

3.2 x 1.6 x 0.5 (mm) WiFi/Bluetooth Ceramic Chip Antenna (AA055U) Engineering Specification

1. Product Number

H 2 U 3 4 W 1 H 1 Z 0 7 0 0



2. Features

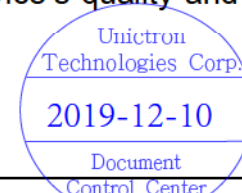
- *Stable and reliable in performances
- *Low profile, compact size
- *RoHS 2.0 compliance
- *SMT processes compatible

3. Applications

- *ISM 2.4 GHz applications
- *ZigBee/BLE applications
- *Bluetooth earphone systems
- *Hand-held devices when WiFi / Bluetooth functions are needed, e.g., Smart phones
- *IEEE802.11 b/g/n
- *Wireless PCMCIA cards or USB dongles

4. Description

Unictron's AA055U ceramic chip antenna is designed for ISM 2.4GHz applications, covering frequencies 2400~2500MHz. Fabricated with proprietary design and processes, AA055U shows excellent performance and is fully compatible with SMT processes which can decrease the assembly cost and improve device's quality and consistency.



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Prepared by : Jane

Designed by : James

Checked by : Mike

Approved by : Herbert

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5-2. Electrical Specifications (Evaluation Board Dimensions: 80 x 40 mm²)

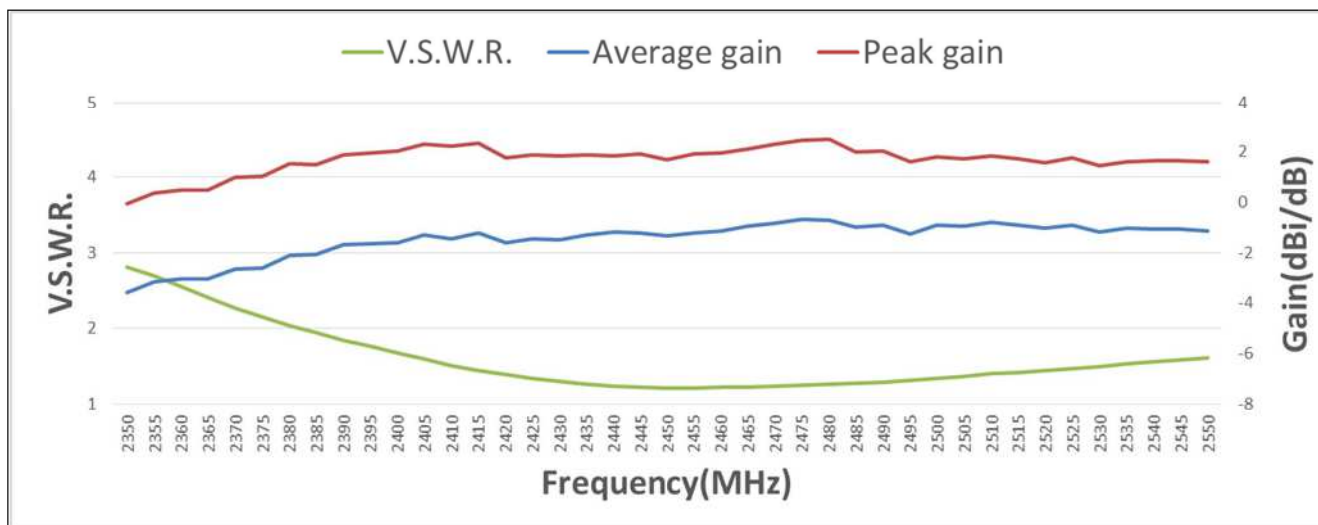
5-2-1. Electrical Table

Characteristics		Specifications	Unit
Outline Dimensions		3.2 x 1.6 x 0.5	mm
Ground Plane Dimensions		80 x 40	mm
Working Frequency		2400~2500	MHz
VSWR (@ center frequency)*		2 Max.	
Characteristic Impedance		50	Ω
Polarization		Linear Polarization	
Peak Gain	(@2442 MHz)	1.8 (typical**)	dBi
Efficiency		76.3 (typical**)	%

*Center frequency means the frequency with the lowest value in return loss of the chip antenna on the evaluation board.

**A typical value is for reference only, not guaranteed.

5-2-2. Frequency vs. V.S.W.R. and Total Radiation Gain



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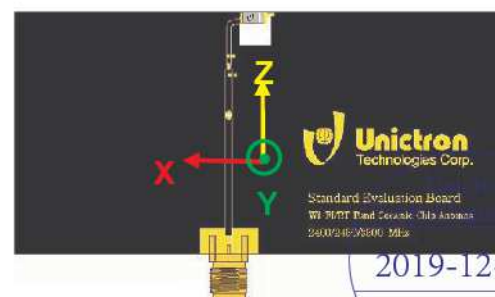
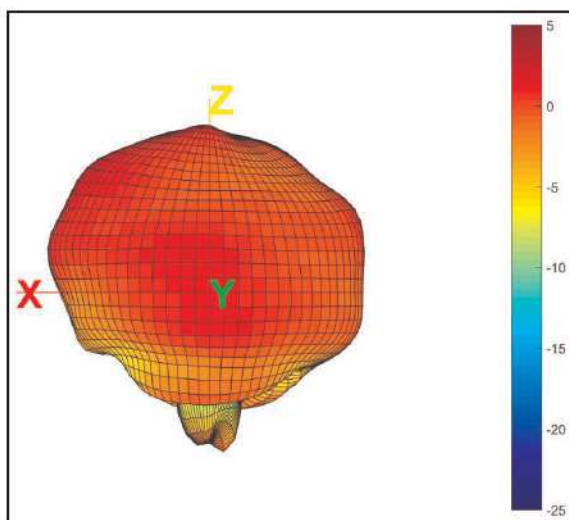
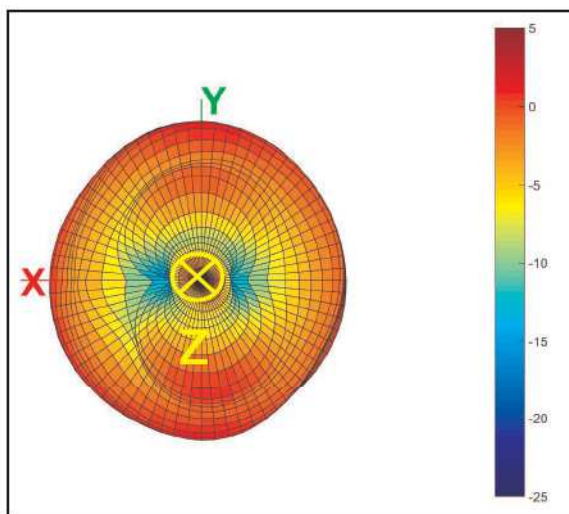
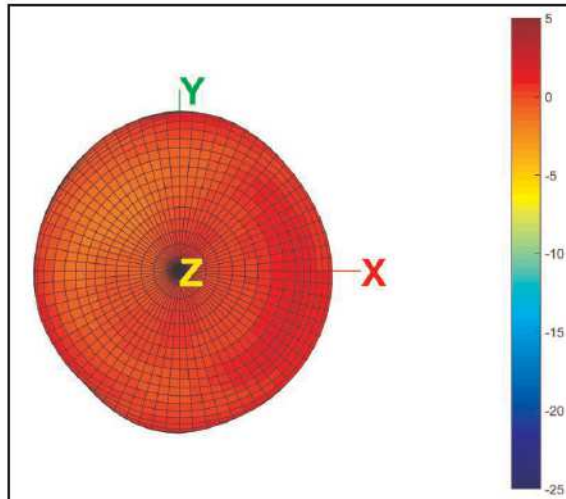
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7. 3D Radiation Gain Pattern (with 80 x 40 mm² Evaluation Board)

3D Radiation Gain Pattern @ 2442 MHz (unit: dBi)



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