



product Datasheet

Synzen

ARCADYd | THROUGH HOLE CERAMIC PATCH | GPS/GALILEO/GLONASS

Part Number / Name

- SZC-N-3G31
- ARCADYd

Description

- GPS ceramic through hole patch

Features

- GPS/GALILEO/GLONASS constellations
- Through hole mount
- High Gain
- Dimensions: 25.0 x 25.0 x 4.0 (mm)





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Introduction

An embedded SMD solution, a 25 x 25 x 4 (mm) ceramic patch solution. This antenna is tuned best placed at the center of a 70 x 70 (mm) GND plane and has a Peak gain of 5dBi at 1575.42MHz

Typical Applications

- Asset Tracking
- Precision agriculture
- Automotive
- Fleet management
- Emergency response



Mechanical Specifications

Electrical / RF Specifications*

Part Number	SZC-N-3G31
Name	ARCADYd
Dimensions	25.0 x 25.0 x 4.0 (mm)
Weight	<8g
Antenna Type	Through Hole Patch
Material	Ceramic

*All performance stated is measured of SZDV-C-3G31 evaluation kit.

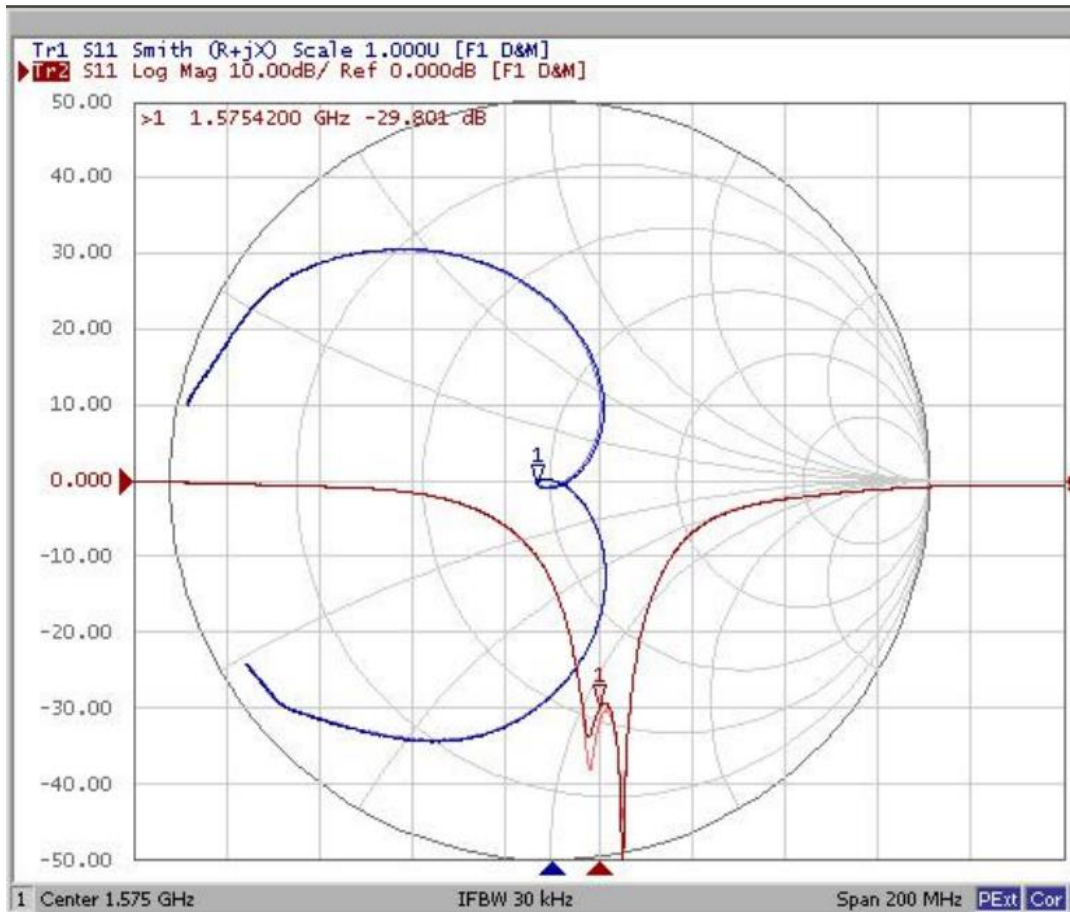
Band	Frequency Range (MHz)	Avg Efficiency (%)	Peak Gain (dBi)	Impedance	Polarization
GPS /GALILEO	1575.42 ±3	>75	4.80	50Ω	Linear
GLONAS	1602 ±5	>70	4.35		

Environmental Specifications

Operational Temperature	-40 to +85 (°C)
Storage Temperature	-10 to +40 (°C)
Relative Humidity	≤75%
Moisture Sensitivity Level (MSL)	NA
RoHs & REACH compliant	Yes

RF Characteristics

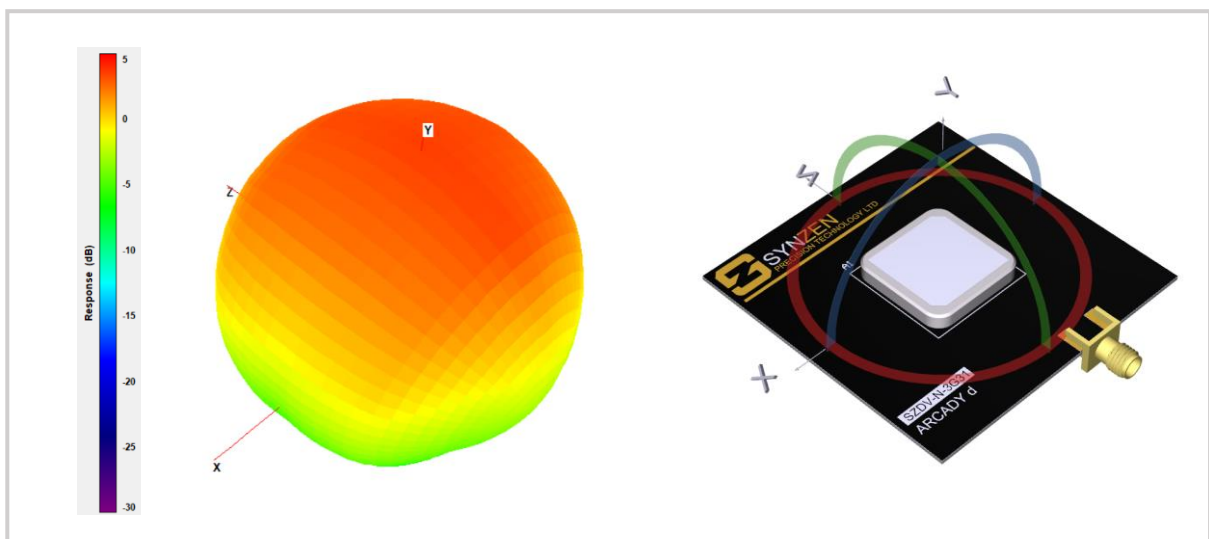
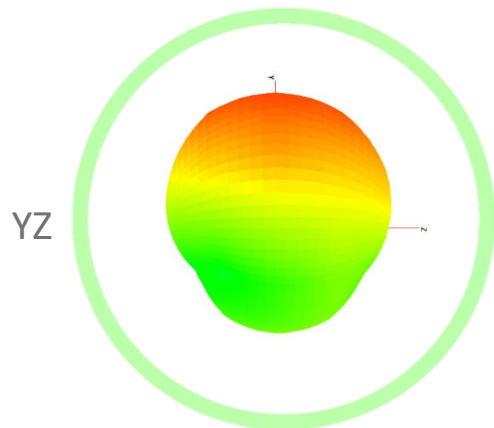
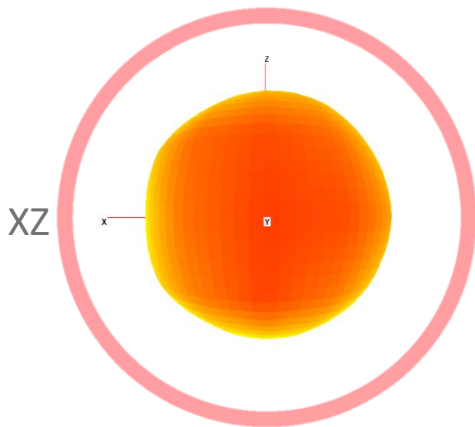
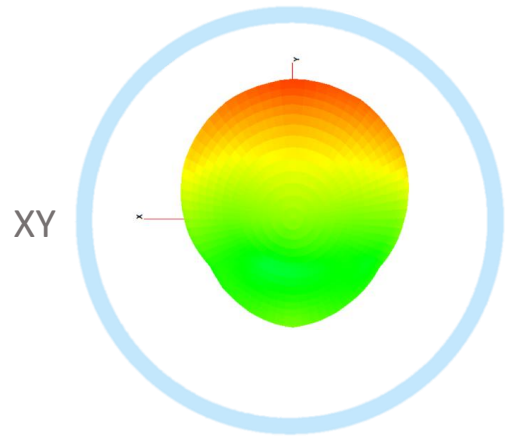
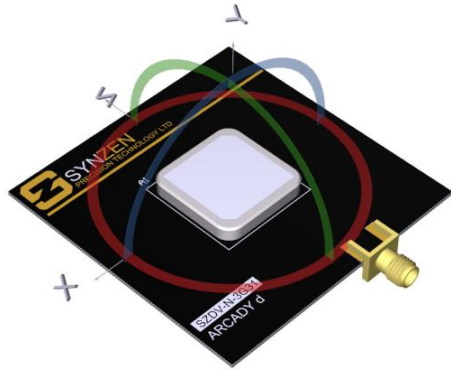
S11 / Smith



Radiated Performance 3D – 1575MHZ

3D Radiation Pattern at 1575MHz

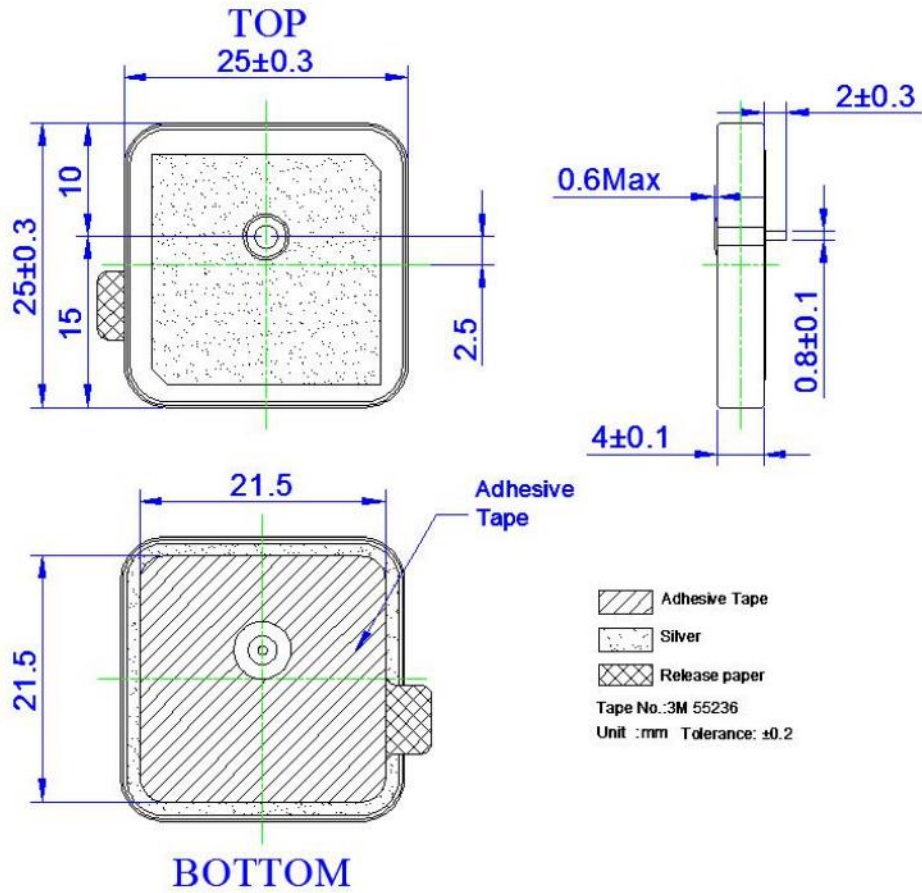
The data shown was measured on Synzen EVK (SZDV-C-3G31)





Mechanical

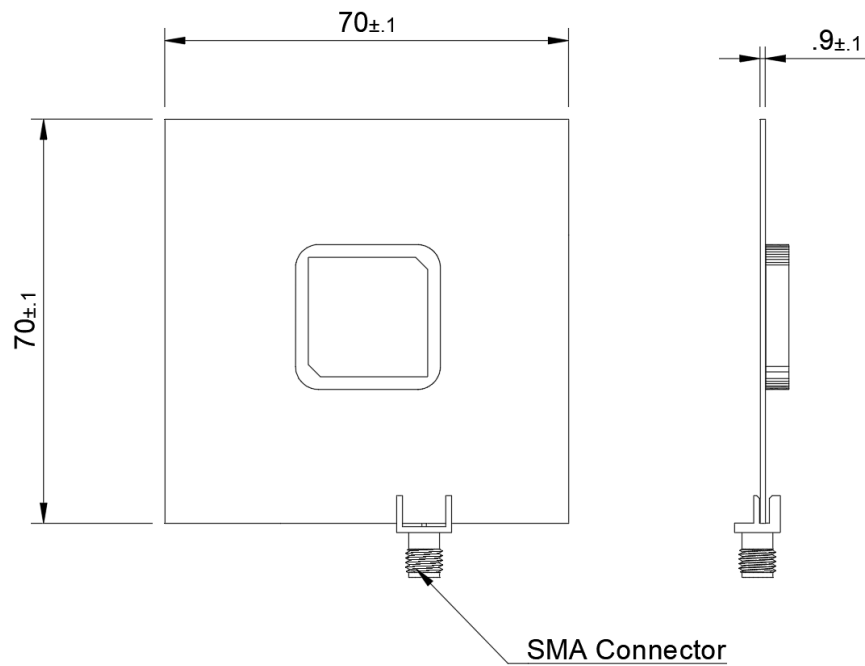
Antenna Mechanical Drawing



Evaluation Kit

SZDV-C-3G31 Evaluation Kit

The SZDV-C-3G31 evaluation kit is a PCBA with the antenna (SZC-C-3G31) fitted. Connection to the antenna is made using the fitted female SMA connector.





Packaging

Plastic tray	Inner box	Outside box
40 Pcs/tray	200 Pcs/box	800 Pcs/box

Environmental

Material Regulation

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

No.	Description	Material	Specification
5.1	Antenna Substrate	Microwave dielectric	20±2
5.2	Pin	Copper and Silver-plated	4MM
5.3	Electrode	Ag Plated	
5.4	Adhesive Type	3M 55236	S21.5*21.5
5.5	Sn	Sn:Ag:Cu	96.5:3:0.5



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