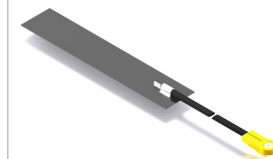


Features

- ISM Band
- FPCB Type
- Stable And Reliable Performance
- 863-870MHz
- Compact Size With Efficient Reception

Applications

- Industrial Monitoring And Control
- IOT Applications
- Smart Meters
- Wireless Alarm And Security System



Part Numbering Guide

S AT PC 35A7AB5 IS B5

SUNTSU

ANTENNA

PCB ANTENNA

PACKAGE SIZE*

APPLICATION

FREQUENCY

35A7AB5 = 35.0mm x 7.0mm x 0.15mm

IS = ISM

B5 = 863-870MHz

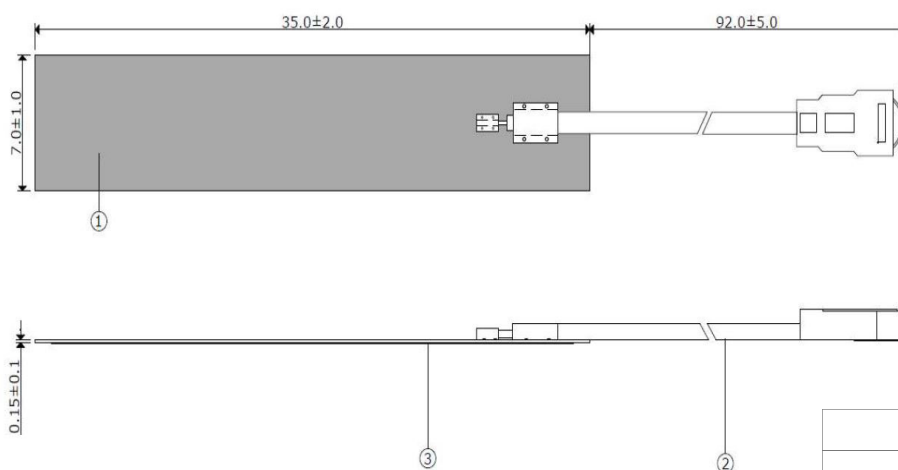


* Where letters denote decimal location (A=0, B=1, C=2, etc.); e.g. B5=0.15, 3A5=3.05, 9A=9.0

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	863		870	
Impedance	Ω		50		
Polarization			RHCP		
Peak Gain	dBi		1.9		At 868MHz
Efficiency	%		61.1		At 868MHz
VSWR				2	At Center Frequency
Operating Temperature	C	-40		85	

Outline Drawing

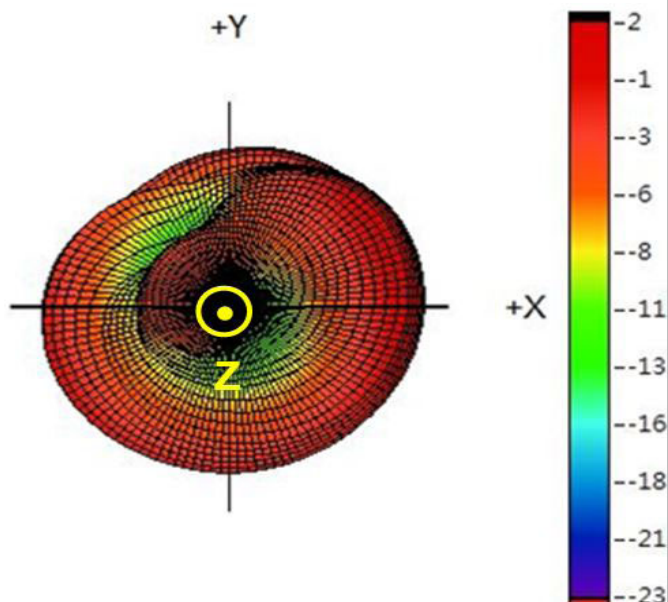
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



Item	Material
1	FPCB
2	IPEX Connector and Cable with OD of 1.13
3	Adhesive Tape

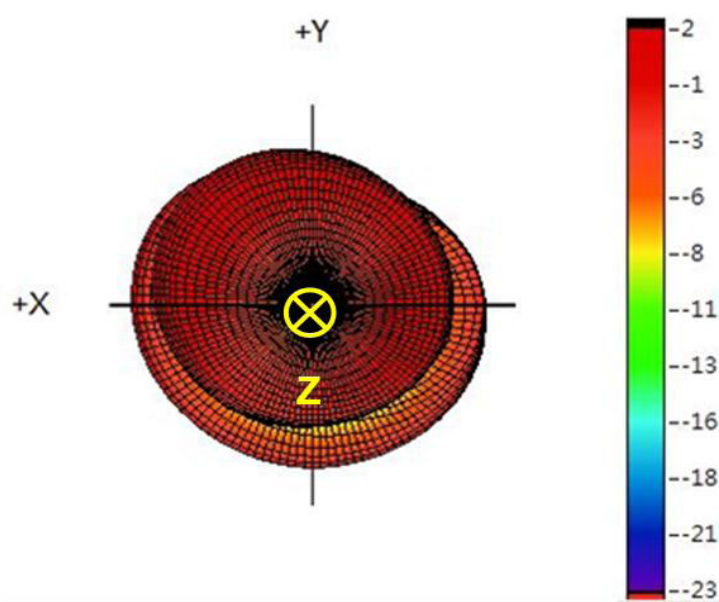
Radiation Pattern

868MHz



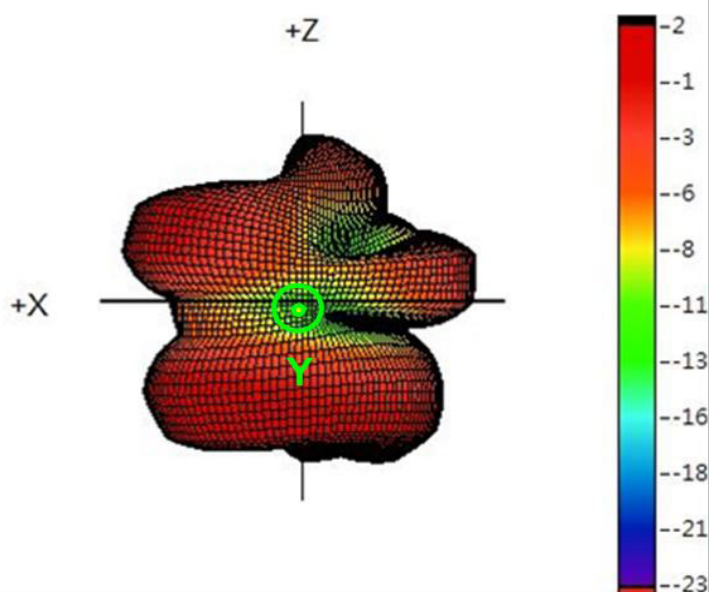
Radiation Pattern

868MHz



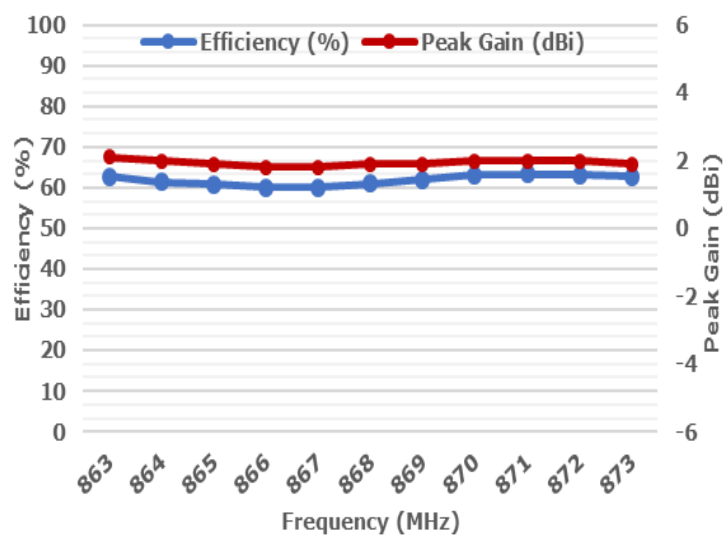
Radiation Pattern

868MHz



Efficiency V's Frequency

868MHz

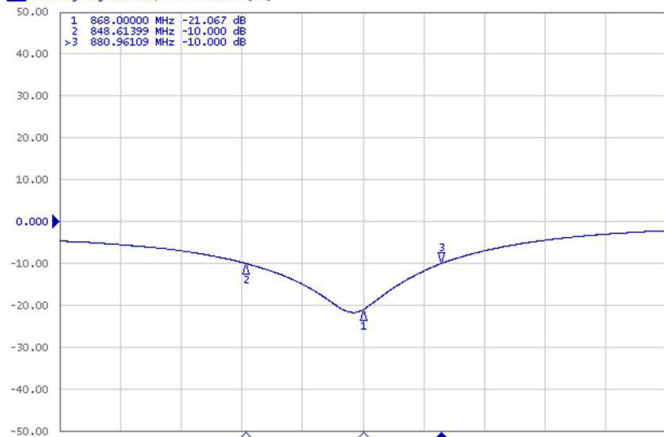


Freq.	863	864	865	866	867	868	869	870	871	872	873
Eff. (%)	62.8	61.4	60.9	60.1	60.1	61.1	61.90	63.10	63.4	63.1	62.7
P.G.	2.1	2	1.9	1.8	1.8	1.9	1.9	2	2	2	1.9

Electrical Test

Return Loss

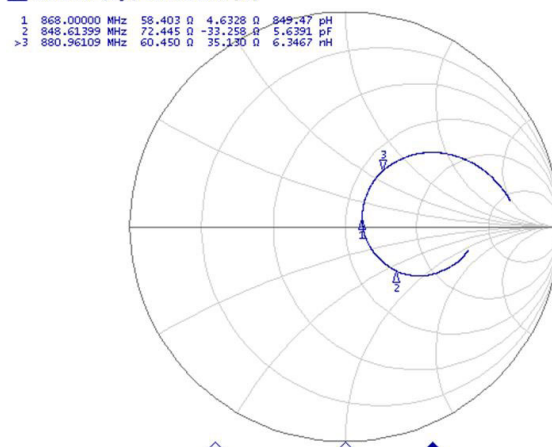
Fig 1 S11 Log Mag 10.00dB/ Ref 0.000dB [F1]



Electrical Test

VSWR

Fig 2 S11 Smith (R+jX) Scale 1.000U [F1]



Environmental & Mechanical Specifications

High Temperature Test	85°C for 240 hours, and then to normal temperature/humidity High Temperature Test for 24hours.
Low Temperature Test	-30°C for 240 hours, and then to normal temperature/humidity for 24hours.
Humidity Test	85°C / 90-95%RH for 48 hours, and then to normal temperature/humidity for 24hours.
Thermal Shock Test	-30°C for 30 min and +85°C for 30 min. 5 cycles, then expose to normal temperature/humidity for 24 hours or more.
Vibration Test	5 to 200 to 5Hz, swept in 10min, 4.5G at max(2mm amplitude), in X and Y directions for 2 hours each and in Z direction for 4 hours.