

Antenna Specification

Product Name : FPCB Antenna

Model Name: WW20D0

Antenna type: FPCB



詠業科技股份有限公司
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20.0 x 7.0 x 0.15 (mm) WiFi FPCB Antenna (WW20D0)

Engineering Specification

1. Explanation of Product Number

<u>H</u>	<u>2</u>	<u>B</u>	<u>4</u>	<u>B</u>	<u>C</u>	<u>3</u>	<u>F</u>	<u>1</u>	<u>B</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
				(1)	(2)		(3)		(4)		(5)		



Product Code:

(1) Product Applications:

B : WiFi

(2) Dimensions:

C3 : 20.0 x 7.0 x 0.15 (mm)

(3) Material:

F : PI

(4) Working Frequencies:

1B : 2400-2484 MHz

(5) Antenna Series:

01 : serial number

IPEX I Cable(\$ 1.13 mm),L=100 mm



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Prepared by : Xenia

Designed by : Tom

Checked by : Chiming

Approved by : Herbert

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2. Features

- * Stable and reliable in performances
- * Compact size
- * RoHS compliance

3. Applications

- * IEEE802.11 (b/g/n).
- * Hand-held devices when WiFi (802.11 b/g/n) functions are needed.

4. Description

Unictron's WW20D0 FPCB antenna is designed for WiFi bands applications, covering frequencies 2400-2484 MHz. Fabricated with proprietary design and processes, WW20D0 shows excellent performance and is fully compatible.

5. Electrical Specifications

(Antenna is attached on a 2.0mm-thick ABS + PC material plate)

5-1. Electrical Table (2400-2484 MHz Band)

Characteristics		Specifications	Unit
Outline Dimensions		20.0 x 7.0 x 0.15	mm
Working Frequency		2400-2484	MHz
VSWR		2.0 Max.(typical)	
Characteristic Impedance		50	Ω
Polarization		Linear Polarization	
Peak Gain	(@2442 MHz)	4.3 (typical)	dBi
Efficiency		64 (typical)	%



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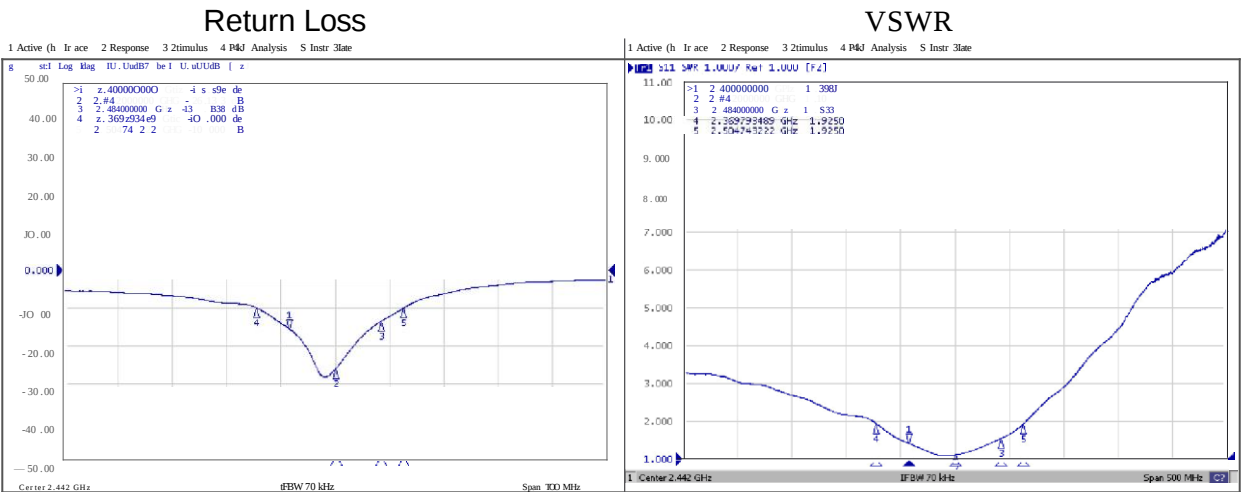
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5-2. Return Loss & VSWR



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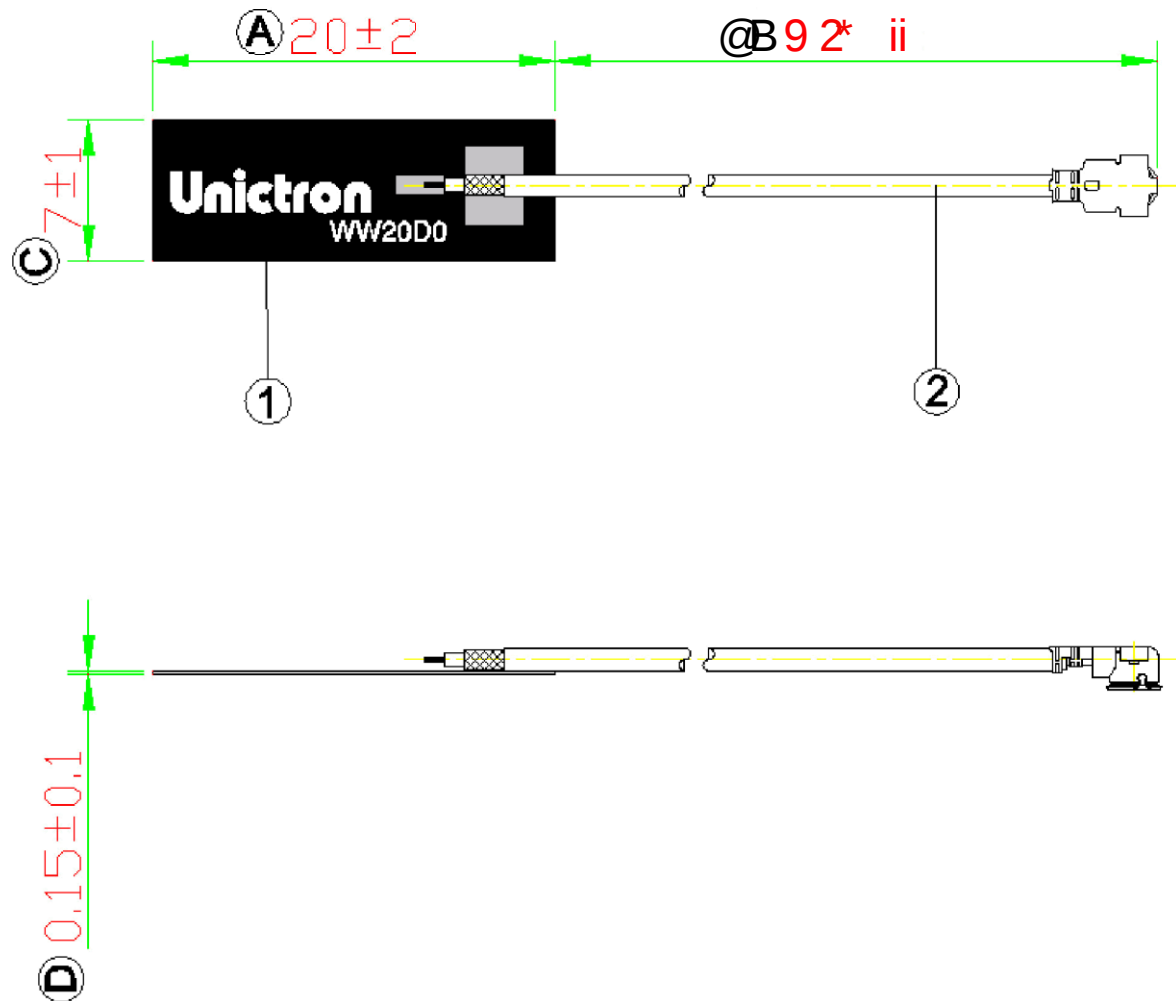
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6. Antenna Dimensions (unit: mm)



NOTB:

1. All materials are RoHS compliant
2. "A~D" Critical Dimensions.
3. "()" Reference Dimensions.

Item	Name	Material	Color	Q'ty
1	FPCB	PI	Black	1
2	IPEX Connector(MHF I) Cable OD 1.13mm	FEP	Gray	1



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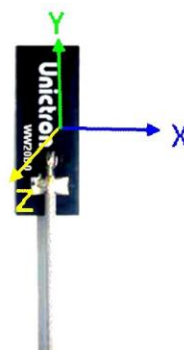
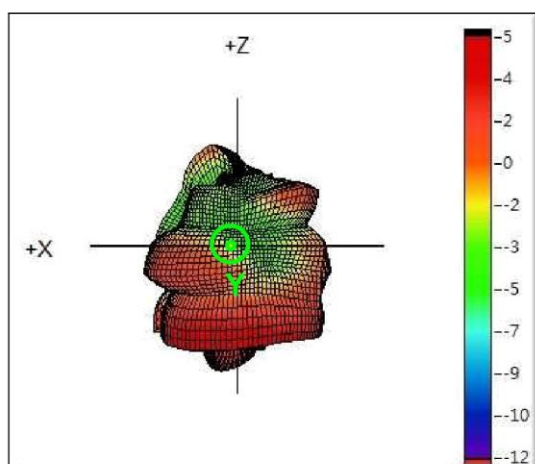
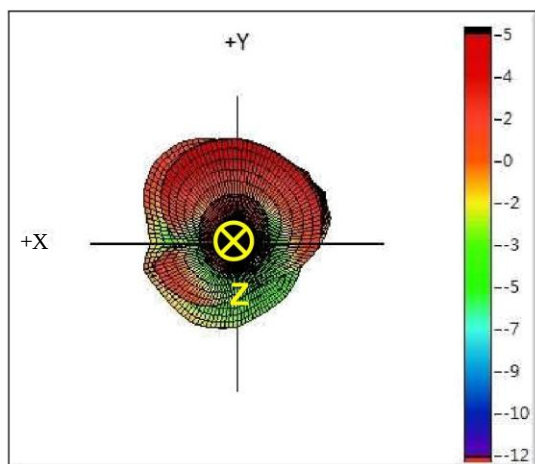
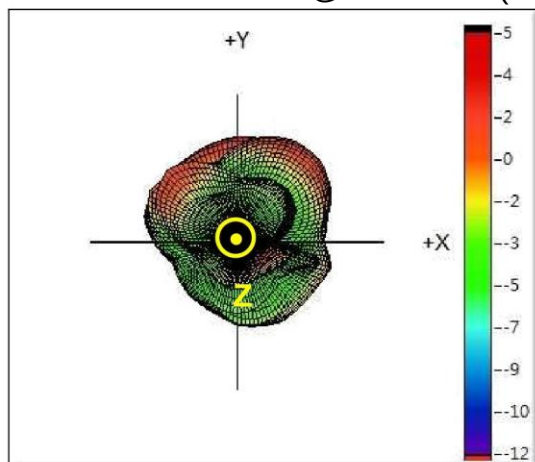
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7. Radiation Pattern

7-1. 2400-2484 MHz Band

7-1-1. 3D Gain Pattern @ 2442 MHz (unit: dBi)



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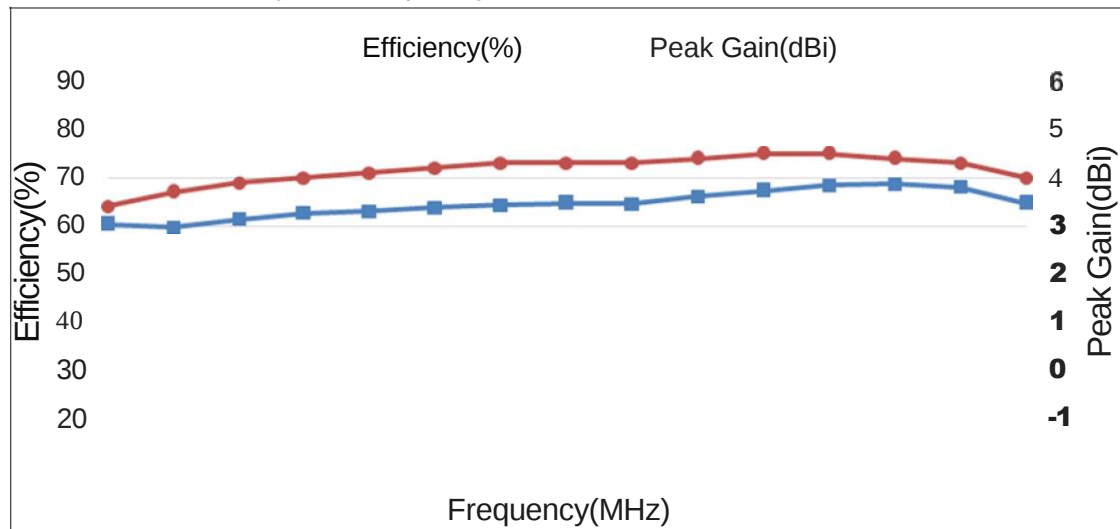
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7-1-2. 3D Efficiency Table

Frequency(MHz)	2400	2412	2417	2422	2427	2432	2437	2442	2447	2452	2457	2462	2467	2472	2484
Efficiency(dB)	-2.2	-2.2	-2.1	-2.0	-2.0	-2.0	-1.9	-1.9	-1.9	-1.8	-1.7	-1.7	-1.6	-1.7	-1.9
Efficiency(%)	60.3	59.7	61.4	62.7	63.0	63.8	64.3	64.7	64.6	66.1	67.3	68.4	68.7	68.1	64.7
Peak Gain(dBi)	3.4	3.7	3.9	4.0	4.1	4.2	4.3	4.3	4.3	4.4	4.5	4.5	4.4	4.3	4.0

7-1-3. 3D Efficiency vs. Frequency



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