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 of X: \pm 1 X.X: \pm Angle: \pm	• •	Unictr Technologies	Unictron Technologies Corp. Website: www.unictro	•		
Scale :	Unit: mm	TILLO ODEOLEIOA	TION 10 THE PROPERTY OF	LINIOTRON		
Prepared By :Shelley Checked By :Joy		THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED				
	Approved By : Frank	OR USED IN ALL CI	IRCUMSTANCES WITHOUT WRITTEN P	ERMISSION		
TITLE: 35x 7.0 x 0.5mm ISM PCB Antenna (P3507-01)		PART	S2B1OD3A1L01000	REV.		
		NO.	SZB1SB3A1E01000	Α		
			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)

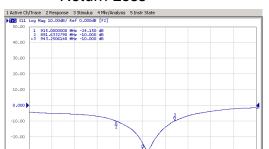
5-1. Electrical Table:

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	Ω
Polarization	Linear Polarization	
Peak Gain	0.8	dBi
Efficiency	41.9	%

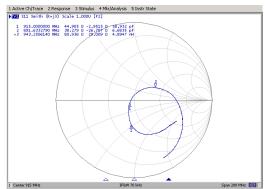
Tolerances (Unless of X: ± 1 X.X: ± Angle: ±	• •	Unictor Technologies	Unictron Technologies Corp. Website: www.unictro	•	
Scale :	Unit: mm	TI IIO ODEOJEJOA:	TION IO THE PROPERTY OF	LINIOTRON	
Prepared By :Shelley	Checked By :Joy	THIS SPECIFICATECHNOLOGIES C	TION IS THE PROPERTY OF ORPORATION AND SHALL NOT BE RE		
	Approved By : Frank	OR USED IN ALL C	RCUMSTANCES WITHOUT WRITTEN P	ERMISSION	
TITLE: 35x 7.0 x 0.5mm ISM PCB		PART	S2B1OD3A1L01000	REV.	
Antenna (P3507-01)		NO.	SEB 10 BOATEO 1000	Α	
			PAGE 2 OF	6	

5-2. Return Loss & Smith Chart

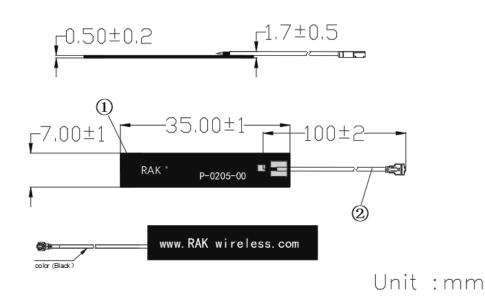
Return Loss



Smith Chart



6. Antenna Dimensions (unit: mm) .

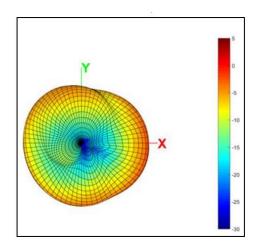


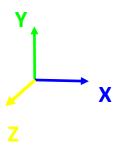
2	P-0205-00 (35mm*7mm*0.5mm)	1			
1	Cable(⊖1.13mm), L=100±2mm+IPEX(一代) 黑色	1			
ITEM	Description	Q'ty			
Material					

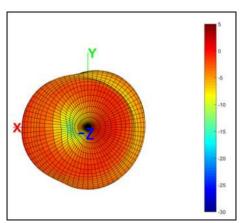
Tolerances (Unless ot X: ± 1 X.X: ± Angle: ±		Unictor Technologies	Unictron Technologies C Website: www.unictro	•
Scale :	Unit: mm	T ODE 0.1510.4:	TION IS THE PROPERTY OF	LINIOTRON
Prepared By :Shelley	Checked By :Joy	THIS SPECIFICATECHNOLOGIES C		
	Approved By : Frank	OR USED IN ALL C	RCUMSTANCES WITHOUT WRITTEN F	PERMISSION
TITLE: 35x 7.0 x 0.5mm ISM PCB		PART	S2B1OD3A1L01000	REV.
Antenna (P3507-01)		NO.	323133371231333	Α
	·	·	PAGE 3 OF	6

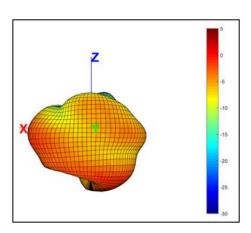
7. Radiation Pattern

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







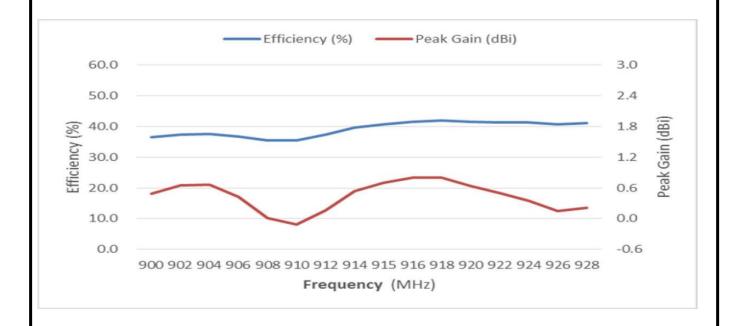


Tolerances (Unless otherwise specified) X: ± 1	Unictron Technologies Corp.	Unictron Technologies Co Website: www.unictro	•			
Scale : Unit : mm	CDECIFICATION	IC THE PROPERTY OF	LINICTDON			
Dropored Dr. Challer Charled Dr. Lov	THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED					
Approved By : Frank	SED IN ALL CIRCUN	MSTANCES WITHOUT WRITTEN PE	RMISSION			
TITLE: 35x 7.0 x 0.5mm ISM PCB	PART S	2B1OD3A1L01000	REV.			
Antenna (P3507-01)	NO.		Α			

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	8.0	0.8	0.6	0.5	0.4	0.1

7-3. 3D Efficiency vs. Frequency



Tolerances (Unless of X: ± 1 X.X: ± Angle: ±	•	Unictor Technologies	Unictron Technologies C Website: www.unictro		
Scale :	Unit: mm	T ODE 0.1510 A	TION IO THE PROPERTY OF	LINIOTRON	
Prepared By :Shelley	Checked By :Joy	THIS SPECIFICATECHNOLOGIES C	TION IS THE PROPERTY OF ORPORATION AND SHALL NOT BE RE		
	Approved By : Frank	OR USED IN ALL C	RCUMSTANCES WITHOUT WRITTEN F	PERMISSION	
TITLE: 35x 7.0 x 0.5mm ISM PCB		PART	REV.		
Antenna (P3507-01)		NO.	S2B1OD3A1L01000	Α	
	·		PAGE 5 OF	6	

8. Revision Control:

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

Tolerances (Unless oth X: ± 1 X.X: ± 0 Angle: ±		Unictr Technologies	Unictron Technologies Coscorp. Website: www.unictro	•
Scale :	Unit: mm	TILLO ODEOLEIOA	TION IO THE PROPERTY OF	UNICTRON
Prepared By :Shelley	Checked By :Joy	THIS SPECIFICATION IS THE PROPERTY OF U TECHNOLOGIES CORPORATION AND SHALL NOT BE REPR		
	Approved By : Frank	OR USED IN ALL CI	RCUMSTANCES WITHOUT WRITTEN P	ERMISSION
TITLE: 35x 7.0 x 0.5mm ISM PCB		PART	S2B1OD3A1L01000	REV.
Antenna (P3507-01)		NO.	OZBIODOATEO 1000	Α
	·		PAGE 6 OF	6