

40x6x0.12mmmm WiFi / BT FPC Antenna (4006-08)

1.Explanation of Product Number

Diagram illustrating the memory layout for a linked list. The list consists of six nodes, each containing a letter and a number. The nodes are labeled (1) through (6) below them.

- Node (1): S, 2
- Node (2): B, 4
- Node (3): P, 6
- Node (4): F, 1
- Node (5): P, 0
- Node (6): 0, 8, 0, 0, 0

The nodes are connected sequentially: (1) points to (2), (2) points to (3), (3) points to (4), (4) points to (5), and (5) points to (6). Node (6) contains the letter 'P' and the number '0', indicating the end of the list.



Product Code:

(1) Product Categories:

B4: FPC Antenna

(2) Application:

P: WiFi / BT antenna

(3) Dimensions:

E6: 40x6x0.12mm/ L=0.81*130mm+IPEX II

(4)Material:

F: FPC

(5) Working Frequencies

1P: 2400~2500 / 5150~5850 MHz

(6) Antenna Series:

08: 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		
Prepared By :shelley	Checked By :Joy			
	Approved By : Frank			
TITLE: 40x6x0.12mmWiFi / BT FPC Antenna (4006-08)		PART NO.	S2B4PE6F1P08000	REV. A
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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 / BT (802.11 b/g/n) functions are needed.

4.Description

Unictron's FPC antenna series are specially designed for WiFi (802.11 b/g/n) applications. Based on Unictron's proprietary design and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5.Electrical Specifications

5-1. Electrical Table (2400~2500MHz Band)

Characteristics	Specifications			Unit
Outline Dimensions	40x6x0.12			mm
Frequency	2450			MHz
Impedance	50			Ω
Polarization	Linear Polarization			
Return Loss Table	Return Loss			
Freq.Band	2.4G Hz	2.45G Hz	2.5G Hz	
dB	-16.92	-16.06	-11.63	
VSWR Table	VSWR			
Freq.Band	2.4G Hz	2.45G Hz	2.5G Hz	
	1.37	1.39	1.71	
GAIN Table	Total Gain =Xpol + Ppol			
Freq.Band	2400MHz	2450MHz	2480MHz	2500MHz
Peak Gain(dBi)	2.73	2.53	2.42	2.66

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Scale:

Unit: mm

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5-2-2. Electrical Table (5150~5850 MHz Band)

Characteristics	Specifications			Unit
Outline Dimensions	40x6x0.12			mm
Frequency	5150~5850			MHz
Impedance	50			Ω
Polarization	Linear Polarization			
Return Loss Table	Return Loss			
Freq.Band	5.15GHz	5.55GHz	5.85GHz	
dB	-19.53	-12.11	-13.54	
VSWR Table	VSWR			
Freq.Band	5.15GHz	5.55GHz	5.85GHz	
	1.25	1.67	1.50	
GAIN Table	Total Gain =Xpol + Ppol			
Freq.Band	5150MHZ	5350MHZ	5550MHZ	5850MHZ
Peak Gain(dBi)	3.08	2.79	2.01	3.45

*The data was measured by A Test Lab Techno Corp.(CTIA Authorized Test Lab).

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Angle : $\pm$ Hole Dia. : $\pm$

Scale :

Unit: mm

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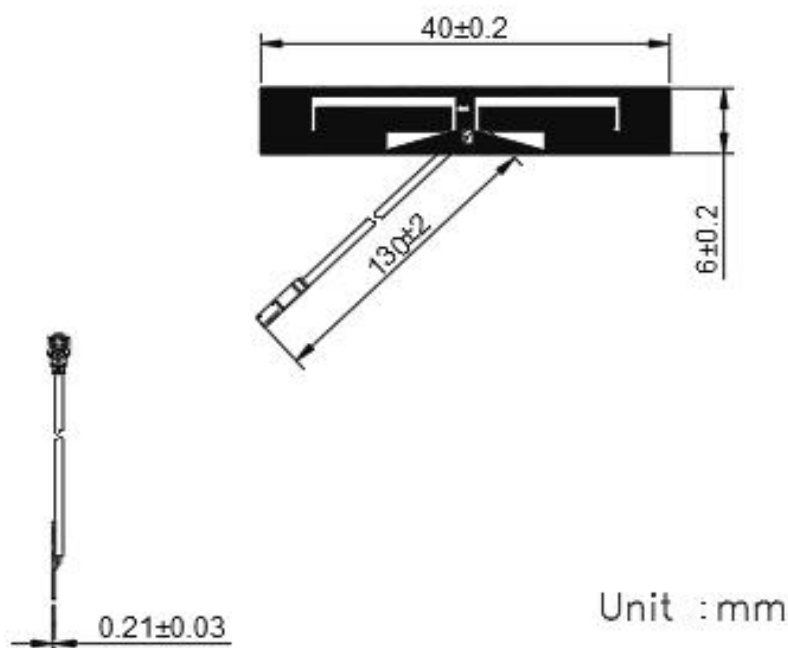
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6. Antenna Dimensions (unit: mm) .



2	P-0103-01(40x6x0.12mm)mm	1
1	Cable($\phi 0.81$ mm),L=130 $\pm$ 2mm +IPEXII	1
ITEM	Description	Q'ty
	Material	

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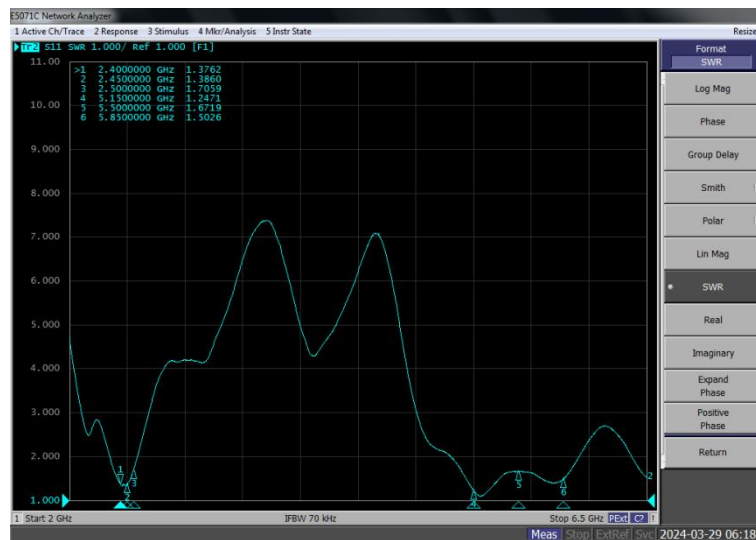
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7.Return Loss & VSWR

Return Loss (S_{11}) & VSWR (S_{11})



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Freq(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	2.73	-2.50	56.22
2410	2.71	-2.55	55.63
2420	2.66	-2.60	54.95
2430	2.52	-2.74	53.22
2440	2.54	-2.75	53.06
2450	2.53	-2.83	52.14
2460	2.47	-2.92	50.99
2470	2.45	-2.94	50.85
2480	2.42	-2.98	50.33
2490	2.56	-2.99	50.21
2500	2.66	-2.99	50.18
5150	3.08	-3.39	45.77
5200	3.31	-3.12	48.74
5250	3.34	-3.07	49.37
5300	3.17	-3.28	47.02
5350	2.79	-3.26	47.25
5400	2.08	-2.96	50.63
5450	1.83	-3.09	49.14
5500	1.83	-3.26	47.22
5550	2.01	-3.04	49.60
5600	2.69	-2.76	53.02
5650	2.62	-2.85	51.84
5700	2.69	-2.97	50.48
5750	3.26	-2.73	53.30
5800	3.47	-2.68	54.01
5850	3.45	-2.84	51.99

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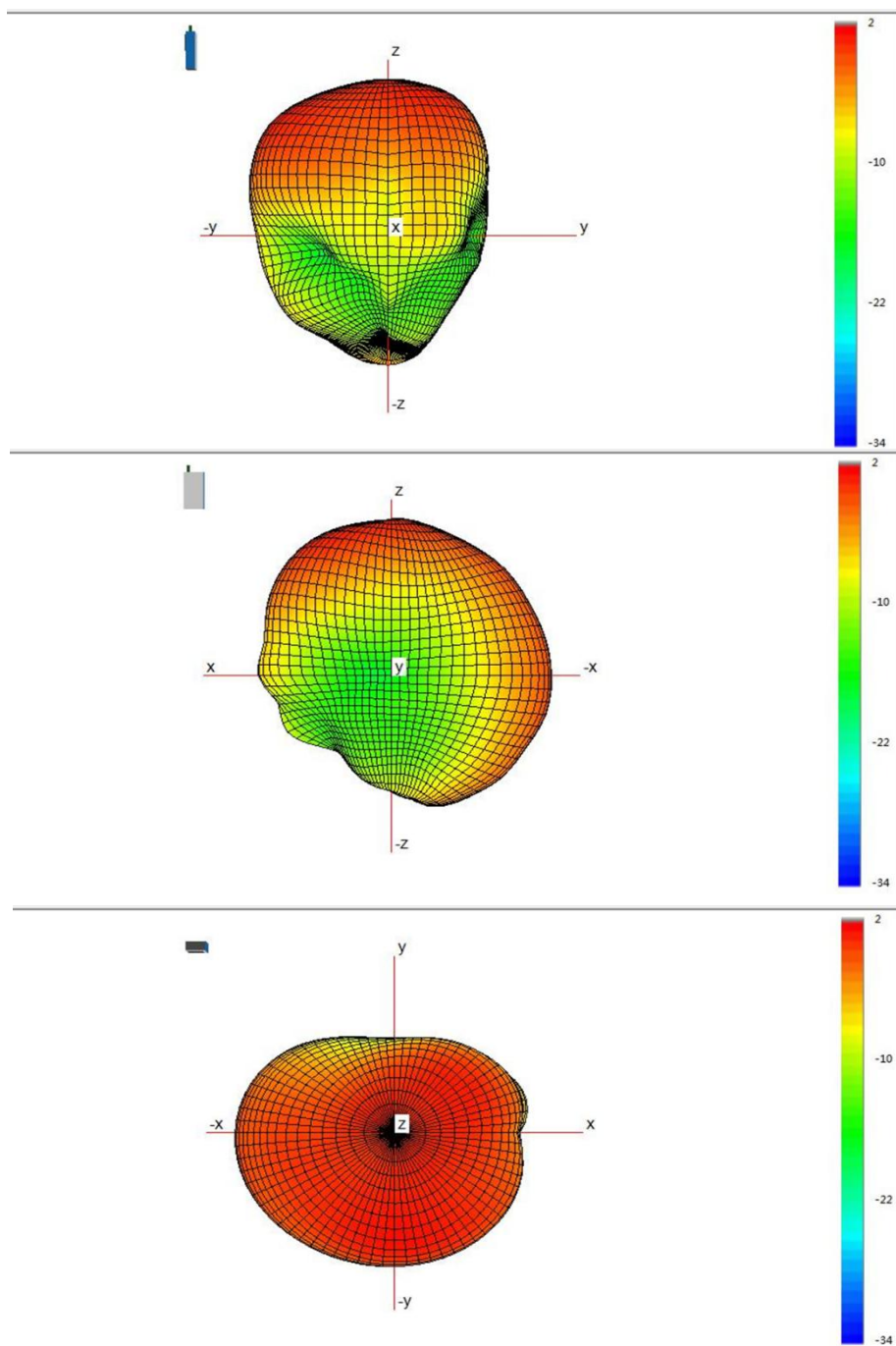
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8.Radiation Pattern

8-1.3D Gain Pattern @ 2450MHz (unit: dBi)



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9. Revision Control:

Revision	Date	Content	Remark
A	Mar.27.2024	New Issued.	N/A

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