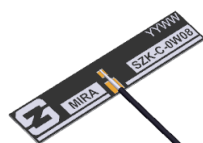




Dual Band WLAN FPC Antenna

SZK-C-0W08

WLAN: 2400 – 2500MHz; 4900 – 5850MHz; 5925 – 7125MHz



For Wi-Fi 6E applications in the 6 GHz band (5.925 GHz to 7.125 GHz) plus 2.4 GHz and 5 GHz Wi-Fi/WLAN solutions.

Name: MIRA

Part Number: SZK-C-0W08

Description: WLAN (802.11a/b/g/n/ac FPC with cable and connector IPEX MHFI (U.FL))

- Flexible PCB Antenna using 3M 468 adhesive
- Dimensions: 30 x 6 x 0.2 (mm)
- Cable: 150mm length, 1.13mm diameter
- RoHS & Reach Compliant



Dual Band WLAN FPC Antenna

SZK-C-0W08

WLAN: 2400 – 2500MHz; 4900 – 5850MHz; 5925 – 7125MHz

Description

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

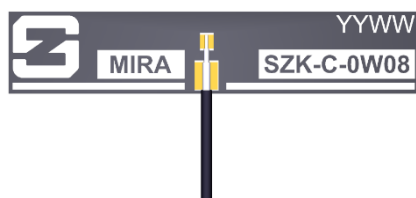
- For WLAN Applications 2.4-2.5GHz; 4.9-5.85GHz; 5.9 – 7.1GHz
- Alternate cable lengths available upon request, contact sales@synzen.com.tw
- Ideal for MIMO systems 2x2, 4x4, 8x8.
- Simple integration, plug and operate the device without designing onboard antenna.
- Can be tuned for various environments and plastic thickness with additional Pi network, free tuning service available.

Applications

Access Points
Smart Grid

M2M Industrial
Healthcare

Smart Meters
Set Top Box





General Specifications

Mechanical Specifications

Part Number	SZK-C-0W08
Name	MIRA
Dimensions	30 x 6.0 x 0.2 (mm)
Weight	<1g
Antenna Type	FPC + Cable
Cable Length	150mm, Black
Cable Type	Mini Coax $\varnothing$ 1.13mm
Connector	MHFI (U.FL Compatible)
Adhesive backing	3M 468

RF Specifications

Frequency Range	2400 – 2500MHz	4900 – 5850MHz	5925 – 7125MHz
Average Efficiency	>70%	>60%	>70%
Peak Gain	3.40dBi	4.20dBi	4.85dBi
S11 (max)	<-14.0dB	<-10.0dB	<-8.0dB
VSWR (max)	1.85:1	1.90:1	3.20:1
Impedance	50 Ω		
Polarization	Linear		
Max Input Power	3W		

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

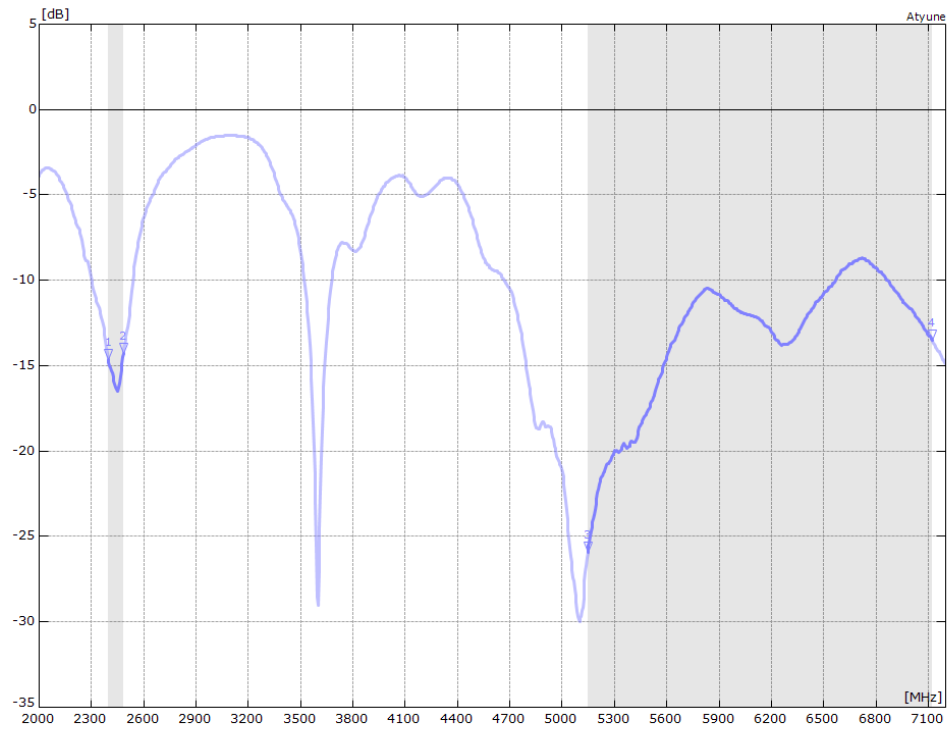
Environmental Specifications

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

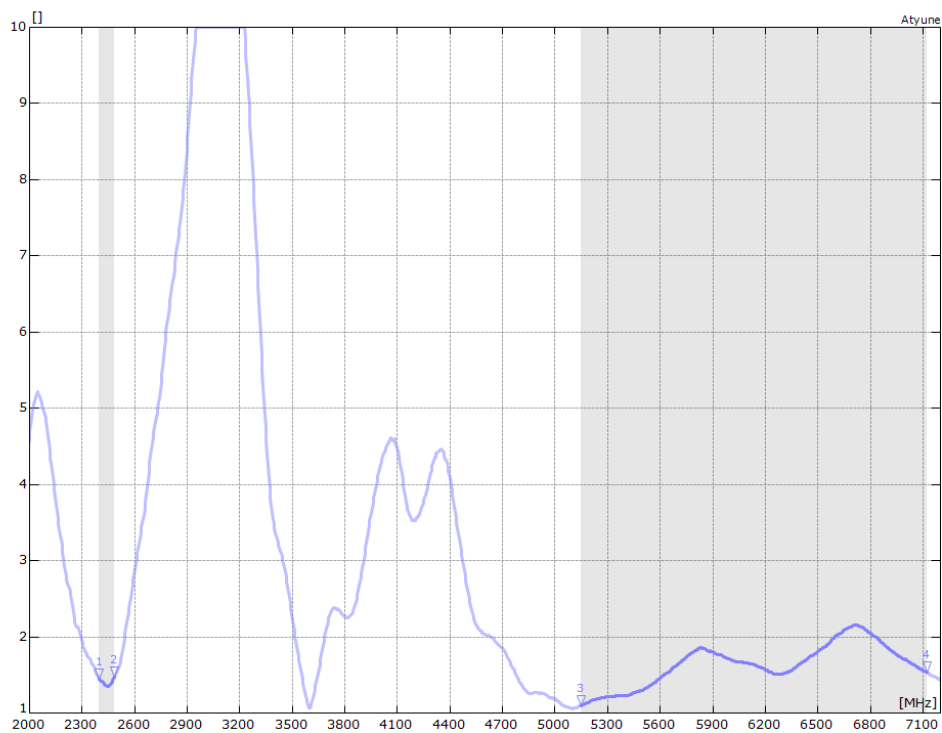


RF Characteristics

S11 Parameter



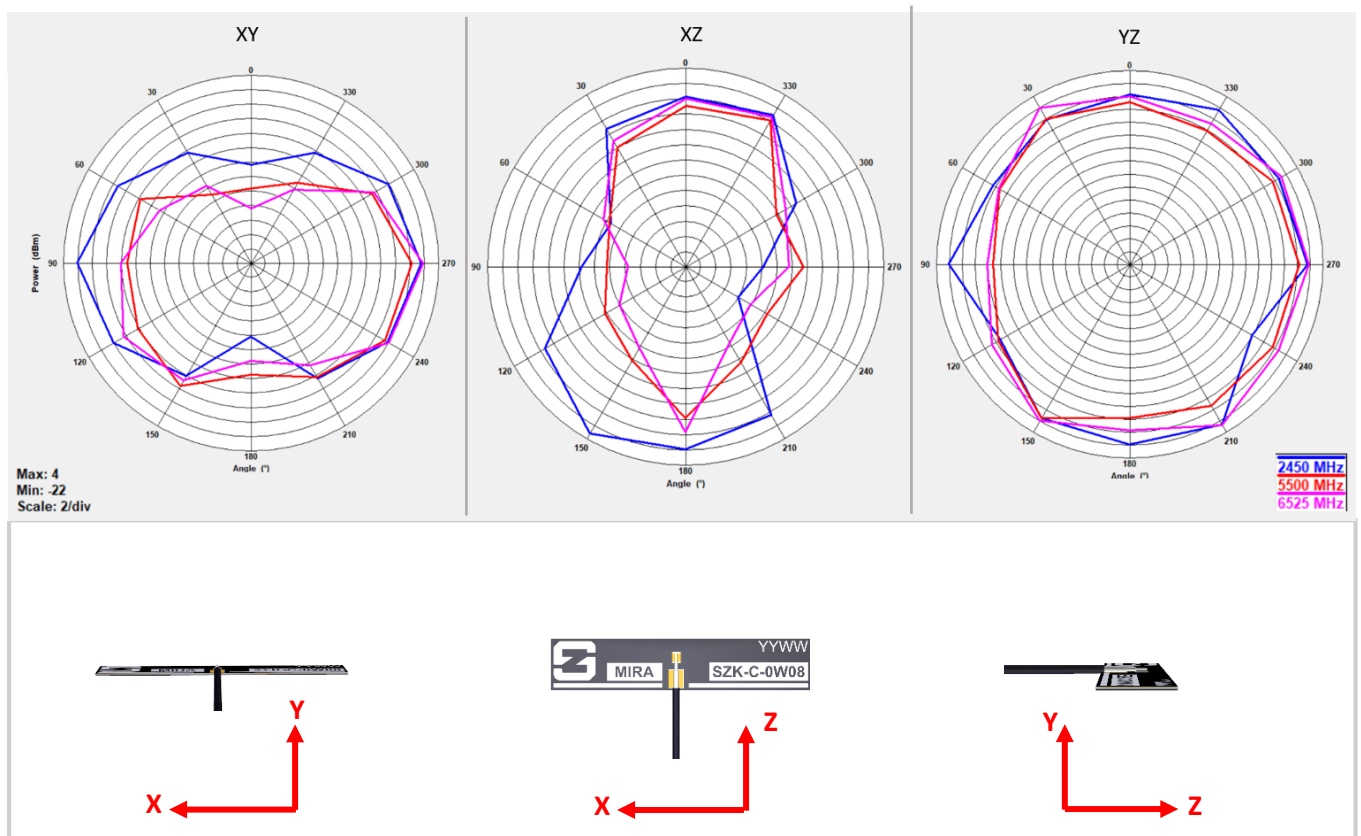
VSWR



Radiated Performance

2D Polar Plot

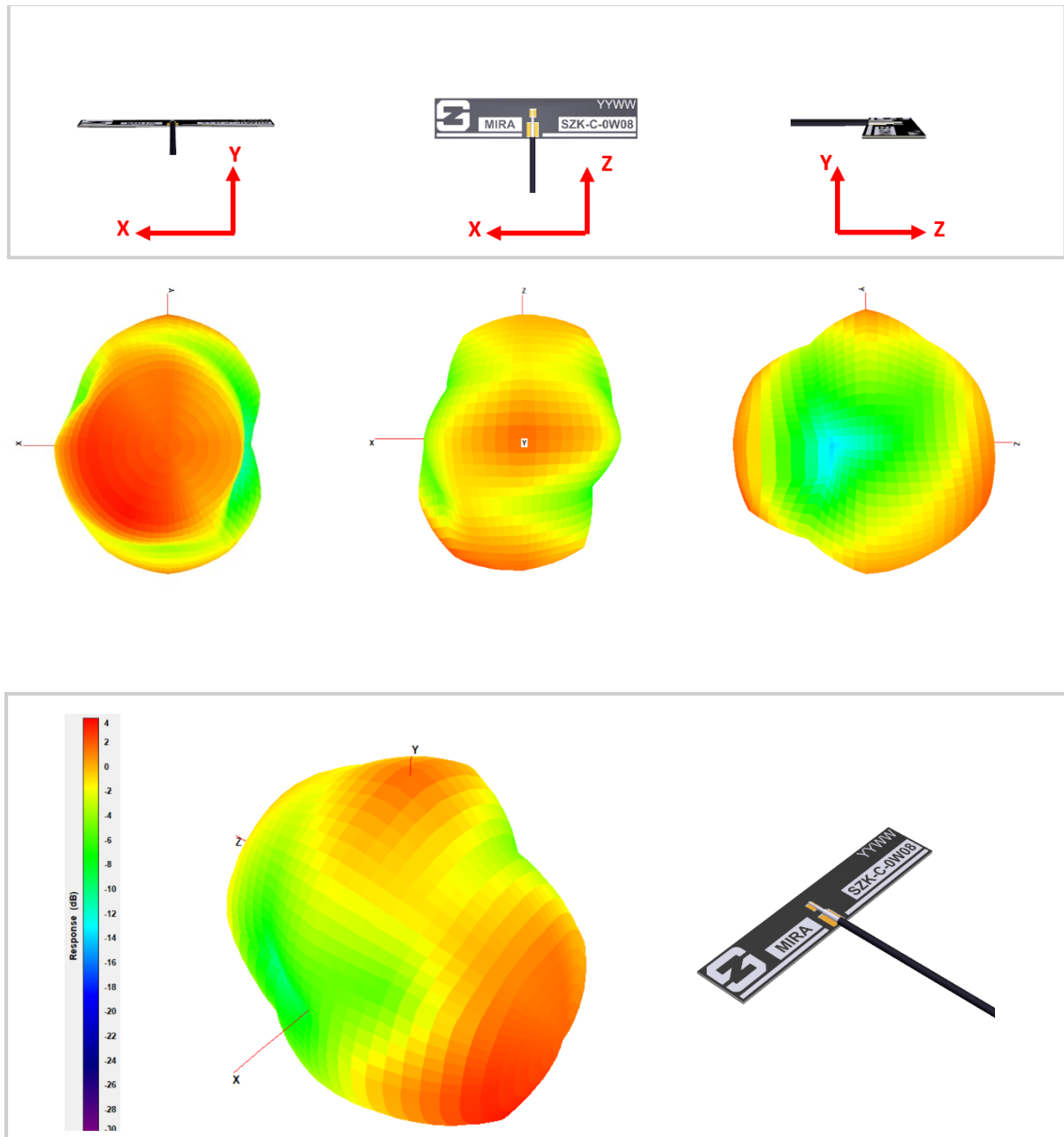
The data shown was measured on 2.0mm ABS plastic, RF chokes used to prevent cable radiation.



Radiated Performance 2400-2500MHz

3D Radiation Pattern

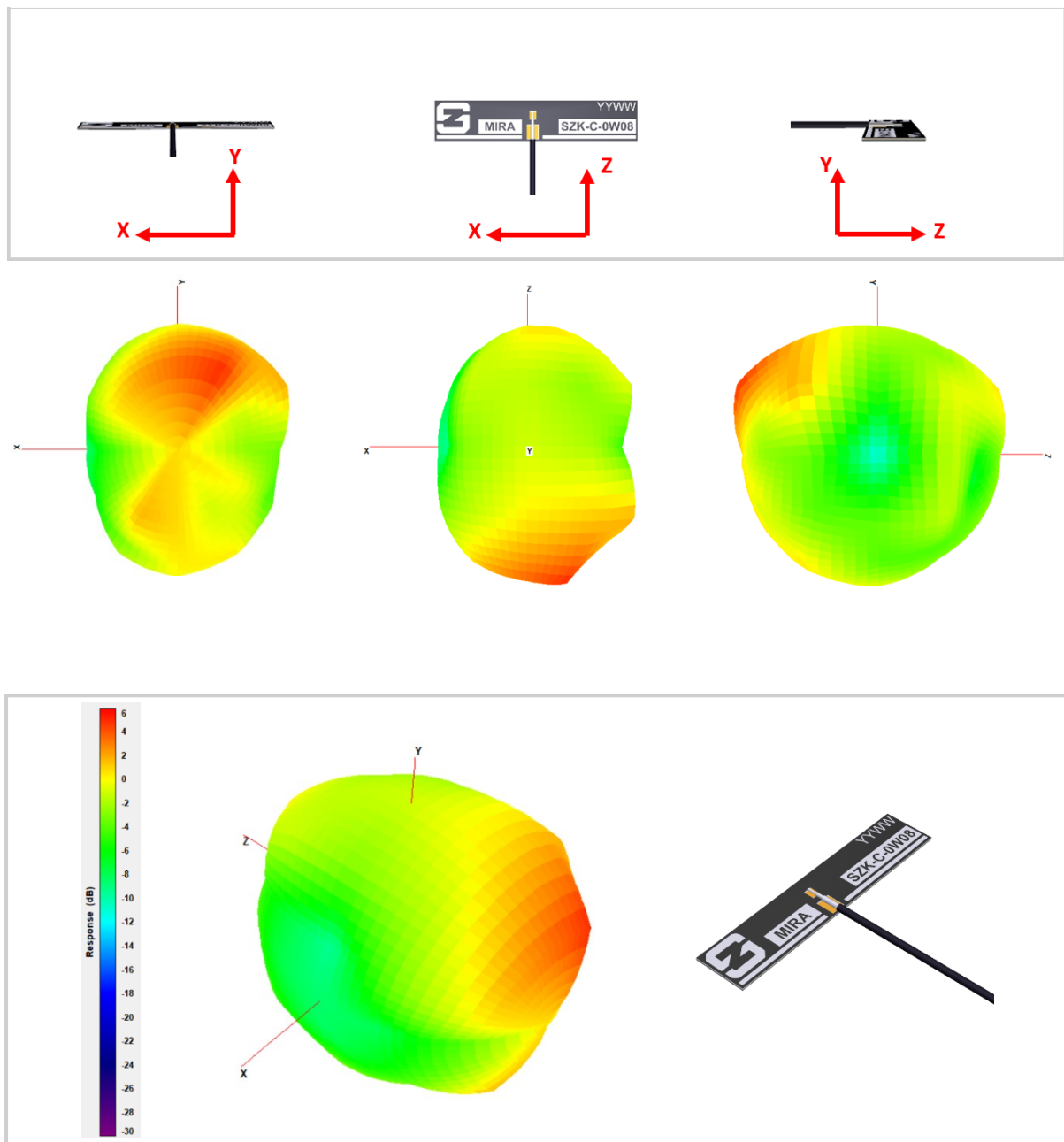
The data shown was measured on measured on 2.0mm ABS plastic, RF chokes used to prevent cable radiation. The frequency point shown here is 2450MHz.



Radiated Performance 4900-6000MHz

3D Radiation Pattern

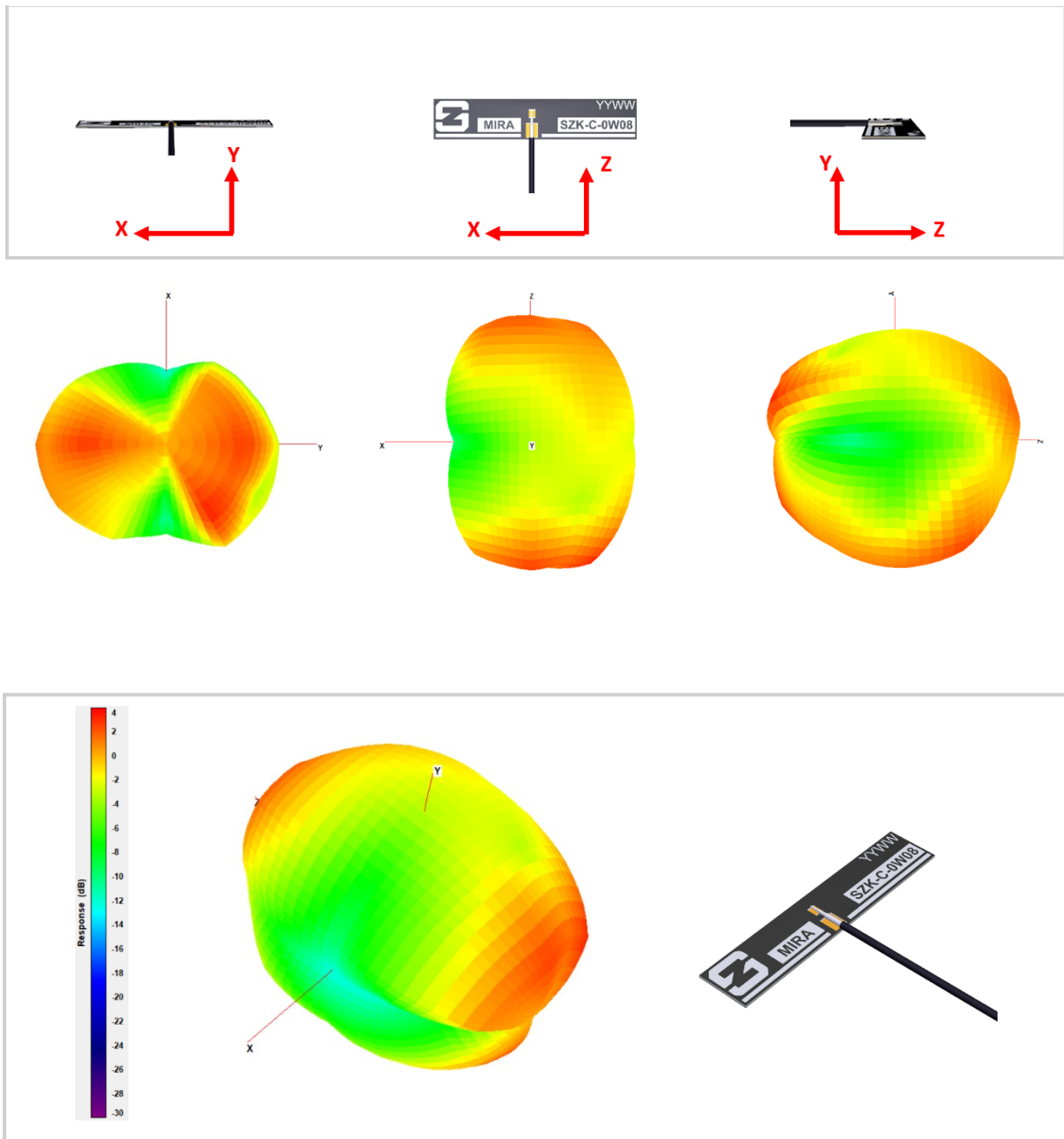
The data shown was measured on measured on 2.0mm ABS plastic, RF chokes used to prevent cable radiation. The frequency point shown here is 5500MHz.



Radiated Performance 5925-7125MHz

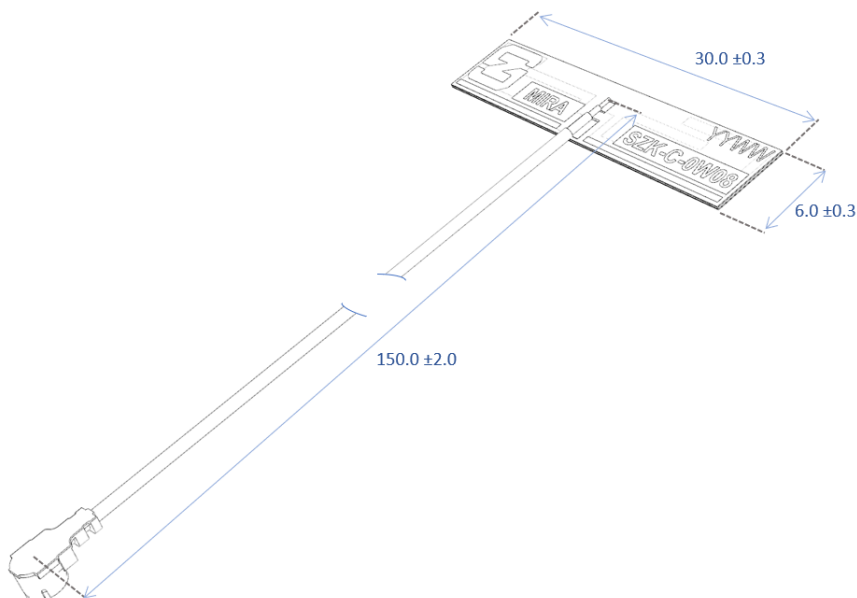
3D Radiation Pattern

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 6500MHz.

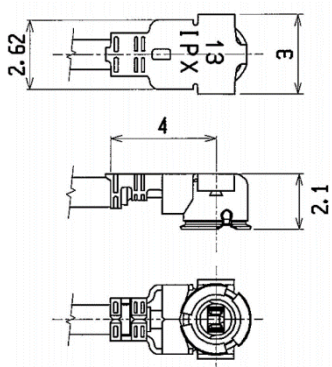


Mechanical

Antenna Mechanical Drawing



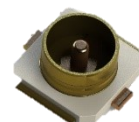
The plug connector on the antenna cable is an IPEX MHFI.



Suitable PCB mating connector (U.FL) example

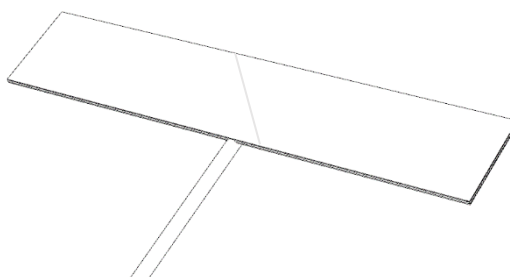
Joymax: Model: CT-MPB01X

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-0W08
Description :	WLAN Tri-Band FPC Antenna
Name:	MIRA
Quantity:	1000
Date code:	YYWW
A3, 4F, No. 58, Zhouzi St, Neihu Dist., Taipei City, 11493, Taiwan Tel: +886 (02) 2659 8030 www.synzen.com.tw	

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



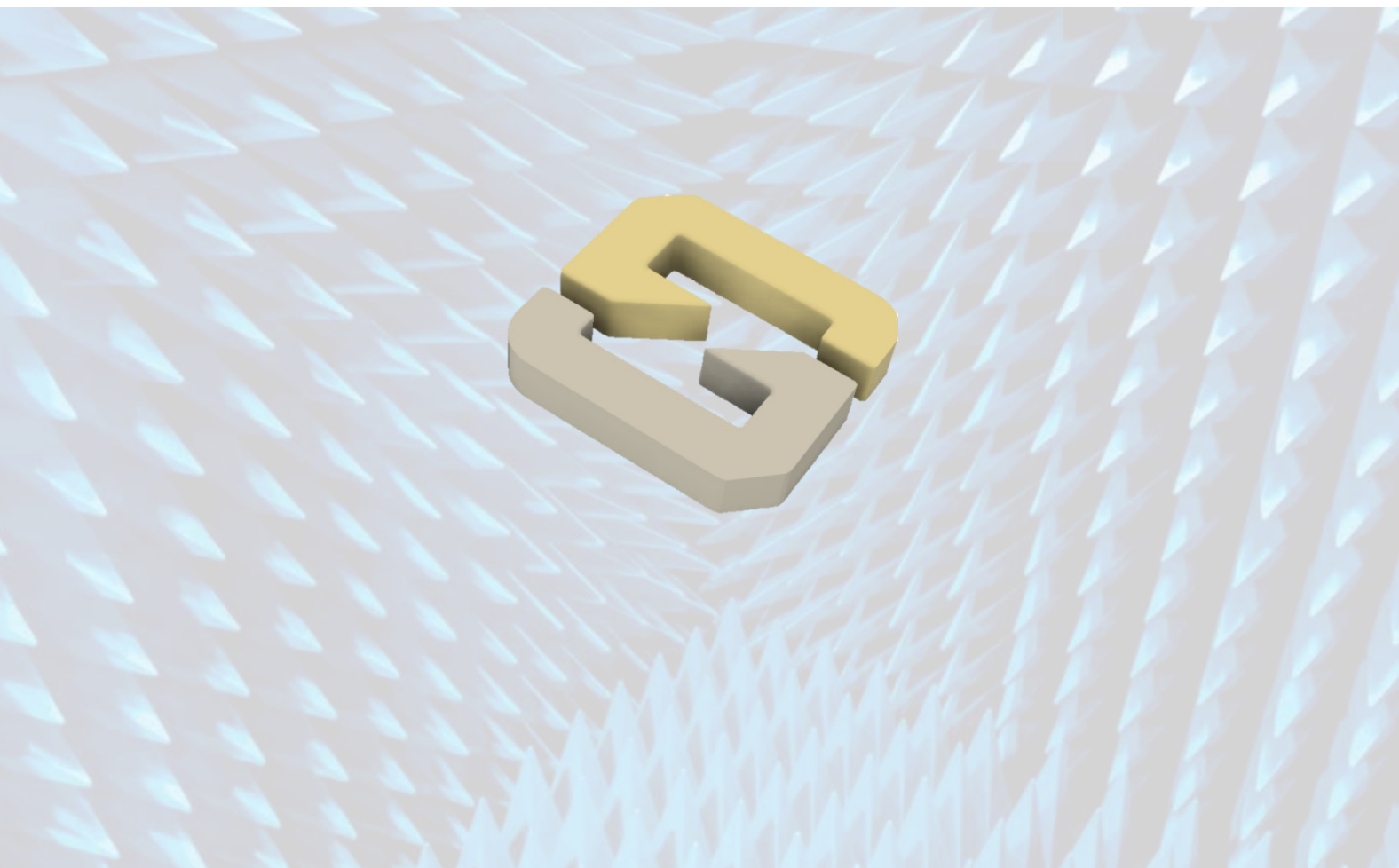
Environmental

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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SYNZEN

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