

Antenna Datasheet

PT01SA0110B8

AP Antenna

Prepared: Chris Chai		Approved: Adam Chen				
Checked:	Feidi Pei	Customer:				
Version	Changed Reason	Changed by	Date			
01	Original version	Chris	20200416			
	X					

Address (India): B-407, Tower B, Pioneer Urban Square, Sector 62, Gurugram, Haryana,

India-122413

Address (TW): 2F., NO 3, Gongye 4th RD., Hukou Shiang Hsinchu County 303-51, Taiwan



Features

- Purpose for 2400-2500MHz
- Omni directional radiation
- Vertical linear polarization
- VSWR 2.0:1
- Gain 2 dBi
- Lead free materials
- RoHS compliant product

Applications

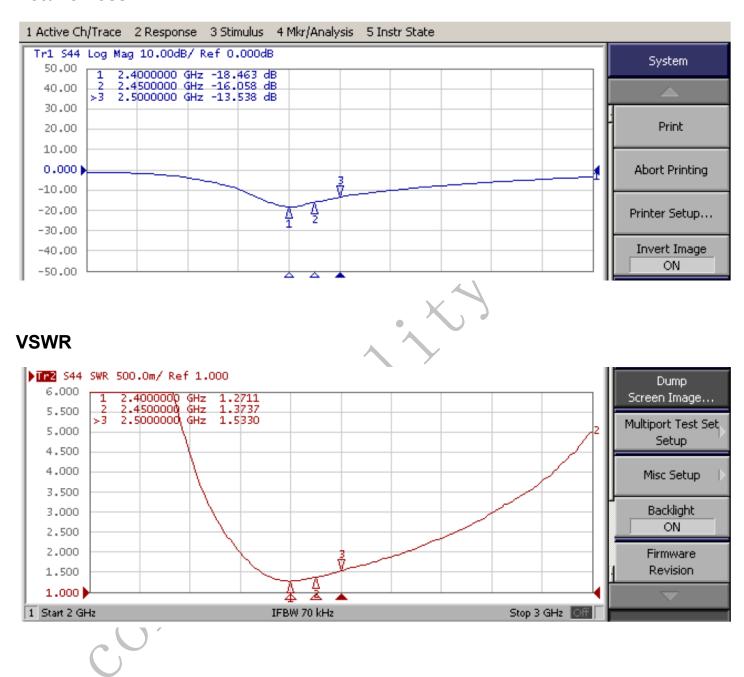
Frequency range: 2400-2500MHz

Typical performance

Electrical Specifications					
Frequency	2400-2500MHz				
V.S.W.R	2.0 Max				
Impedance	50Ω				
Gain	2 dBi				
Radiation	Omni-directional				
Return Loss	-10 dBi				
Polarization	Linear				
Operating temp	-45°C~+80°C				
Storage Temperature	- 50°C ~ + 85°C				

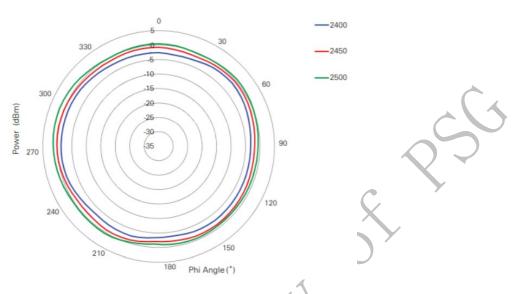


Retune Loss

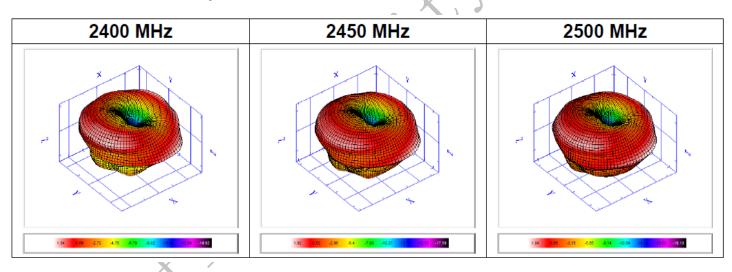




Antenna 2D Radiation pattern



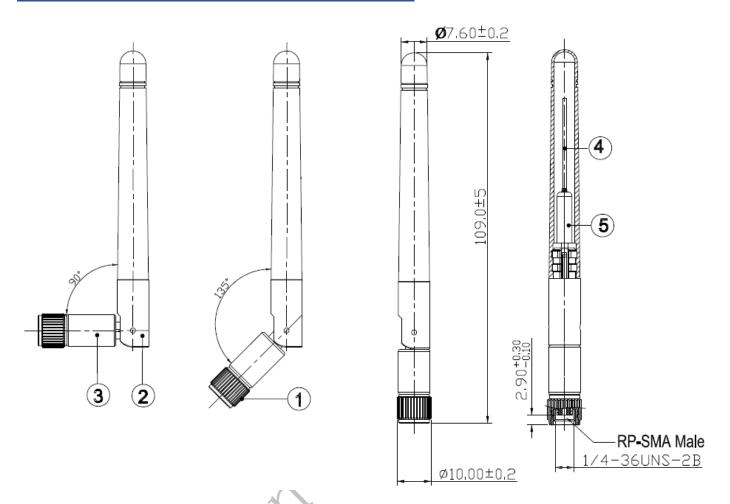
Antenna 3D Radiation pattern



Frequency	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
TRP (dBm)	-2.37	-2.38	-2.23	-2.15	-1.89	-1.89	-1.71	-1.81	-1.7	-1.84	-1.57
Peak EIRP (dBm)	1.34	1.13	1.41	1.64	1.72	1.92	2.2	2.11	2.1	1.75	1.84
NHPRP +/- 45 (degree)	-2.89	-2.88	-2.72	-2.65	-2.39	-2.39	-2.21	-2.3	-2.17	-2.3	-2.02
NHPRP +/- 30 (degree)	-3.89	-3.88	-3.71	-3.6	-3.35	-3.33	-3.14	-3.23	-3.06	-3.18	-2.91
E-Theta Peak Gain (dBi)	-9.41	-9.3	-8.17	-8.81	-8.31	-9.05	-9.2	-9.31	-9.26	-9.05	-9.31
E-Phi Peak Gain (dBi)	1	0.84	1.15	1.46	1.46	1.63	1.93	1.89	1.91	1.56	1.68
E-Total Peak Gain (dBi)	1.34	1.13	1.41	1.64	1.72	1.92	2.2	2.11	2.1	1.75	1.84
Directivity (dBi)	3.71	3.51	3.64	3.79	3.62	3.8	3.92	3.92	3.8	3.58	3.41
Efficiency (%)	57.9	57.79	59.85	60.94	64.66	64.78	67.4	65.84	67.68	65.54	69.69



Terminal Configuration and Dimensions



Mechanical Specifications					
Dimensions-mm	L=109mm				
Material of Radiator	Cu				
Material of Plastic	TPE/ABS				
Cable diameter	RG178				
Connector	RP-SMA MALE				
Plastic colour	White				

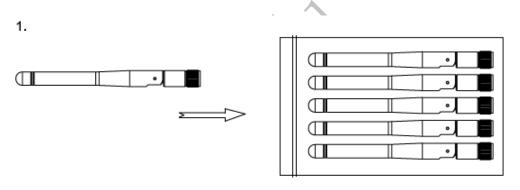




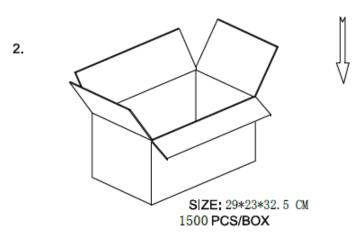
Characteristics and Reliability Test

Items	Spec ./ Request	Sample Qty'	Notes
Salt Spray	GB / T 2423. 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	5	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
Humidity	GB / T 2423. 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	5	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. <= 5%
Thermal Shock	GB / T 2423. 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	5	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. <= 5%
Life (High	GB /T 2423. 2 – 89	-	After 2 Hours Recovery
Temp.)	Temp: 80°C; Time: 24 hours	5	1. No Visual Damage 2. Frequency Tol. <= 5%

Package



R-PE-BAG-220150006 50PCS/BAG



Note: The product specification only for standard product

Confidential
This is a proprietary information of PSG.
No reproduction / copying is allowed without permission.
https://www.psgtek.com