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

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GNSS FPC Antenna SZK-C-0G04

GNSS L1: **1559 – 1610 MHz**

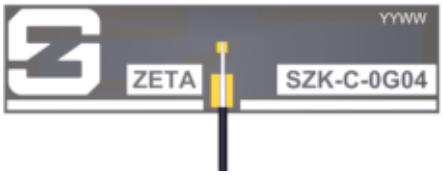
Description

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





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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 ø 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.

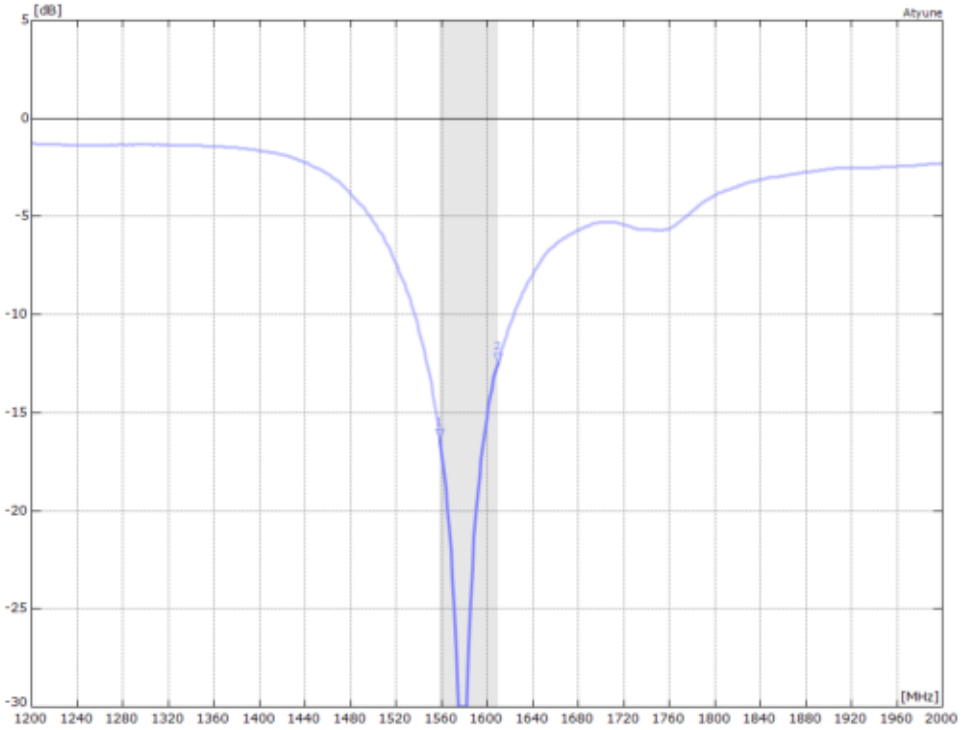
Environmental Specifications

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

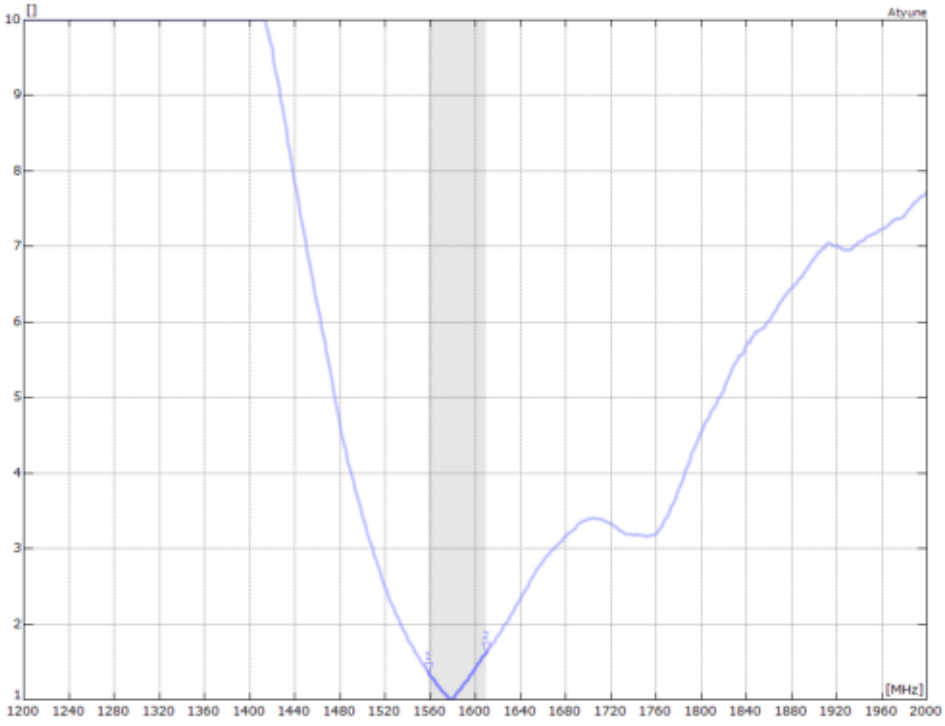
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RF Characteristics

S11 Parameter



VSWR / SMITH CHART

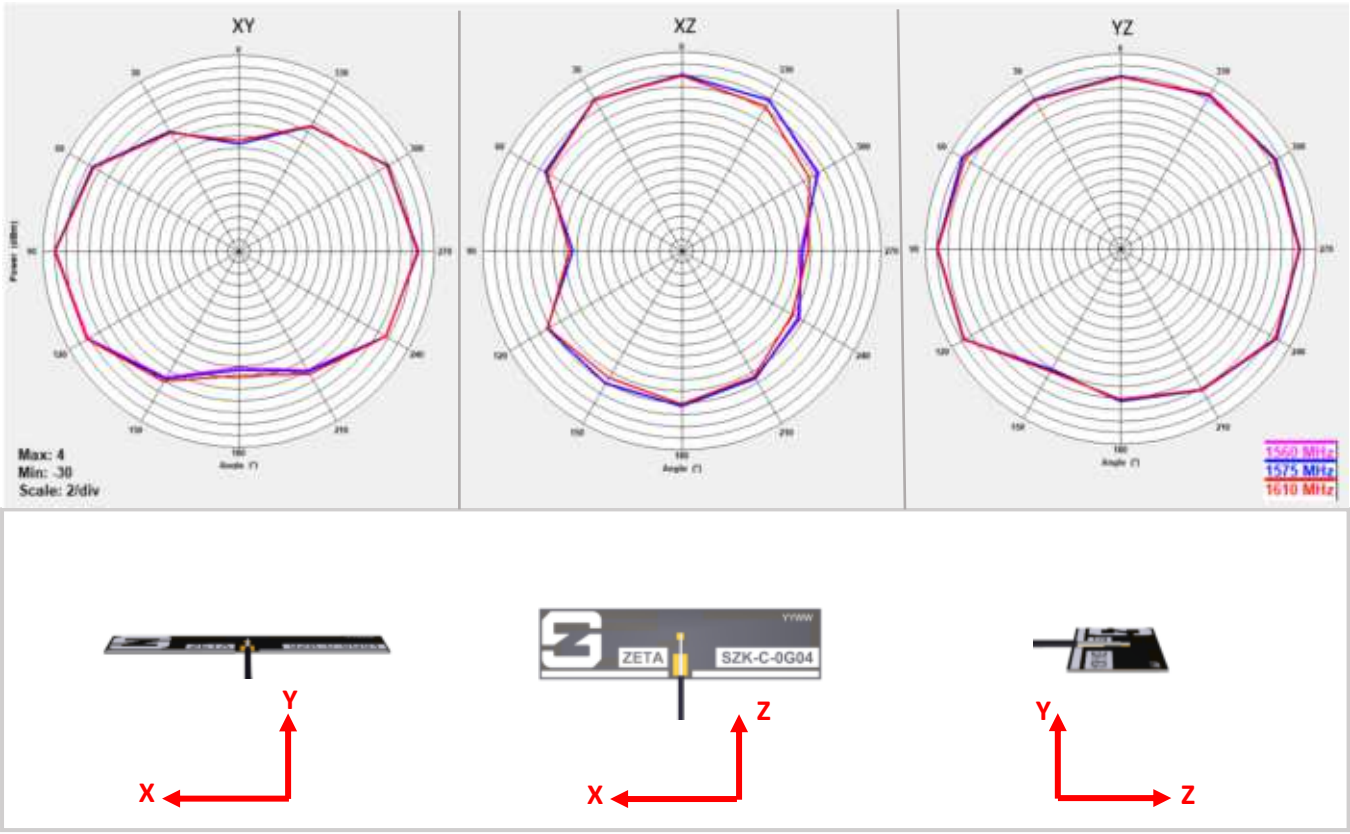


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Radiated Performance

2D Polar Plot

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



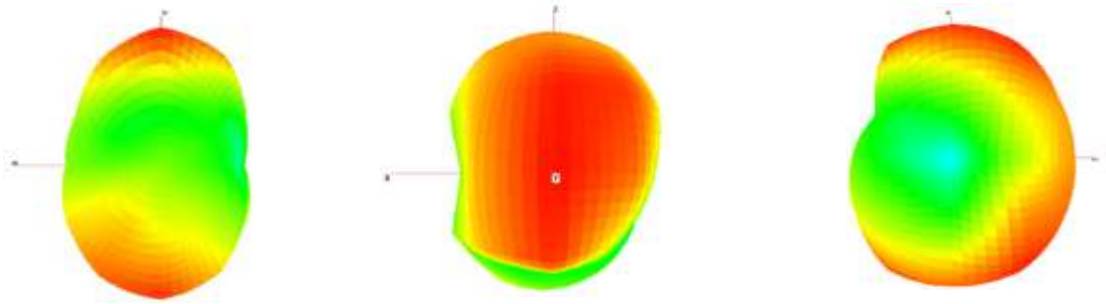
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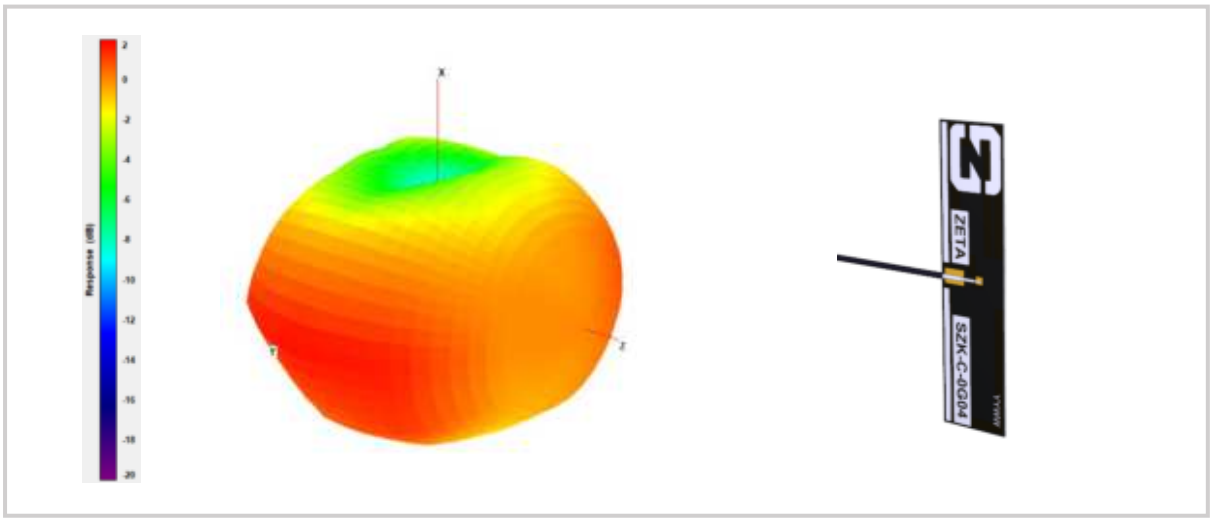
Radiated Performance

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.

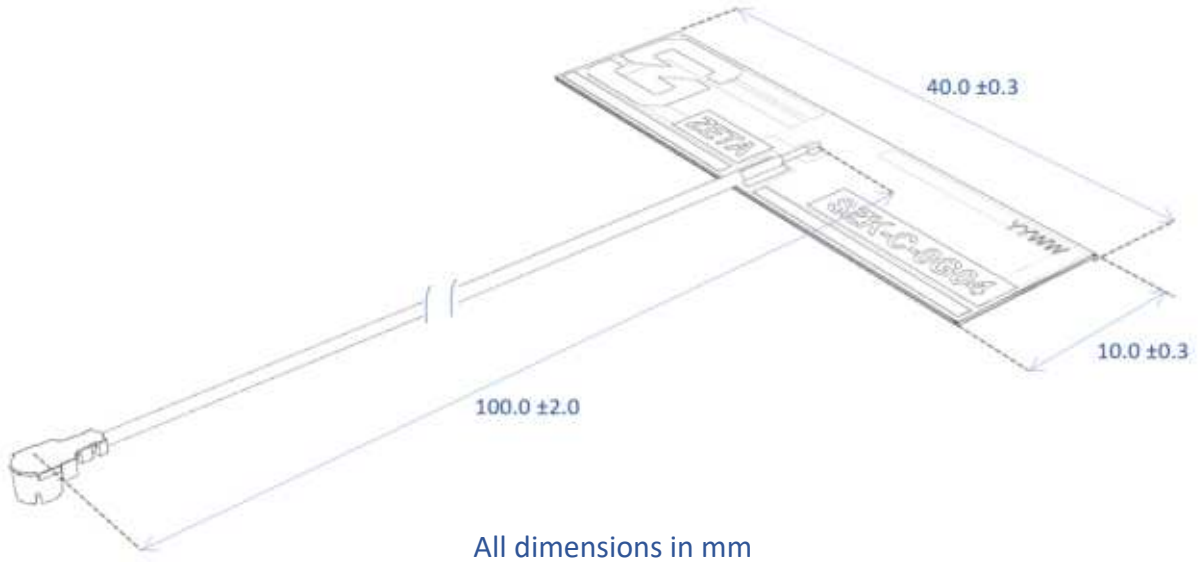






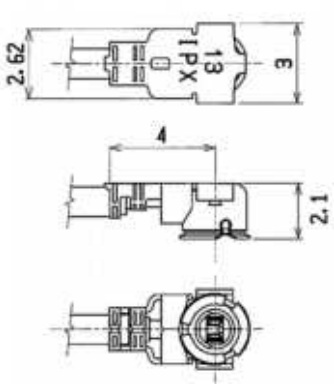
Mechanical

Antenna Mechanical Drawing



All dimensions in mm

The plug connector on the antenna is an IPEX MHFI.



Suitable PCB mating connector (U.FL) example

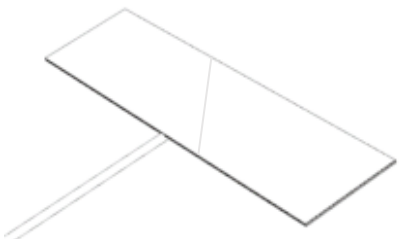
Joymax: Model: CT-MPB01X

www.joymax.com.tw



Adhesive Backing

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



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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



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

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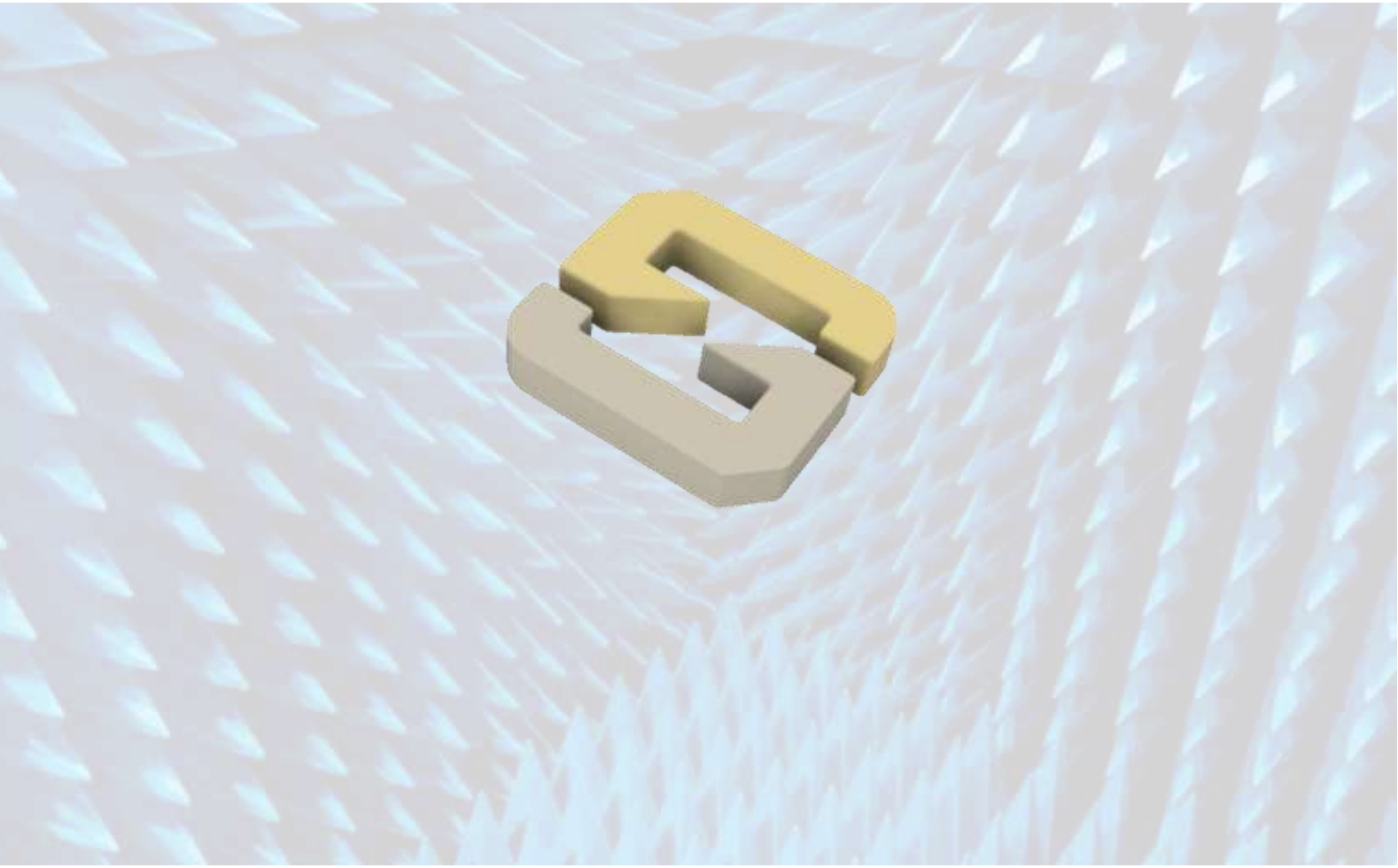
Environmental

Material Regulation

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

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