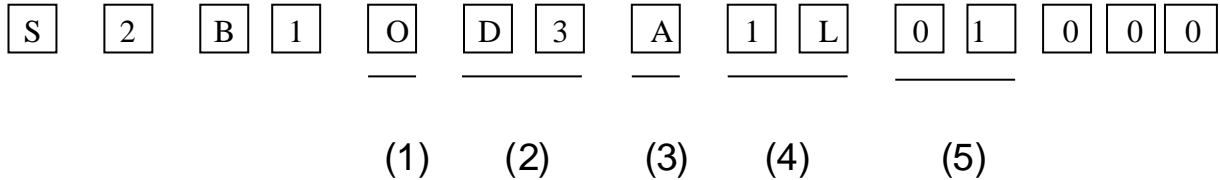


# 35x7x0.5mm ISM PCB Antenna (P3507-01)

## 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

1L: 902~928 MHz

(5) Antenna Series:

01: serial number

|   |                     |   |                        |                  |
|---|---------------------|---|------------------------|------------------|
| <b>Tolerances (Unless otherwise specified)</b><br>X : ± 1      X.X : ± 0.1      X.XX : ± 0.01<br>Angle : ±                      Hole Dia. : ± |                     | <b>Unictron Technologies Corporation</b><br>Website: <a href="http://www.unictron.com">www.unictron.com</a>   |                        |                  |
| 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 |   |                        |                  |
| <b>TITLE : 35x 7.0 x 0.5mm ISM PCB Antenna (P3507-01)</b>   |                     | <b>PART NO.</b>   | <b>S2B1OD3A1L01000</b> | REV.<br><b>A</b> |
| PAGE 1 OF 6   |                     |   |                        |                  |

## 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                  | $\Omega$ |
| Polarization             | Linear Polarization |          |
| Peak Gain                | 0.8                 | dBi      |
| Efficiency               | 41.9                | %        |

Tolerances (Unless otherwise specified)

X :  $\pm 1$       X.X :  $\pm 0.1$       X.XX :  $\pm 0.01$

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



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Unictron Technologies Corporation  
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Scale :

Unit : mm

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Antenna (P3507-01)**

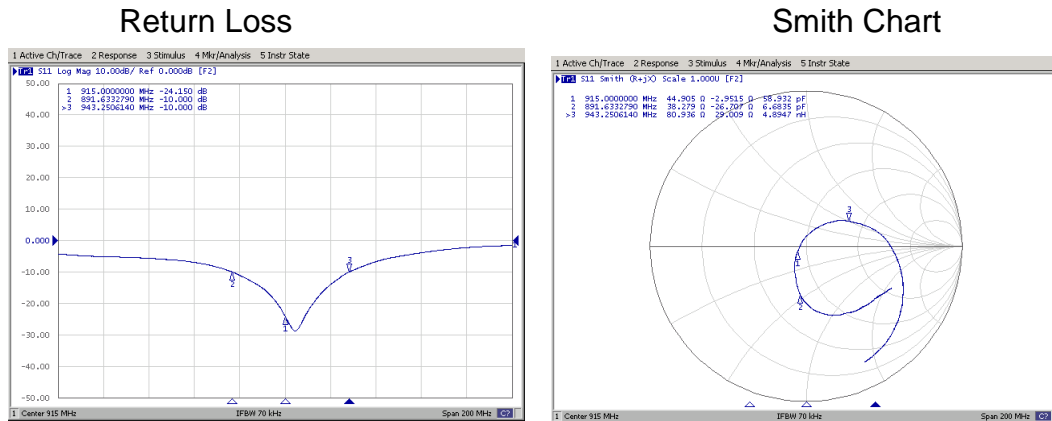
**PART  
NO.**

**S2B10D3A1L01000**

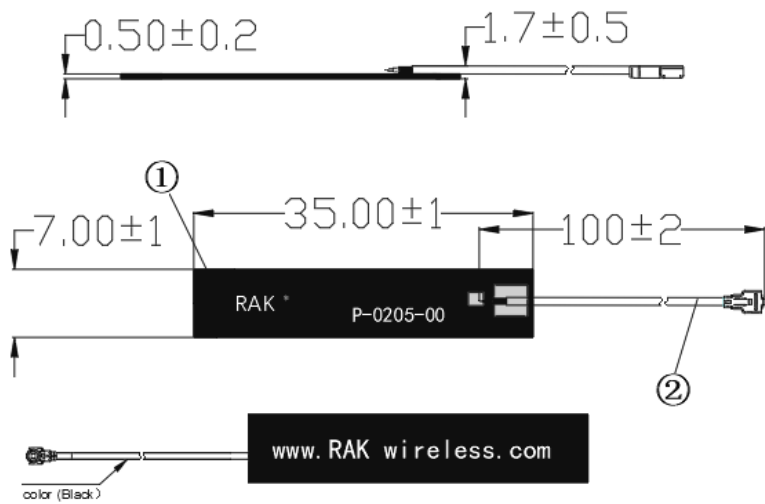
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## 5-2. Return Loss & Smith Chart



## 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 :      Unit : mm

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Antenna (P3507-01)**

**PART  
NO.**

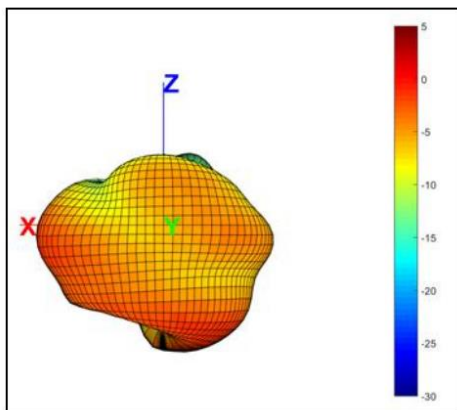
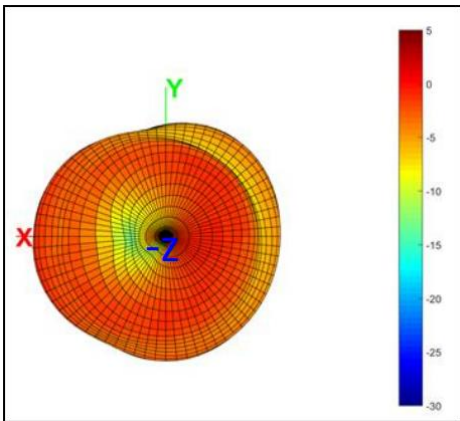
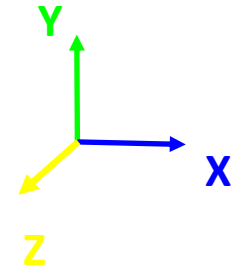
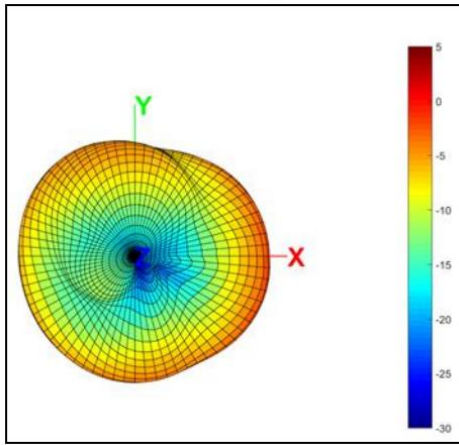
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# 7. Radiation Pattern

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



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



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|                       |                     |
|-----------------------|---------------------|
| Scale :               | Unit : mm           |
| Prepared By : Shelley | Checked By : Joy    |
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**PART NO.**

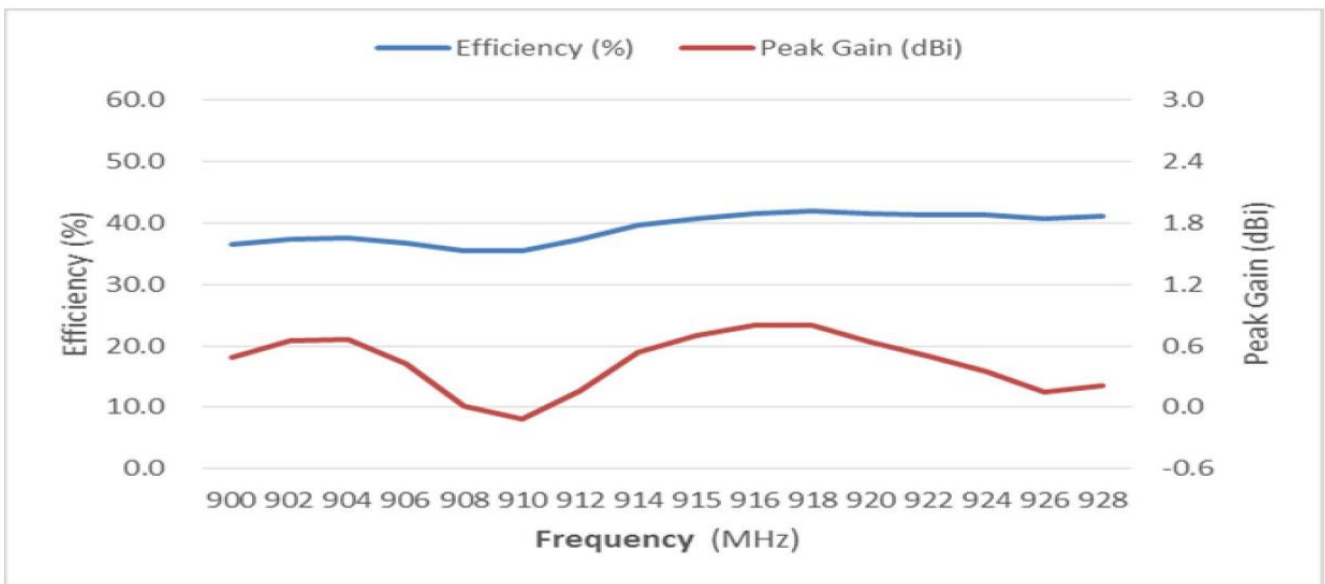
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| A    |

## 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



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



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**PART NO.**

**S2B1OD3A1L01000**

**REV. A**

## 8. Revision Control:

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

**Tolerances (Unless otherwise specified)**

X : ± 1      X.X : ± 0.1      X.XX : ± 0.01

Angle : ±      Hole Dia. : ±



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