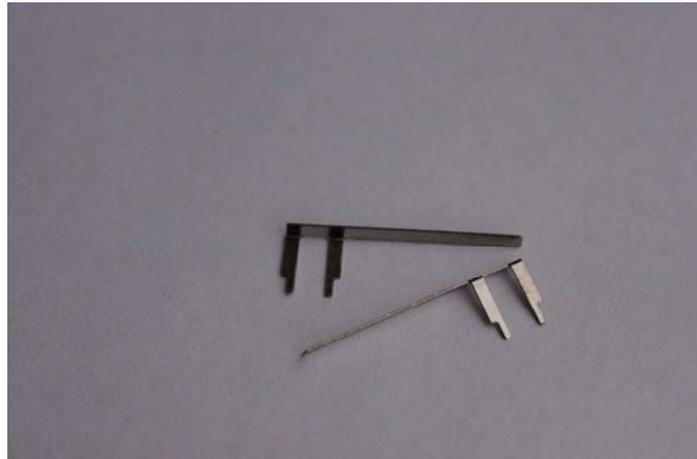


WiFi/BT Metal Stamping Antenna (AA113)

1. Explanation of Part Number

H	2	B	2	B	C	1	H	1	B	0	1	0	0
		(1)		(2)		(3)		(4)		(5)		(6)	



Product Code:

(1) Product Categories:

B2: 2.4G Metal Stamping Antenna

(2) Applications:

B: WiFi

(3) Dimensions:

C1: 29x2.6x8.6(mm)

(4) Material:

H: Tinfoil nickel plating

(5) Working Frequency and Polarization:

1B: 2400MHz ~ 2500MHz / linear polarization

(6) Antenna Series:

01: serial number

Tolerances (Unless otherwise specified) X : ± 1 X.X : ± 0.1 X.XX : ± 0.01 Angle : ± Hole Dia. : ±		 Unictron Technologies Corporation Website: www.unictron.com		
Scale :	Unit : mm	THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION		
Drawn By : Gilespi	Checked By : Jason			
Designed By : Wilson	Approved By : Jaixing			
TITLE : WiFi/BT Metal Stamping Antenna (AA113)		DOCUMENT NO.	H2B2BC1H1B0100	REV. A

2. Features

- *Stable and reliable in performances
- *Low temperature coefficient of frequency
- *RoHS compliance

3. Applications

- *2.4G Systems

4. Description

*Unictron's 2.4G antenna is specially designed for 2.4G applications. It has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5. Electrical Specifications

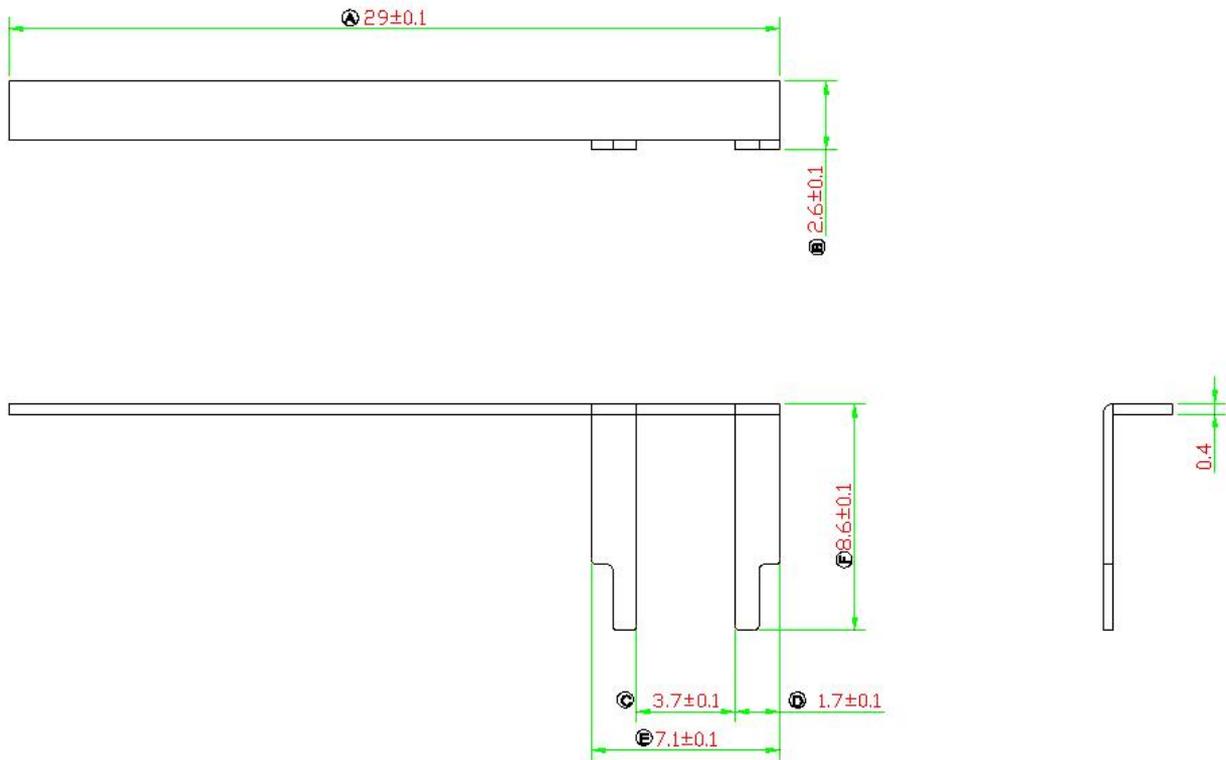
Characteristics		Specifications	Unit
Outline Dimensions		29 x 2.6 x 8.6	mm
Frequency Range		2400 ~ 2500	MHz
VSWR		2 max	
Impedance		50	Ω
Polarization		Linear Polarization	
Gain	Peak	Type A: 2.5 @2450MHz Type B: 2.5 @2450MHz	dBi
	Efficiency	Type A: 50 @2450MHz Type B: 50 @2450MHz	%
Temperature Coefficient of Frequency		0 \pm 20 max (@ -20 $^{\circ}$ C ~ 80 $^{\circ}$ C)	ppm/ $^{\circ}$ C

Note :

1. These test results are based on customer's housing and ground plane (please refer to No.7).

Tolerances (Unless otherwise specified) X : ± 1 X.X : ± 0.1 X.XX : ± 0.01 Angle : \pm Hole Dia. : \pm		 Unictron Technologies Corporation Website: www.unictron.com		
Scale :	Unit : mm	THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION		
Drawn By : Gilespi	Checked By : Jason			
Designed By : Wilson	Approved By : Jaixing			
TITLE : WiFi/BT Metal Stamping Antenna (AA113)		DOCUMENT NO.	H2B2BC1H1B0100	REV. A

6. Antenna Dimensions (unit: mm)



7. Antenna Assembly Location Diagram & Layout Guide:

(1) Test Board



Type A



Type B

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm



Unictron Technologies Corporation
Website: www.unictron.com

Scale : Unit : mm

Drawn By : Gilespi Checked By : Jason

Designed By : Wilson Approved By : Jaixing

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : WiFi/BT Metal Stamping Antenna (AA113)

DOCUMENT NO.

H2B2BC1H1B0100

REV.

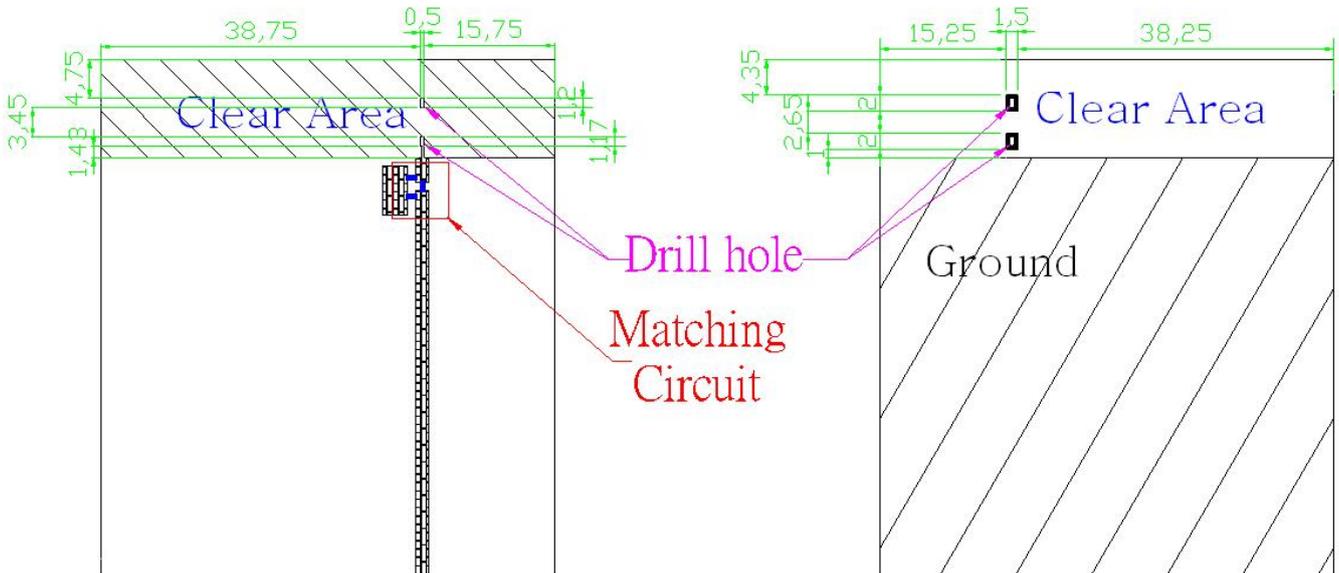
A

(2)Layout Guide

Type A:

TOP

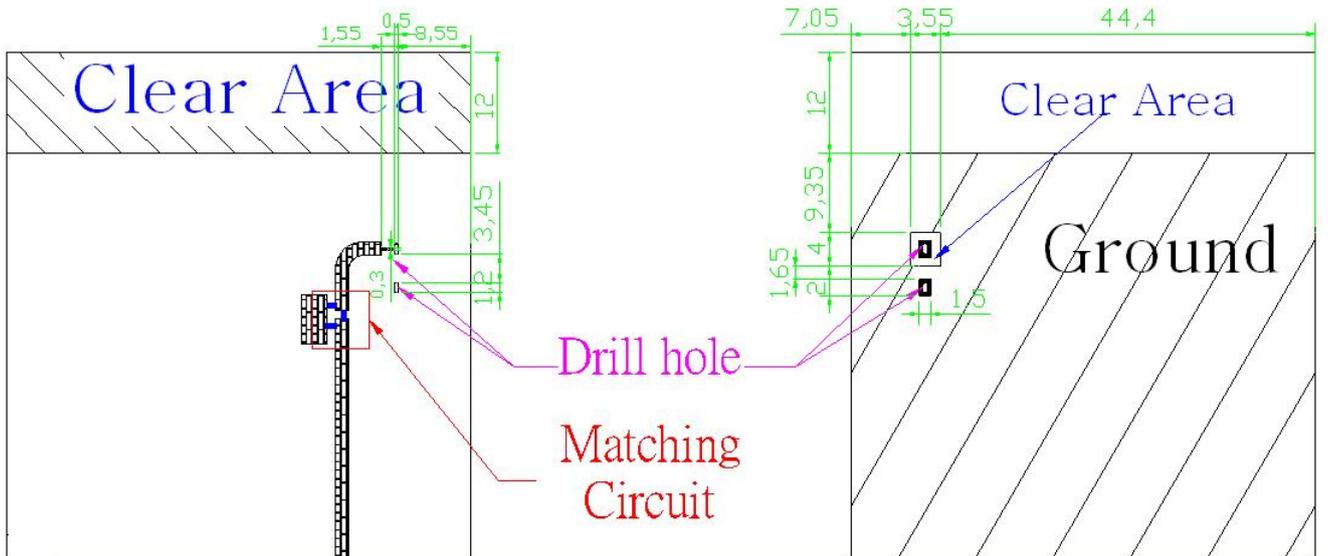
BOTTOM



Type B:

TOP

BOTTOM



Tolerances (Unless otherwise specified)	
X : ± 1	X.X : ± 0.1 X.XX : ± 0.01
Angle : ±	Hole Dia. : ±
Scale :	Unit : mm
Drawn By : Gilespi	Checked By : Jason
Designed By : Wilson	Approved By : Jaixing

 Unictron Technologies Corporation Website: www.unictron.com	THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION	
	DOCUMENT NO.	H2B2BC1H1B0100

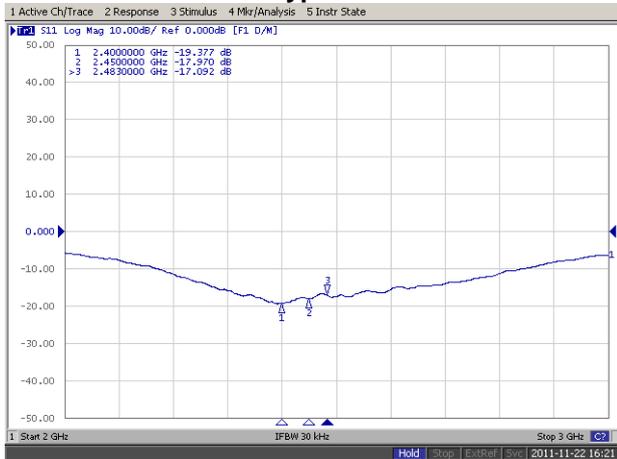
TITLE : WiFi/BT Metal Stamping Antenna (AA113)

DOCUMENT NO.	H2B2BC1H1B0100	REV.
		A

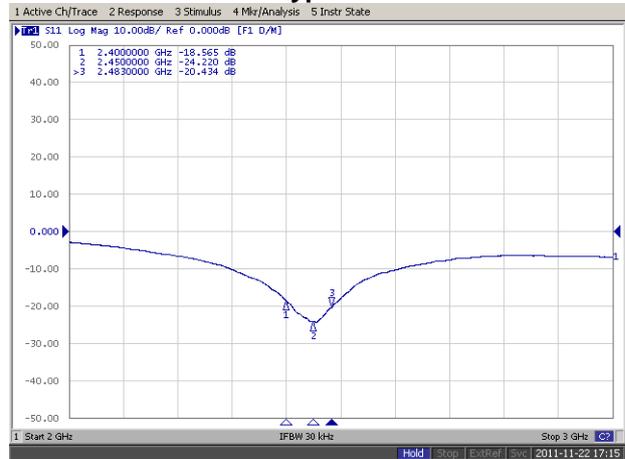
8. Electrical Characteristics

(1) Return Loss

Type A

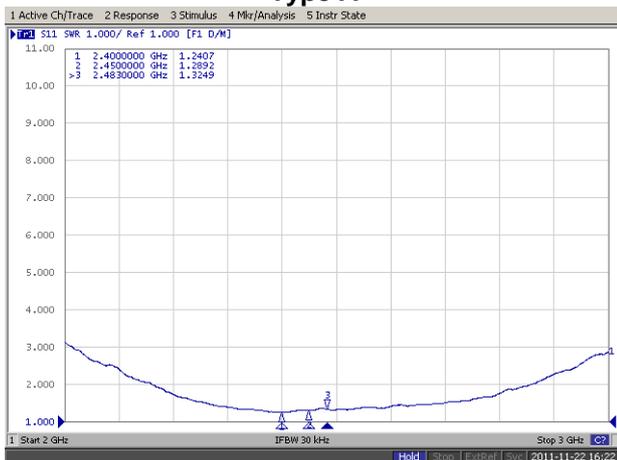


Type B

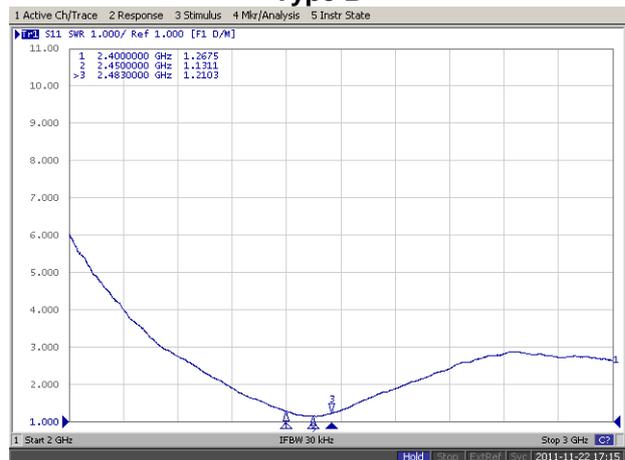


(2) VSWR

Type A



Type B



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : ± Hole Dia. : ±

Scale : Unit : mm

Drawn By : Gilespi Checked By : Jason

Designed By : Wilson Approved By : Jaixing



Unictron Technologies Corporation
Website: www.unictron.com

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

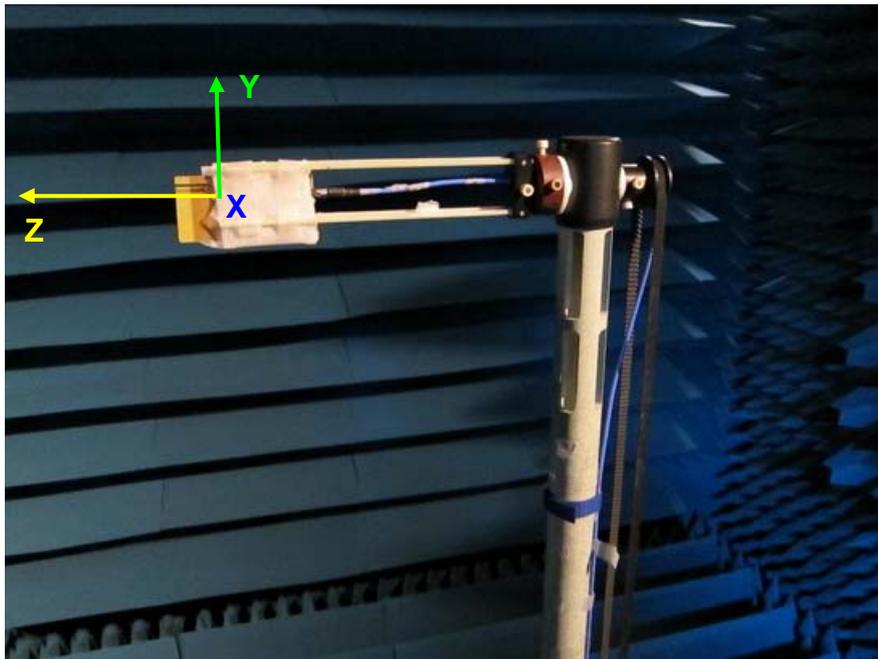
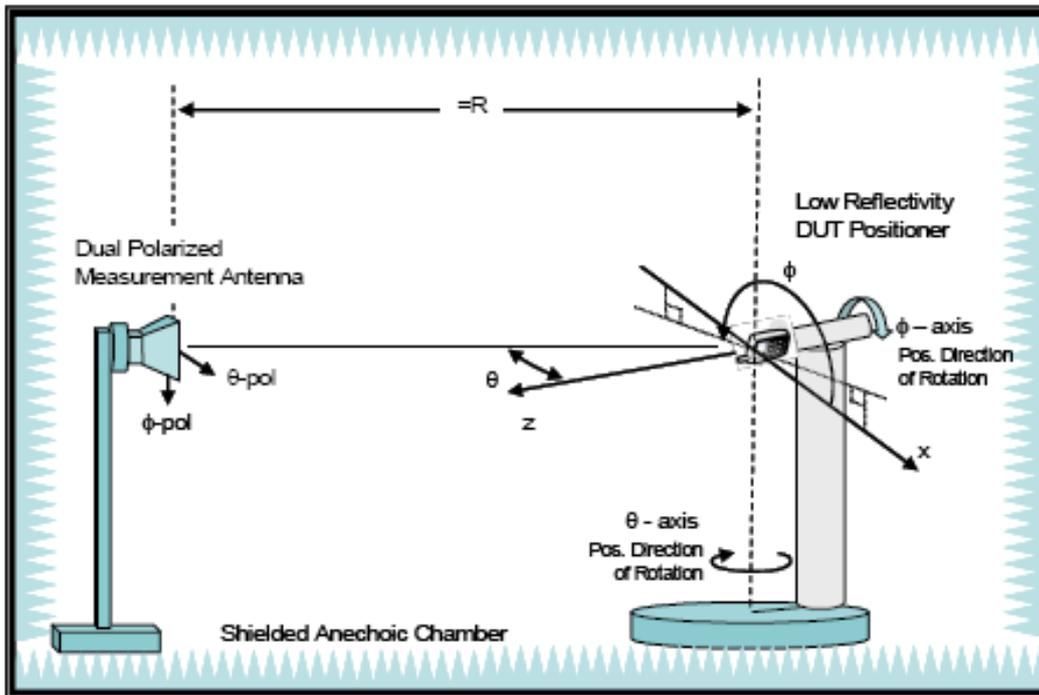
TITLE : WiFi/BT Metal Stamping Antenna (AA113)

DOCUMENT NO.

H2B2BC1H1B0100

REV. A

(3) Three D Radiation Pattern measurements



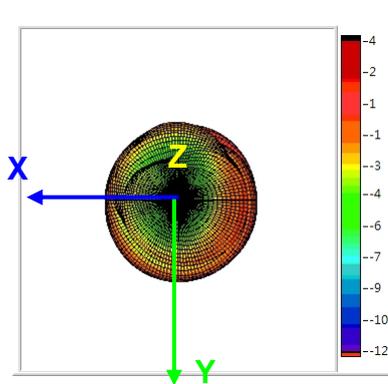
The definition of the measurement face

Tolerances (Unless otherwise specified) X : ± 1 X.X : ± 0.1 X.XX : ± 0.01 Angle : \pm Hole Dia. : \pm		 Unicon Technologies Corporation Website: www.unicon.com		
Scale :	Unit : mm	THIS SPECIFICATION IS THE PROPERTY OF UNICON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION		
Drawn By : Gilespi	Checked By : Jason			
Designed By : Wilson	Approved By : Jaixing			
TITLE : WiFi/BT Metal Stamping Antenna (AA113)		DOCUMENT NO.	H2B2BC1H1B0100	REV. A

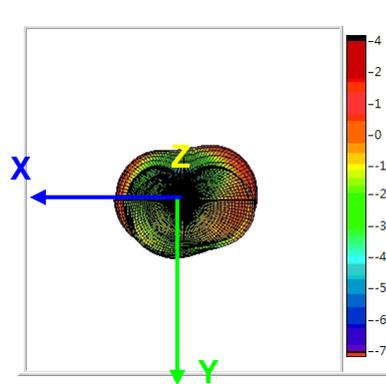
(4)WiFi/BT Antenna Three D Radiation Pattern (unit : dBi)

a. 2400MHz

Type A (Up View)

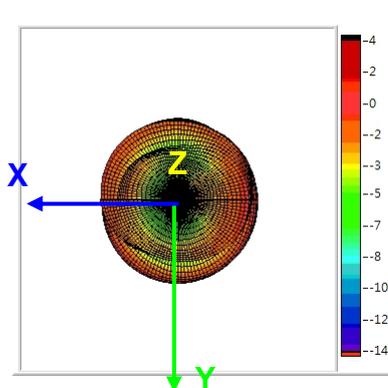


Type B (Up View)

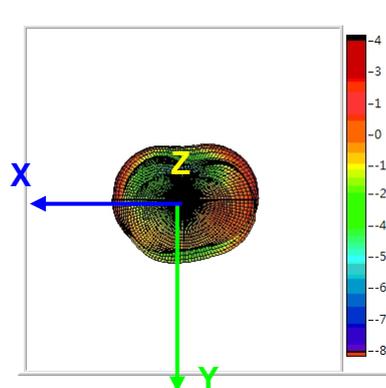


b. 2450MHz

Type A (Up View)

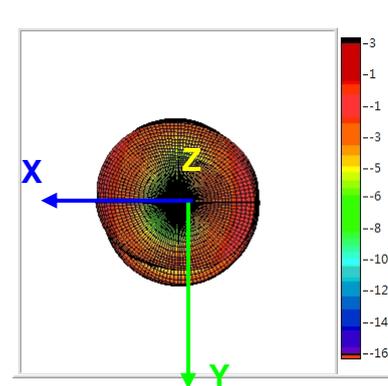


Type B (Up View)

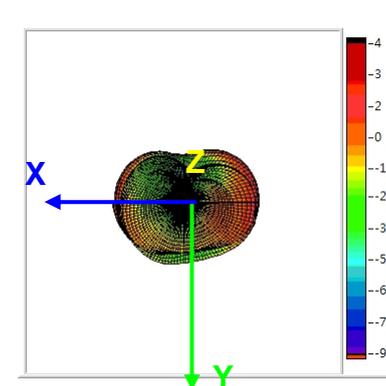


c. 2483MHz

Type A (Up View)



Type B (Up View)



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm



Unictron Technologies Corporation
Website: www.unictron.com

Scale : Unit : mm

Drawn By : Gilespi Checked By : Jason

Designed By : Wilson Approved By : Jaixing

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : WiFi/BT Metal Stamping Antenna (AA113)

DOCUMENT NO.

H2B2BC1H1B0100

REV.

A

(5)Three D Gain Table

Type A:

Frequency(MHz)	2400	2450	2483
Total Rad. Pow. (dBi)	-1.66	-1.58	-1.78
Peak Gain(dBi)	3.8	3.67	3.45
Efficiency(%)	63.23	64.5	61.37

Type B:

Frequency(MHz)	2400	2450	2483
Total Rad. Pow. (dBi)	-1.57	-1.36	-1.14
Peak Gain(dBi)	3.54	3.79	4.14
Efficiency(%)	64.66	68.11	71.91

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm



Unictron Technologies Corporation
Website: www.unictron.com

Scale : Unit : mm

Drawn By : Gilespi Checked By : Jason

Designed By : Wilson Approved By : Jaixing

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : WiFi/BT Metal Stamping Antenna (AA113)

DOCUMENT NO.

H2B2BC1H1B0100

REV.

A