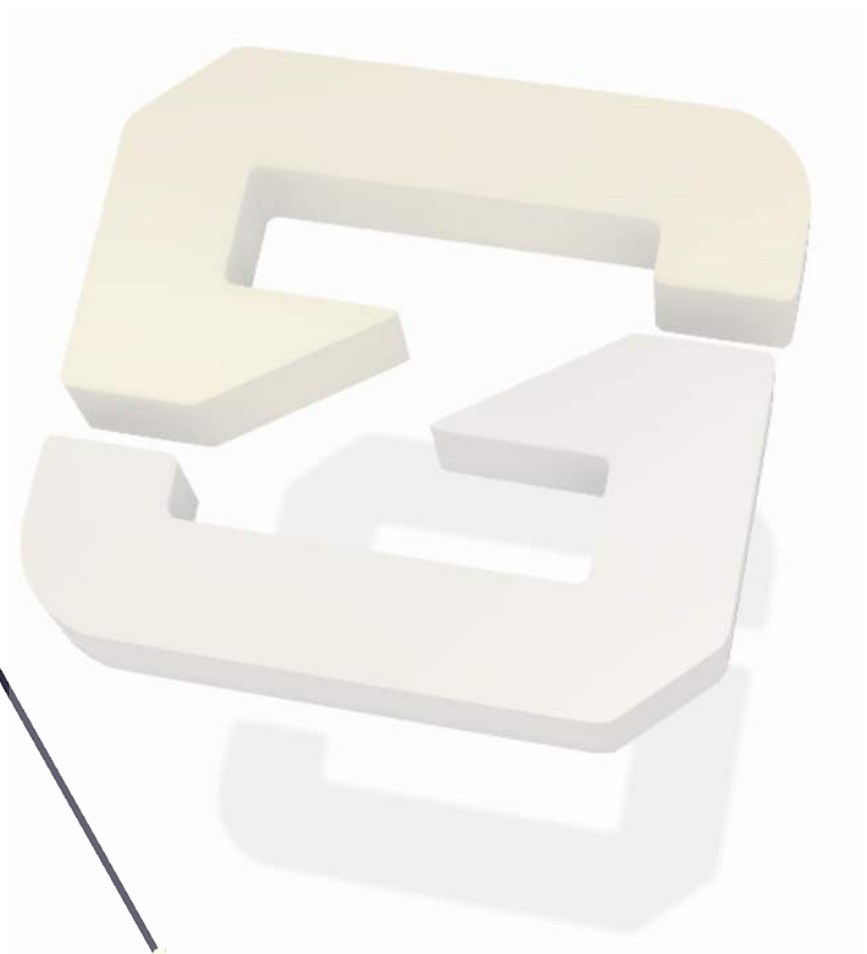
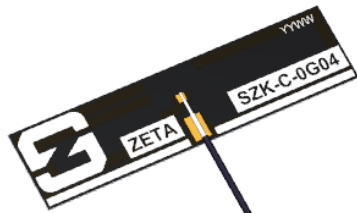




GNSS FPC Antenna

SZK-C-0G04

GNSS L1: 1559 – 1610 MHz



Name: ZETA

Part Number: SZK-C-0G04

Description: GNSS (GPS, GLONASS, GALILEO, Beidou) FPC with cable and connector IPEX MHF (U.FL)

- Flexible PCB Antenna using 3M 468 adhesive
- Dimensions: 40 x 10 x 0.2 (mm)
- Cable: 100mm length, 1.13mm diameter

SYNZEN
PRECISION TECHNOLOGY LTD



GNSS FPC Antenna

SZK-C-0G04

GNSS L1: 1559 – 1610 MHz

Description

A Flexible antenna for GNSS applications. For use internal to a device which requires an integrated antenna solution. High performance with a small form factor for simple integration.

- For GNSS Applications 1559-1610MHz
- Clean resonance with no unwanted out of band response.
- Simple integration, plug and operate the device without designing onboard antenna.
- Can be tuned for various environments and plastic thickness with additional Pi network, free tuning service available.
- Alternate cable lengths available upon request, contact sales@synzen.com.tw

Applications

Drones
Smart Grid

M2M Industrial
Portable Devices

Asset Tracking





General Specifications

Mechanical Specifications

| | |
|-------------------------|--------------------------------|
| Part Number | SZK-C-0G04 |
| Name | ZETA |
| Dimensions | 40 x 10 x 0.2 (mm) |
| Weight | <1g |
| Antenna Type | FPC + Cable |
| Cable Length | 100mm, Black |
| Cable Type | Mini Coax \varnothing 1.13mm |
| Connector | MHFI (U.FL Compatible) |
| Adhesive backing | 3M 468 |

RF Specifications

| | |
|---------------------------|----------------|
| Frequency Range | 1559 – 1610MHz |
| Average Efficiency | >70% |
| Peak Gain | 2.00dBi |
| S11 (max) | <-12.5dB |
| VSWR (max) | 1.65:1 |
| Impedance | 50 Ω |
| Polarization | Linear |
| Max Input Power | 5W |

Note: All performance stated is measured 2.0mm ABS plastic, RF chokes used to prevent cable radiation.

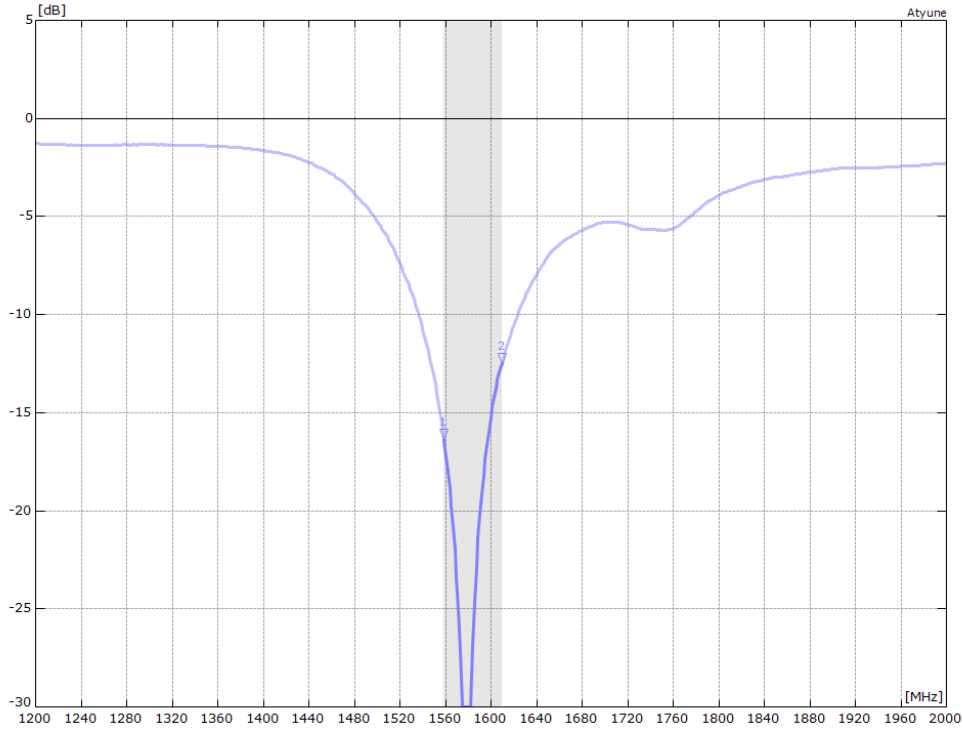
Environmental Specifications

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

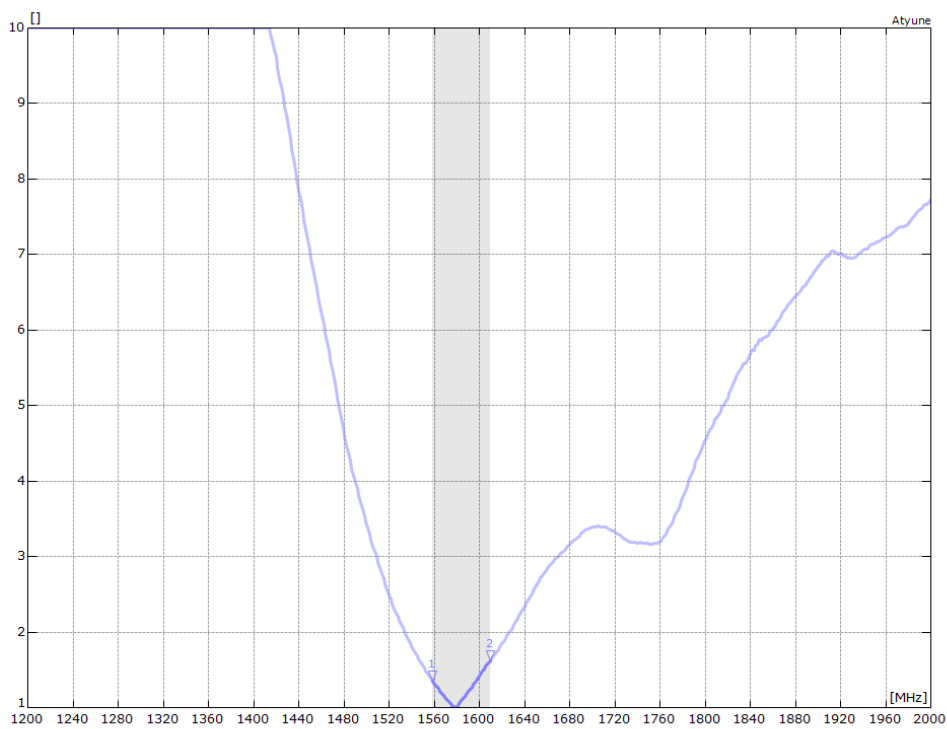


RF Characteristics

S11 Parameter



VSWR / SMITH CHART

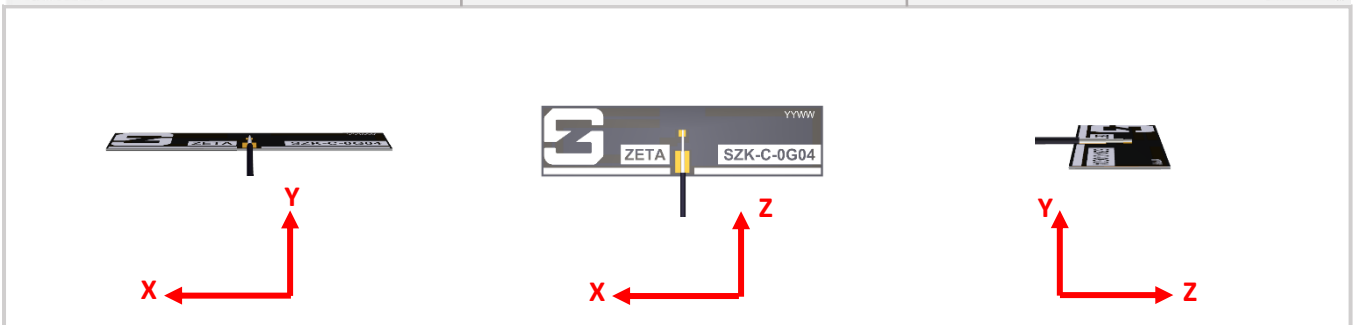
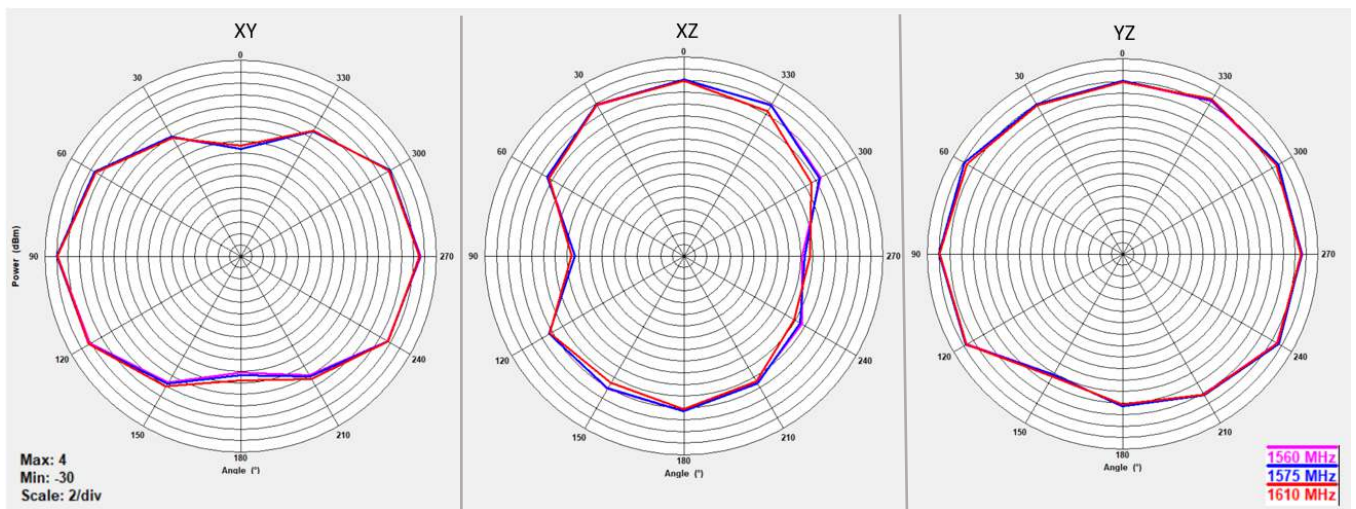




Radiated Performance

2D Polar Plot

The data shown was measured on 2.0mm ABS plastic, RF chokes used to prevent cable radiation.

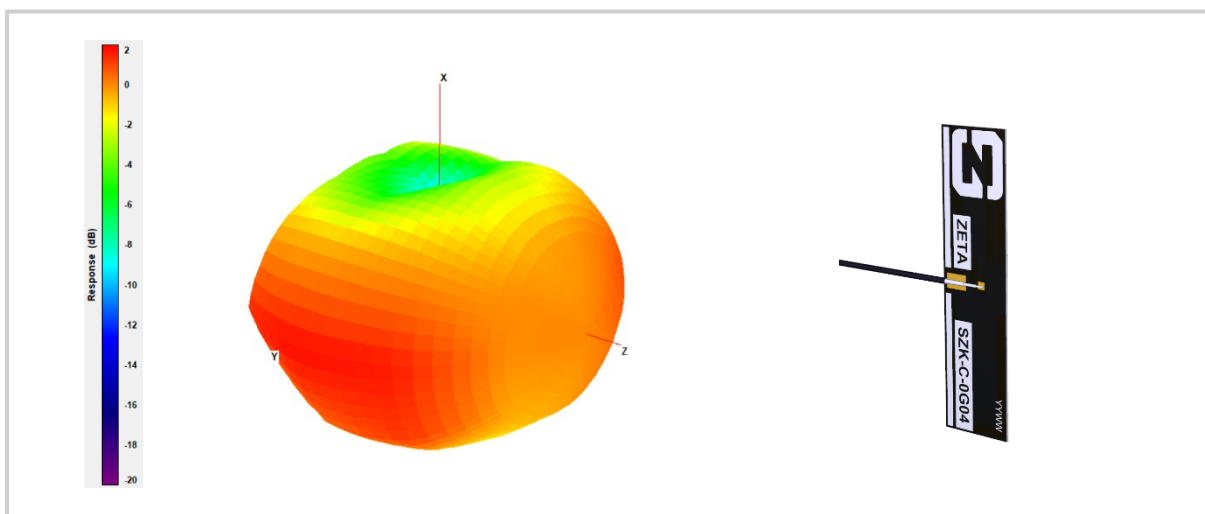
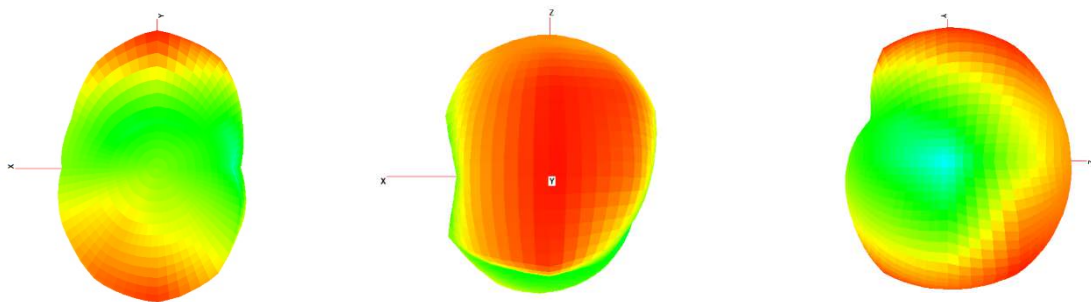
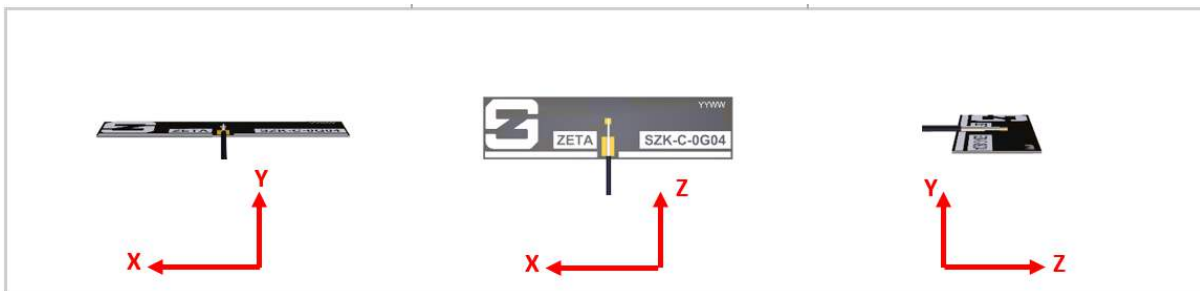




Radiated Performance

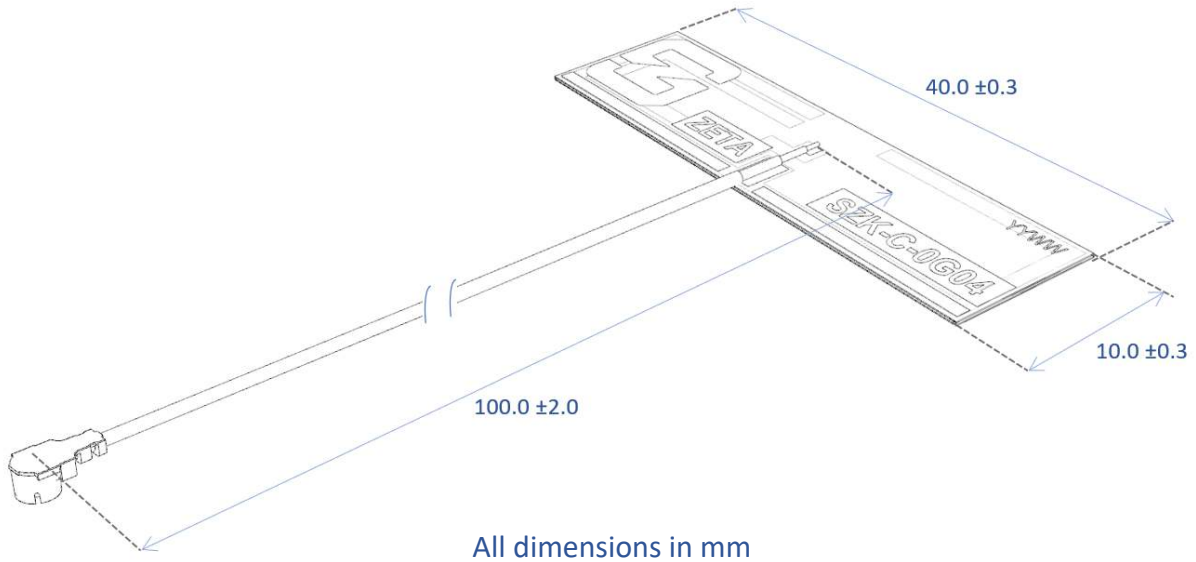
3D Radiation Pattern 1575.42MHz

The data shown was measured on measured on 2.0mm ABS plastic, RF chokes used to prevent cable radiation. The frequency point shown here is 1575.42MHz.

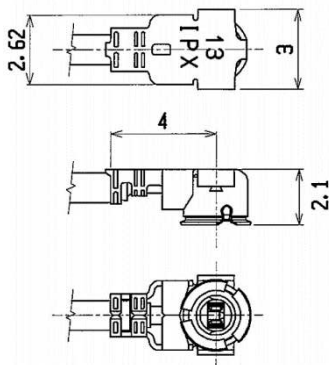


Mechanical

Antenna Mechanical Drawing



The plug connector on the antenna is an IPEX MHFI.



Suitable PCB mating connector (U.FL) example

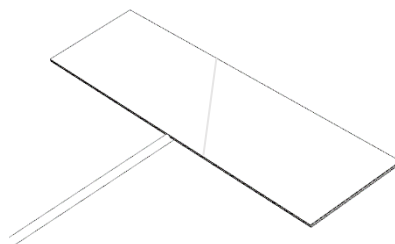
Joymax: Model: CT-MPB01X

www.joymax.com.tw



Adhesive Backing

The antenna comes with 3M 468 adhesive backing upon a PI Kapton substrate. An easy peel cut is on the back side for easy cover removal.



Packaging

Bag and Packaging Information

Antennas Individually packed in PE bag (1 antenna per bag)





100pcs per larger PE bag with product label

Bag dimensions = 180 x 100(mm)



Label

| | |
|--|---|
|  SYNZEN SYNZEN PRECISION TECHNOLOGY | |
| Part Number: | SZK-C-0G04  |
| Description : | GNSS FPC Antenna |
| Name: | ZETA |
| Quantity: | 1000 |
| Date code: | YYWW |
| <small>A3, 4F, No. 58, Zhouzi St, Neihu Dist., Taipei City, 11493, Taiwan Tel: +886 (02) 2659 8030 www.synzen.com.tw</small> | |

- 1000pcs per carton
- Carton dimensions = 33.7 x 32.2 x 10 (cm)



Environmental

Material Regulation

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



Synzen Precision Technology Ltd



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