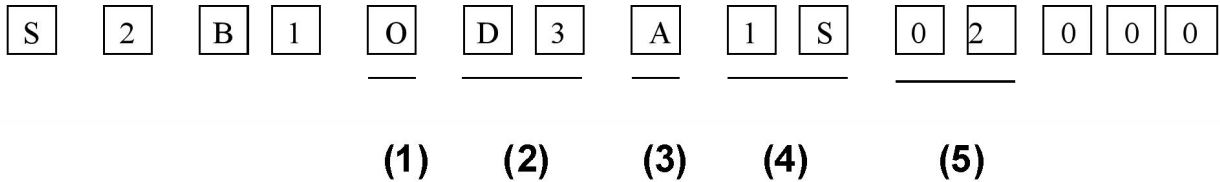


35x7x0.5mm ISM PCB Antenna (P3507-02)

1. Explanation of Product Number



Product Code:

(1) Application:

O: ISM PCB antenna

(2) Dimensions:

D3: 35x 7.0 x 0.5/ L=1.13*100mm+I-PEX

(3) Material:

A: GF

(4) Working Frequencies

1S: 863~870 MHz

(5) Antenna Series:

02: 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: 35x 7.0 x 0.5mm ISM PCB Antenna (P3507-02)		PART NO. S2B1OD3A1S02000	REV. A
PAGE 1		OF 6	

2. Features

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

3. Applications

- *ISM 868 band
- *Smart meters
- *Wireless alarm and security system
- *Industrial monitoring and control
- *IOT applications

4. Description

Unictron's P3507-02 PCB antenna is designed for ISM 868 MHz band applications, covering frequencies 863~870 MHz. Fabricated with proprietary design and processes.

5. Electrical Specifications

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

5-1. Electrical Table:

Characteristics	Specifications	Unit
Outline Dimensions	35 x 7.0 x 0.5	mm
Working Frequency	863~870	MHz
VSWR	2 Max. (typical).	
Characteristic Impedance	50	Ω
Polarization	Linear Polarization	
Peak Gain	0.7	dBi
Efficiency	41.6	%

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm

Scale : Unit: mm

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PART NO.

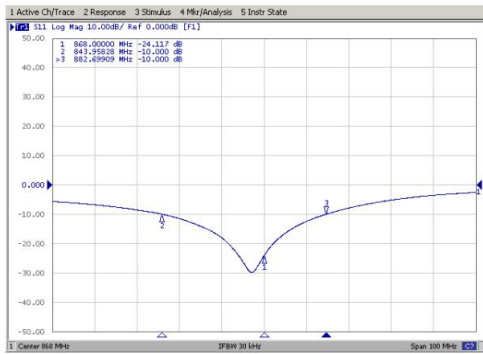
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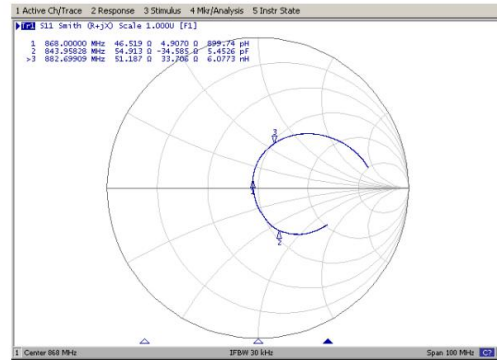
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5-2. Return Loss & Smith Chart

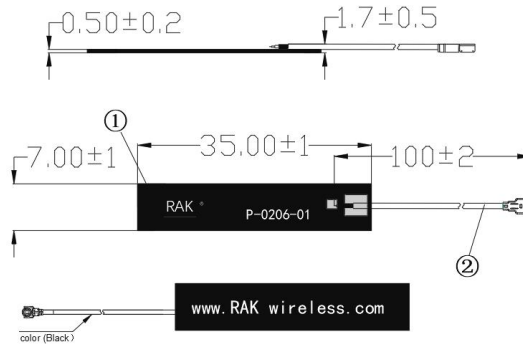
Return Loss



Smith Chart



6. Antenna Dimensions (unit: mm) .



Unit : mm

2	P-0206-01 (35mm*7mm*0.5mm)	1
1	Cable (Φ 1.13mm), L=100±2mm+ IPEX (一代) 黑色	1
ITEM	Description	Q'ty
Material		

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : ± Hole Dia. : ±

Scale : Unit: mm

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**TITLE: 35x 7.0 x 0.5mm ISM PCB
Antenna (P3507-02)**

**PART
NO.**

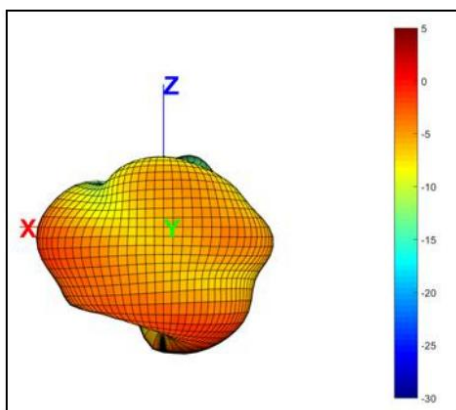
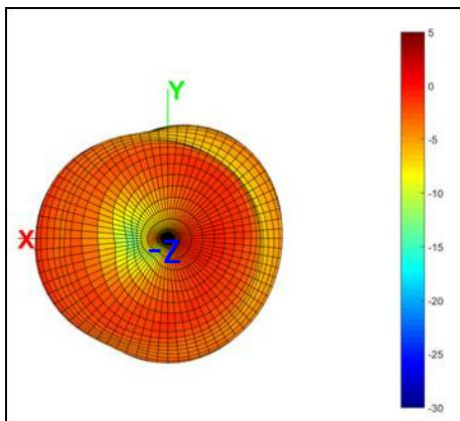
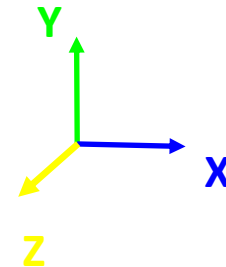
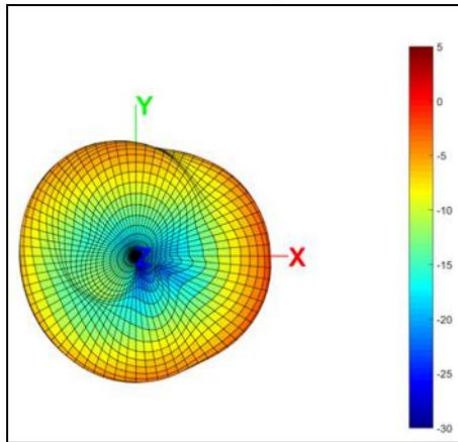
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7. Radiation Pattern

7-1. 3D Gain Pattern (Radiation Pattern @ 868MHz)



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm



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Scale : Unit: mm

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PART NO.

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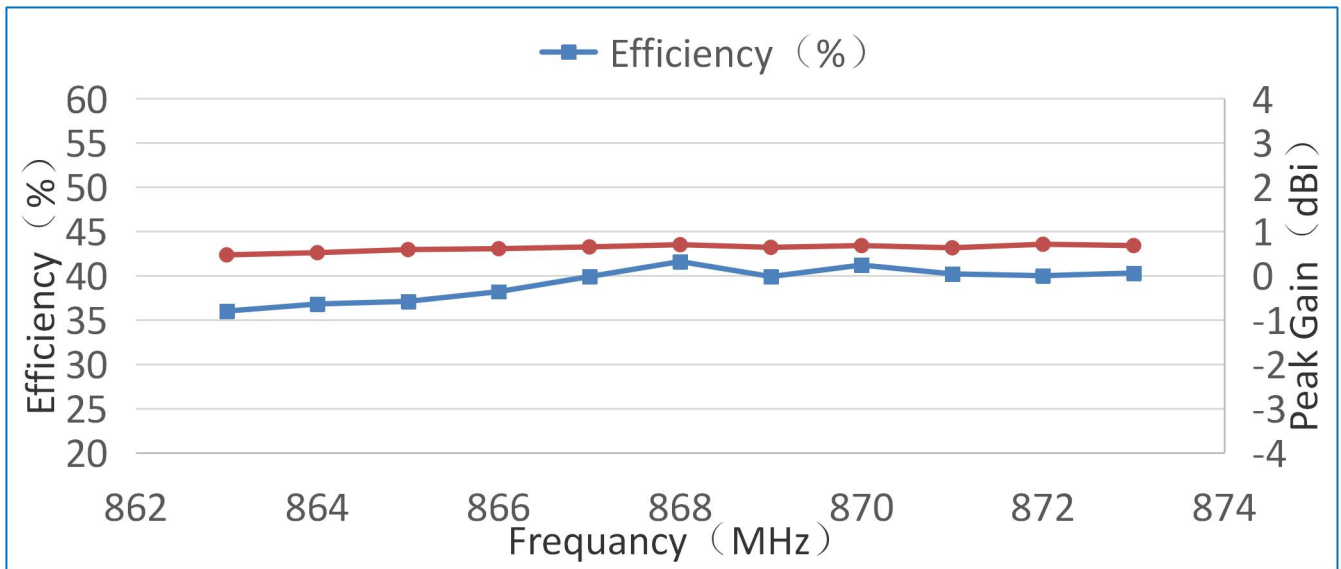
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7-2. 3D Efficiency Table

Frequency (MHz)	863	864	865	866	867	868	869	870	871	872	873
Efficiency (dB)	-4.1	-4.1	-4.1	-4	-3.9	-3.6	-3.7	-3.7	-3.6	-3.6	-3.6
Efficiency (%)	36	36.8	37.1	38.2	39.9	41.6	39.9	41.2	40.2	40	40.3
Peak Gain (dBi)	0.47	0.52	0.59	0.61	0.65	0.7	0.64	0.68	0.63	0.71	0.68

7-3. 3D Efficiency vs. Frequency



Tolerances (Unless otherwise specified)
 X : ± 1 X.X : ± 0.1 X.XX : ± 0.01
 Angle : \pm Hole Dia. : \pm



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8. Revision Control:

Revision	Date	Content	Remark
A	Jul.22.2021	New Issued.	N/A

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm



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Scale :

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REV.

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