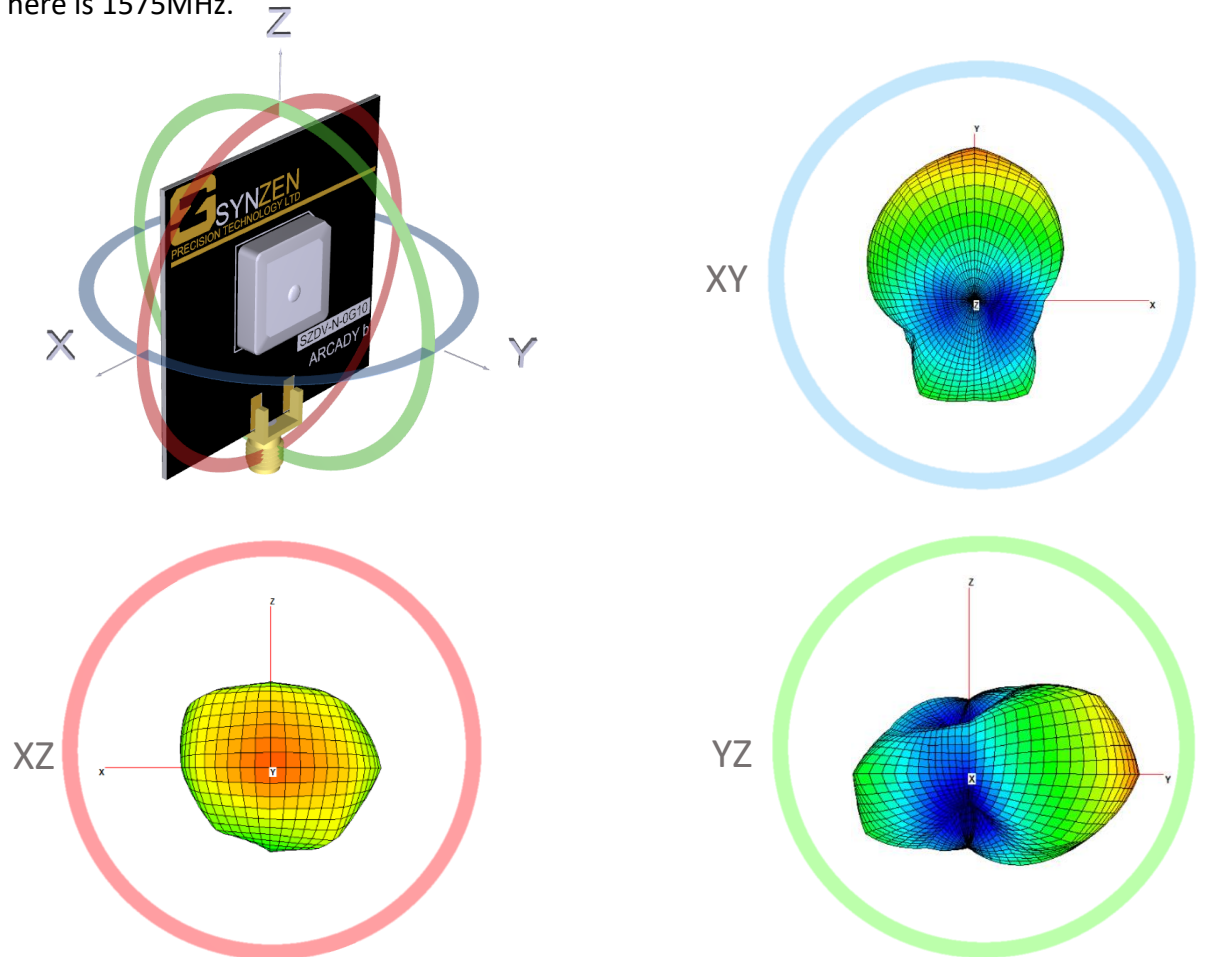




Radiated Performance

3D Radiation Pattern

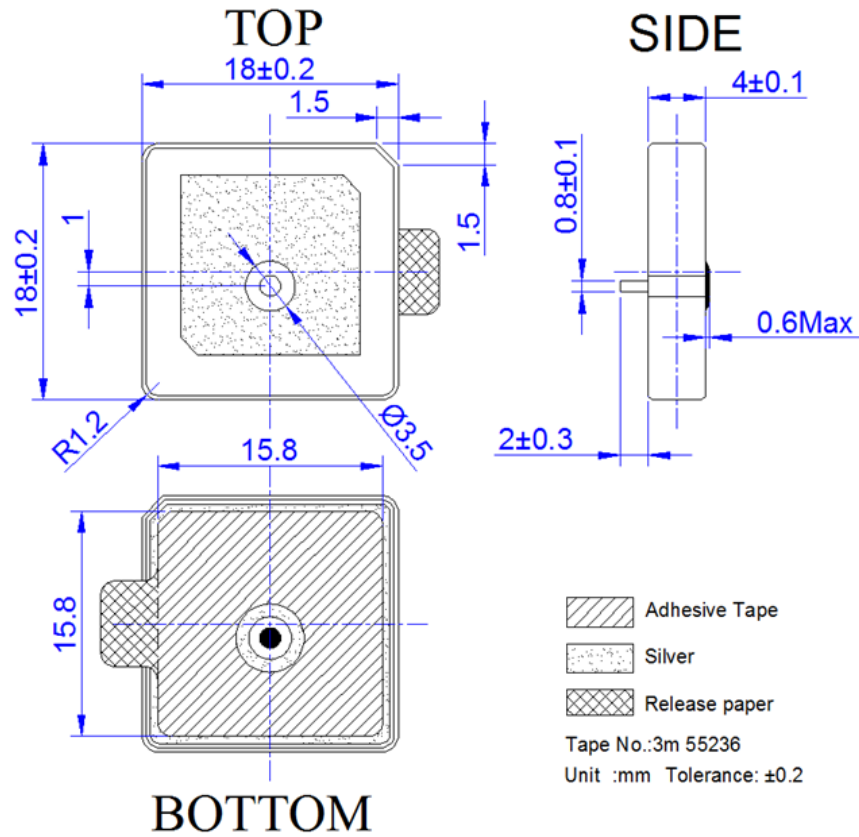
The data shown was measured on Synzen EVK (SZDV-N-0G10). The frequency point shown here is 1575MHz.





Mechanical

Antenna Mechanical Drawing



Required Host PCB Footprint

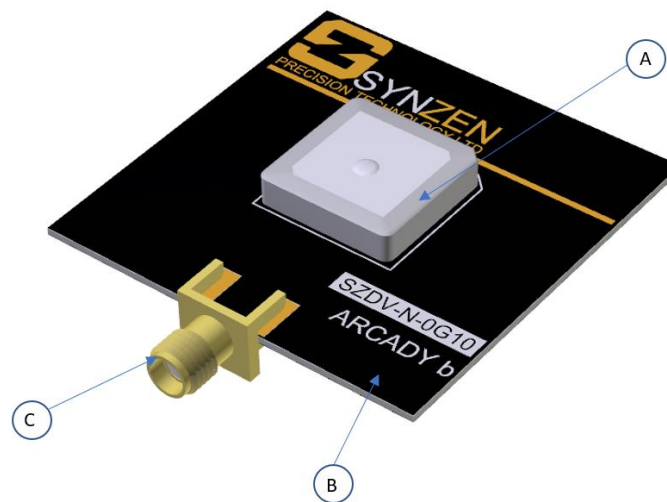
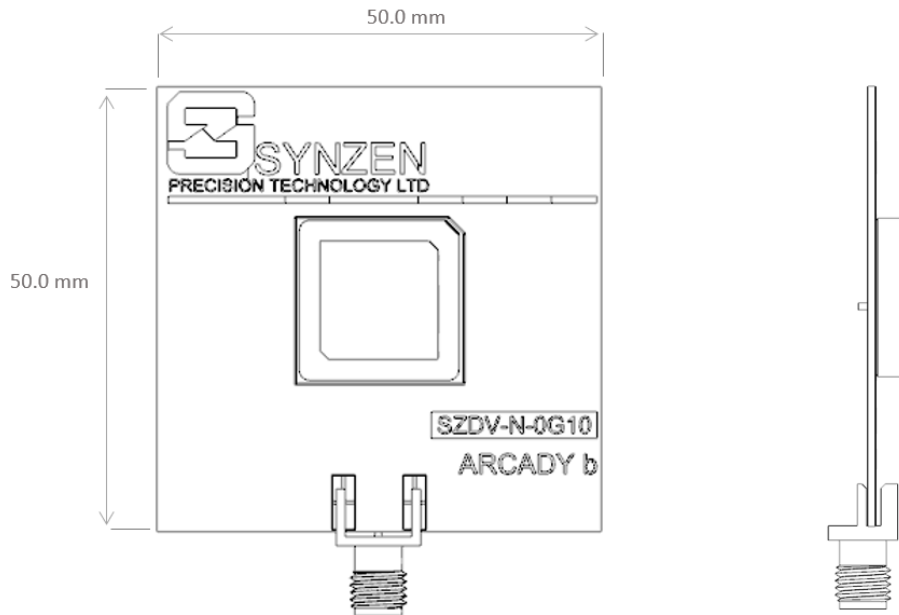
PCB library files and DXF is available from our website www.synzen.com.tw/products.



Evaluation Kit

SZDV-N-0G10 Evaluation Kit

The SZDV-N-0G10 evaluation kit is a PCBA with the antenna (SZC-N-0G10) fitted and optimised with a matching network. Connection to the antenna is made using the fitted female SMA connector.



A	SZC-N-0G10 (ARCADYb)
B	Host PCB
C	SMA Connector



Packaging

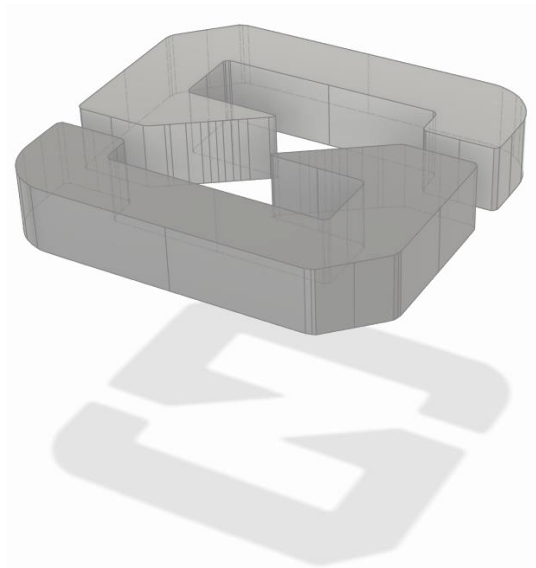
Plastic tray	Inner box	Outside box
60 Pcs/tray	300 Pcs/box	1200Pcs/box

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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