

BT FPC Antenna

1.Explanation of Product Number

Diagram illustrating a Huffman tree structure. The root node is 'S'. The tree structure is as follows:

- S
 - 2
 - B
 - 4
 - E
 - 6
 - F
 - 1
 - P
 - 0
 - 8
 - 0
 - 0
 - 0

The nodes are labeled with their respective values: S, 2, B, 4, P, E, 6, F, 1, P, 0, 8, 0, 0, 0.



Product Code:

(1) Product Categories:

B4: FPC Antenna

(2) Application:

BT antenna (3)

Dimensions:

(4)Material:


F: FPC

(5) Working Frequencies

1P: 2400~2500

(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: BT FPC Antenna | | PART NO. | S2B4PE6F1P08000 | REV. A |
| | | PAGE 1 OF 8 | | |

2.Features

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

3.Applications

- * Hand-held devices when BT.

4.Description

Unictron's FPC antenna series are specially designed for BT 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 | / | | | 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) | -1.25 | -0.00 | -0.05 | -0.63 |

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm

Scale :

Unit: mm

Prepared By :shelley

Checked By :Joy

Approved By : Frank



Unictron
Technologies Corp.

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: BT FPC
Antenna**

**PART
NO.**

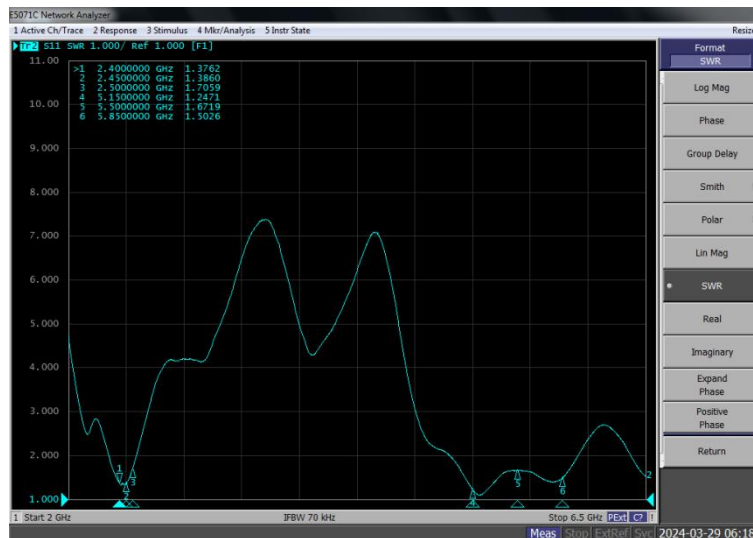
S2B4PE6F1P08000

REV.

A

7.Return Loss & VSWR

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



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm

Scale :

Unit: mm

Prepared By :shelley

Checked By :Joy

Approved By : Frank



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: BT FPC
Antenna**

**PART
NO.**

S2B4PE6F1P08000

REV.

A

PAGE 5 OF 8

| Freq (MHz) | Gain(dBi) | Efficiency(dB) | Efficiency(%) |
|------------|-----------|----------------|---------------|
| 2400 | -1.25 | -2.32 | 32.32 |
| 2410 | -0.66 | -2.25 | 12.20 |
| 2420 | -0.77 | -4.12 | 18.66 |
| 2430 | -1.22 | -1.28 | 25.10 |
| 2440 | -0.30 | -0.88 | 26.63 |
| 2450 | -0.00 | -3.20 | 23.10 |
| 2460 | -0.47 | -1.47 | 18.14 |
| 2470 | -0.12 | -0.57 | 19.25 |
| 2480 | -0.05 | -2.01 | 8.11 |
| 2490 | -0.58 | -1.56 | 21.02 |
| 2500 | -0.63 | -2.22 | 22.80 |

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm

Scale :

Unit: mm

Prepared By :shelley

Checked By :Joy

Approved By : Frank



Unictron
Technologies Corp.

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: BT FPC
Antenna**

**PART
NO.**

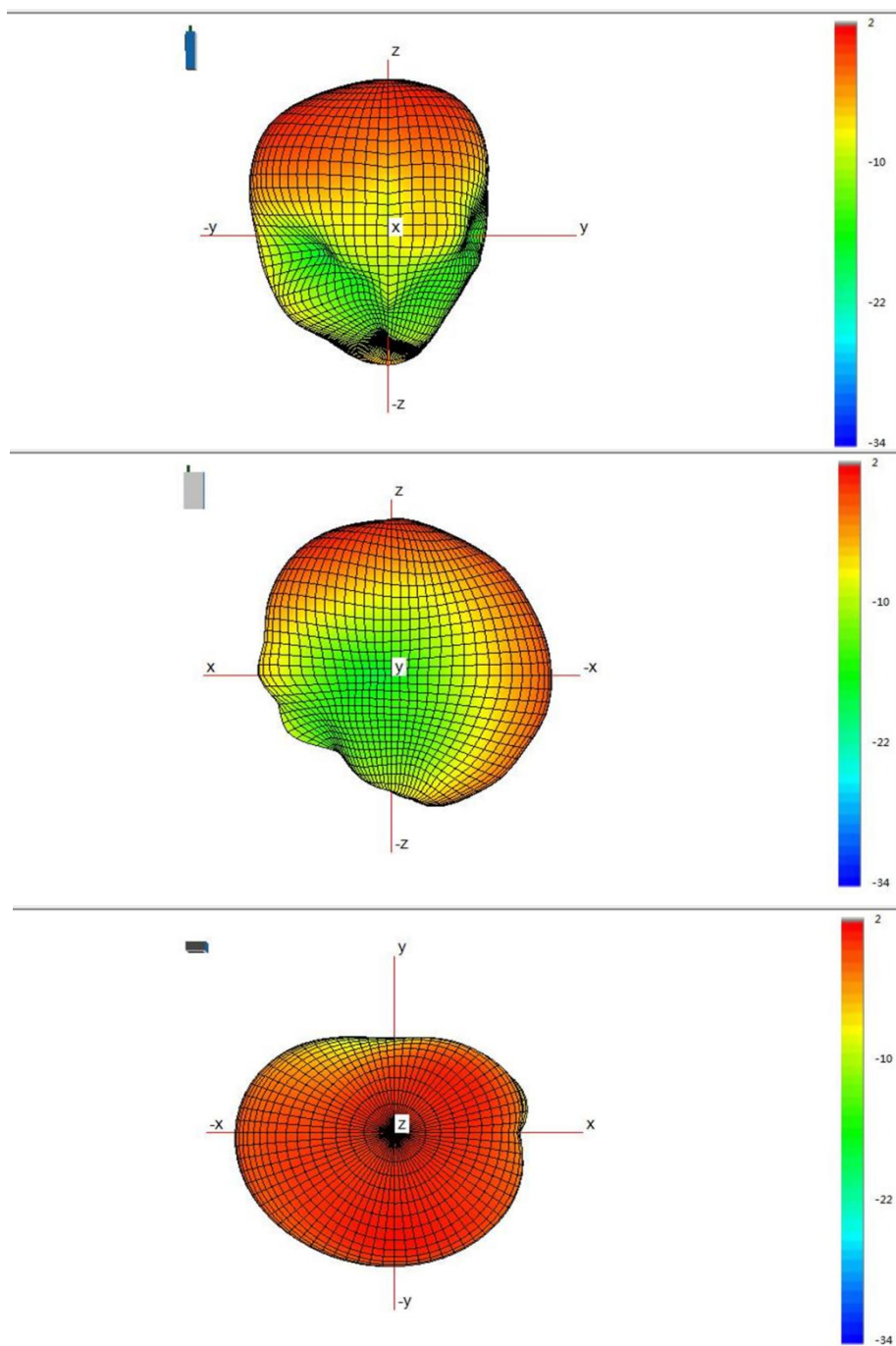
S2B4PE6F1P08000

REV.

A

8.Radiation Pattern

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



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm

Scale :

Unit: mm

Prepared By :shelley

Checked By :Joy

Approved By : Frank



Unictron
Technologies Corp.

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: BT FPC
Antenna**

**PART
NO.**


S2B4PE6F1P08000

REV.

A

9. Revision Control:

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

| | | | |
|---|---------------------|--|-----------------|
| 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 | |
| Prepared By :shelley | Checked By :Joy | | |
| | Approved By : Frank | | |
| TITLE: BT FPC Antenna | | PART NO. | S2B4PE6F1P08000 |
| | | | REV. A |
| PAGE 8 OF 8 | | | |