

35x7x0.5mm ISM PCB Antenna (P3507-01)

1. Explanation of Product Number

S	2	B	1	O	D	3	A	1	L	0	1	0	0	0
				(1)	(2)	(3)	(4)			(5)				



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

1L: 902~928 MHz

(5) Antenna Series:

01: serial number

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : \pm Hole Dia. : \pm



Unictron
Technologies Corp.

Unictron Technologies Corporation

Website: www.unictron.com

Scale :

Unit : mm

Prepared By : Shelley

Checked By : Joy

Approved By : Frank

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

**TITLE : 35x 7.0 x 0.5mm ISM PCB
Antenna (P3507-01)**

**PART
NO.**

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2. Features

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

3. Applications

- *ISM915 band
- *Smart meters
- *Wireless alarm and security system
- *Industrial monitoring and control
- *IOT applications

4. Description

Unictron's P3507-01 PCB antenna is designed for ISM 915 MHz band applications, covering frequencies 902~928 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	902~928	MHz
VSWR	2 Max. (typical).	
Characteristic Impedance	50	Ω
Polarization	Linear Polarization	
Peak Gain	0.8	dBi
Efficiency	41.9	%

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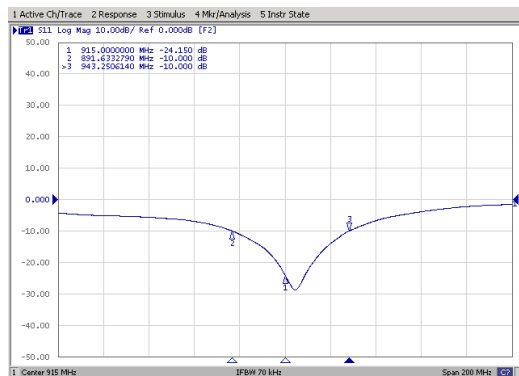
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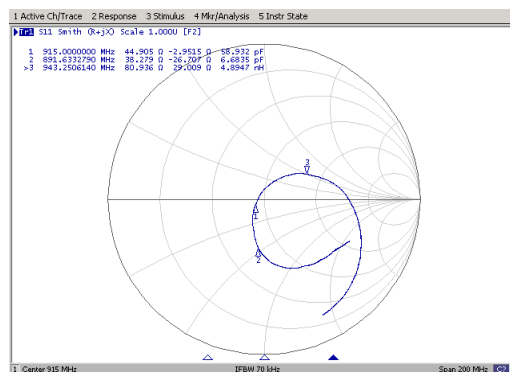
A

5-2. Return Loss & Smith Chart

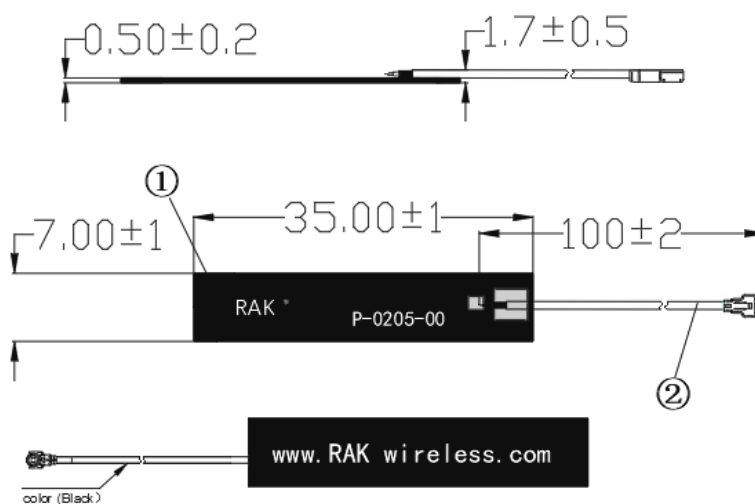
Return Loss



Smith Chart



6. Antenna Dimensions (unit: mm) .



Unit : mm

2	P-0205-00 (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 :

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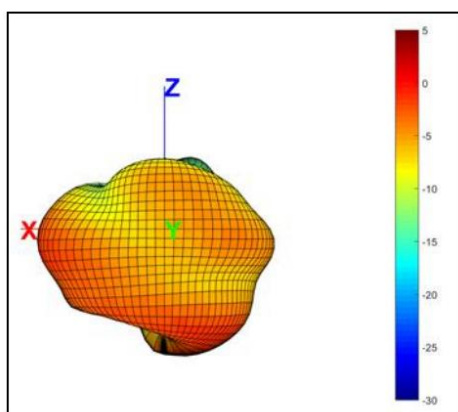
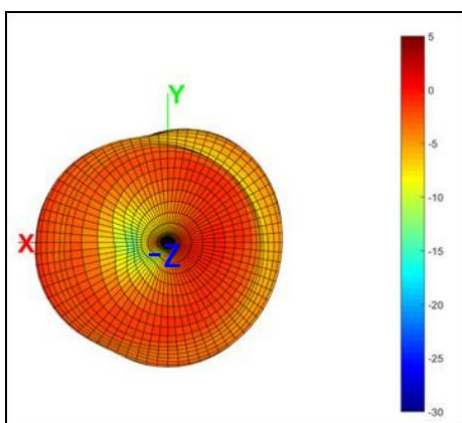
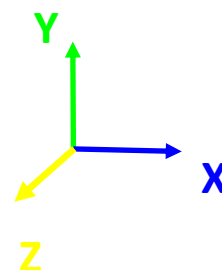
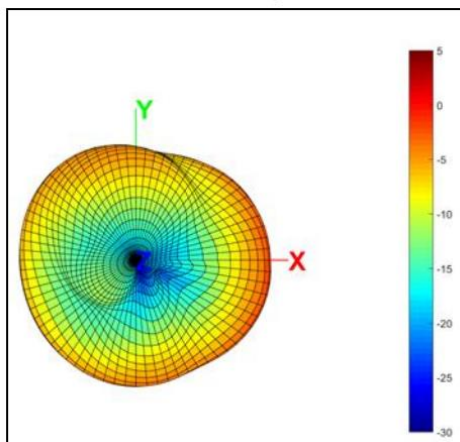
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7. Radiation Pattern

7-1. 3D Gain Pattern (Radiation Pattern @ 915 MHz)



Tolerances (Unless otherwise specified)

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Angle : \pm Hole Dia. : \pm



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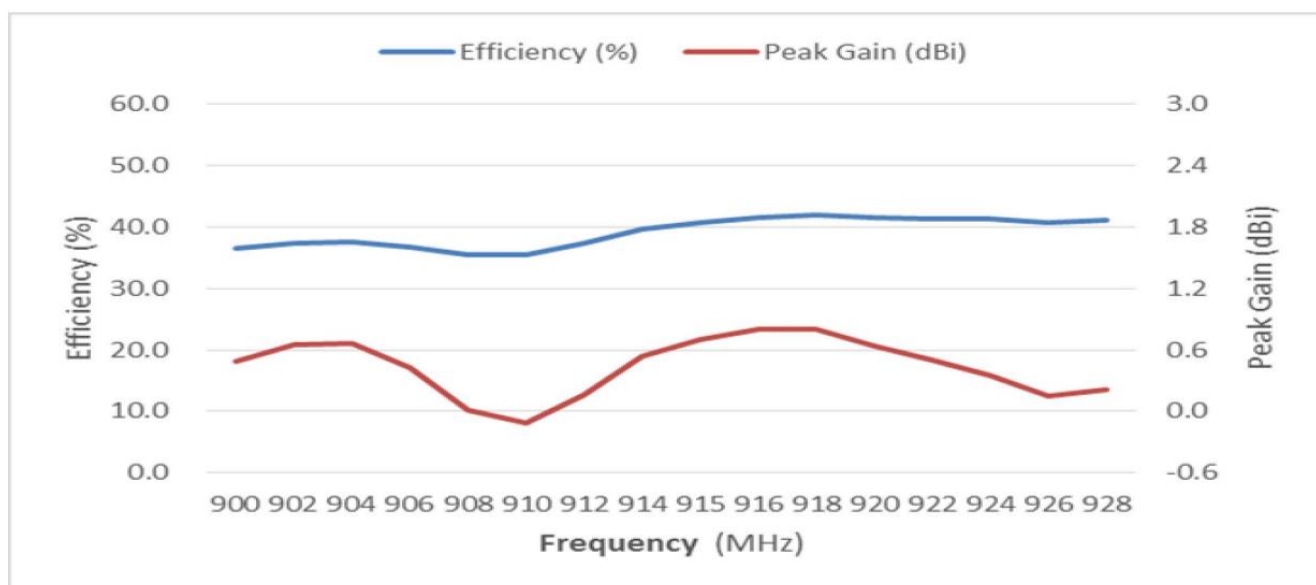
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7-2. 3D Efficiency Table

Frequency(MHz)	902	904	906	908	910	912	914	915	916	918	920	922	924	926	928
Efficiency(dB)	-4.4	-4.3	-4.3	-4.4	-4.5	-4.5	-4.3	-4.0	-3.9	-3.8	-3.8	-3.8	-3.8	-3.8	-3.9
Efficiency (%)	36.5	37.3	37.6	36.7	35.4	35.5	37.4	39.7	40.7	41.5	41.9	41.5	41.3	41.3	40.8
Peak Gain (dBi)	0.5	0.7	0.7	0.4	0.0	-0.1	0.2	0.5	0.7	0.8	0.8	0.6	0.5	0.4	0.1

7-3. 3D Efficiency vs. Frequency



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8. Revision Control:

Revision	Date	Content	Remark
A	Jul.09.2021	New Issued.	N/A

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