

Features

- WiFi / Bluetooth
- Indoor Antenna
- 50 Ohm Impedance
- 2400-2500MHz
- Omni Radiation

Applications

- Bluetooth & IEEE 802.11a/b/g
- Wireless Communication
- Portable Device
- Machine To Machine Communication
- Network Devices



Part Numbering Guide

S AT IA 145A6A WF B1

SUNTSU

ANTENNA

INDOOR ANTENNA

PACKAGE SIZE*

145A6A = 145.0mm x 6.0mm

APPLICATION

WF= WiFi

FREQUENCY

B3 = 2400-2500MHz

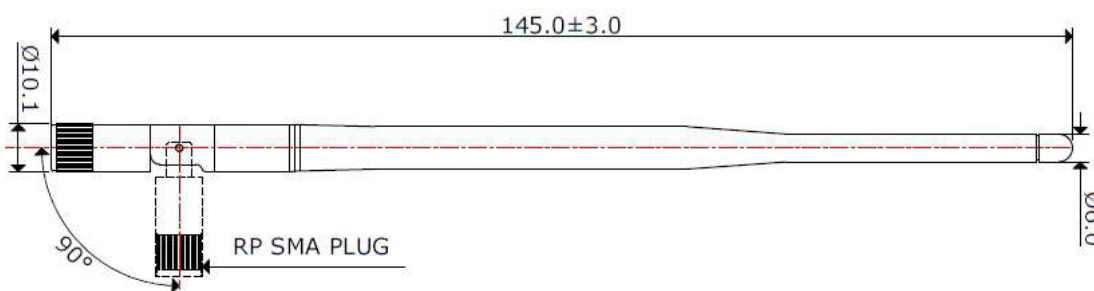


* Where letters denote decimal location (A=.0, B=.1, C=.2, etc.); e.g. B5=0.15, 3A5=3.05, 9A=9.0

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	2400		2500	
Impedance	Ω		50		
Polarization			Vertical		
Peak Gain	dBi		4.3		At 2450MHz
Efficiency	%		93		At 2450MHz
VSWR				2	At Center Frequency
Operating Temperature	C	-20		65	

Outline Drawing

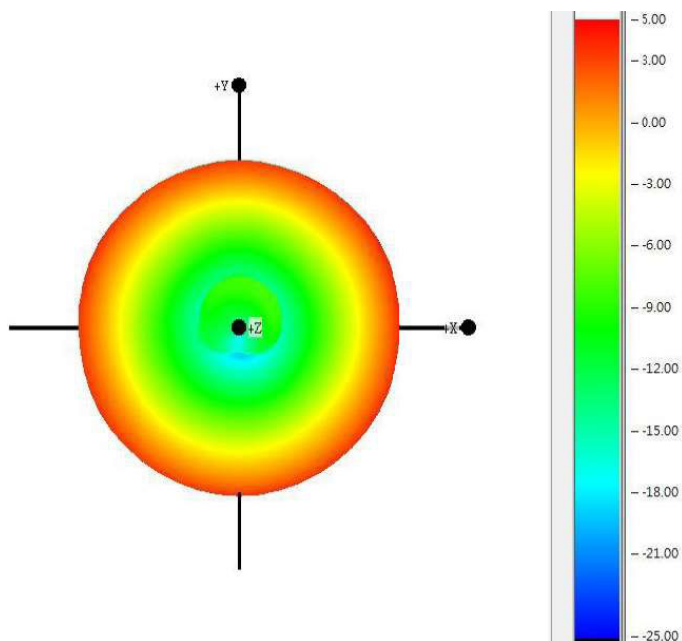
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



Item	Material
Whip	TPE
Connector	Brass
Connector Insulator	Teflon

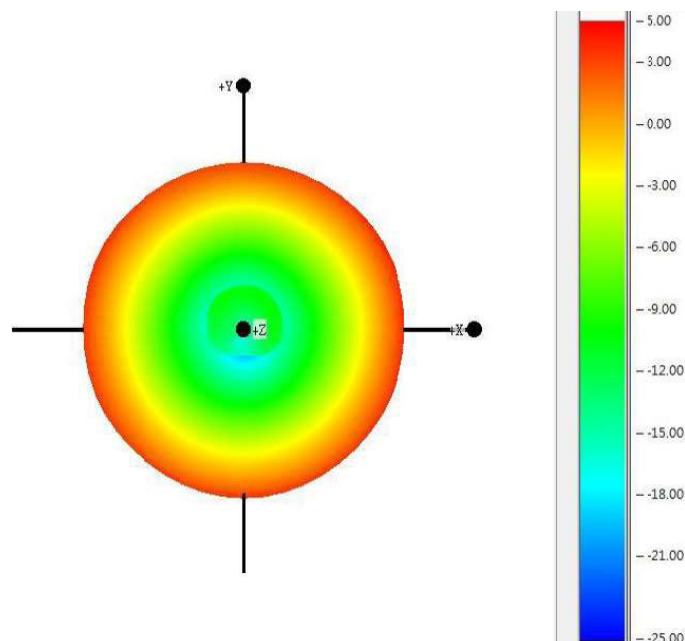
3D Radiation Pattern (Unit: dBi)

2400MHz



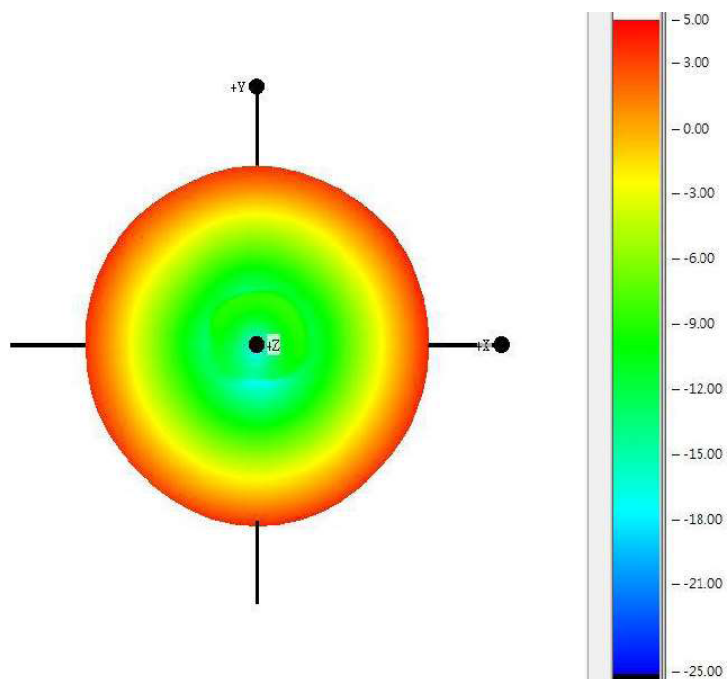
3D Radiation Pattern (Unit: dBi)

2450MHz



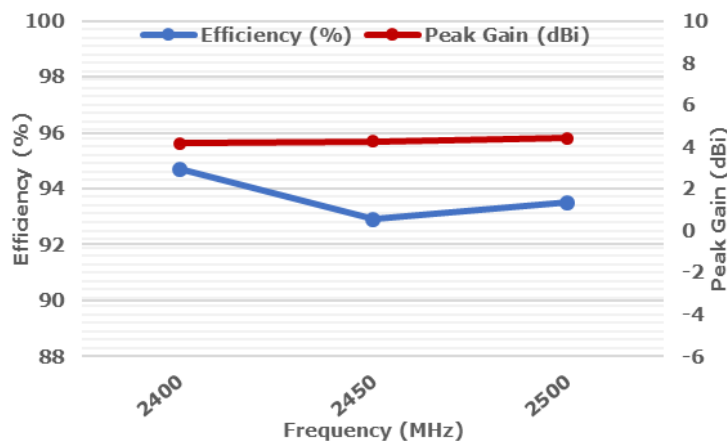
3D Radiation Pattern (Unit: dBi)

2500MHz



Efficiency vs Frequency

2400-2500MHz

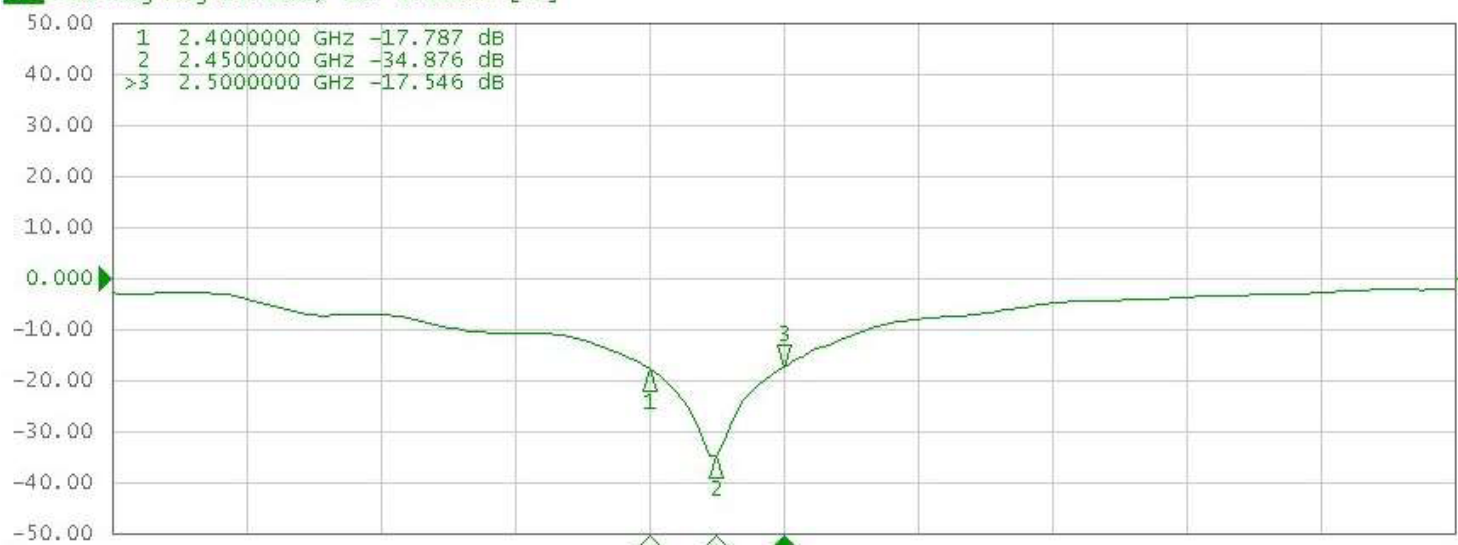


Frequency	2400	2450	2500
Efficiency	94.7	92.9	93.5
P.G	4.15	4.26	4.42

Electrical Test

Return Loss

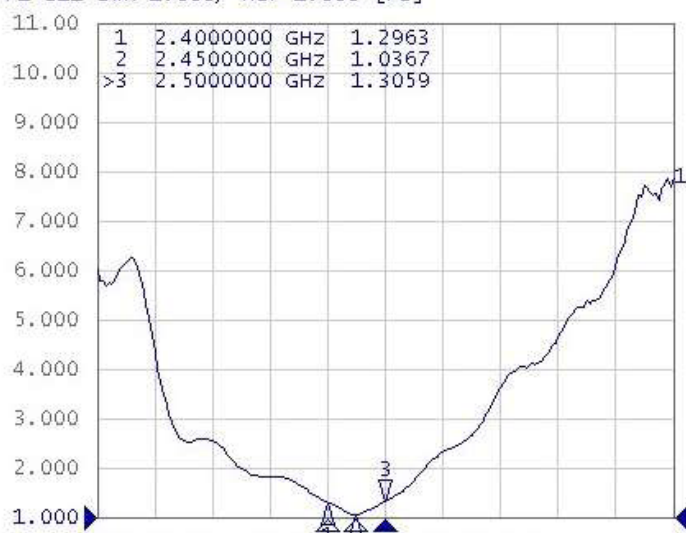
Tr3 S11 Log Mag 10.00dB/ Ref 0.000dB [F2]



Electrical Test

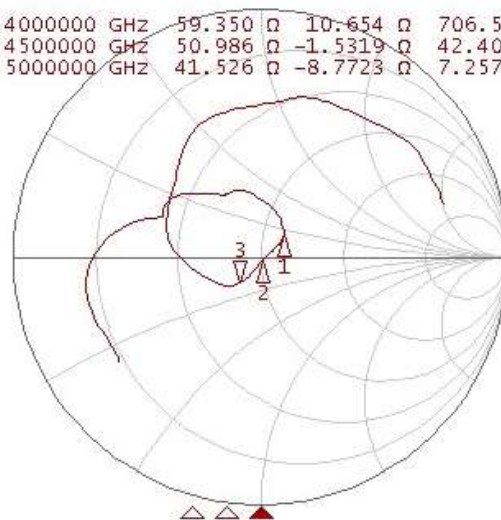
VSWR & SMITH CHART

Tr1 S11 SWR 1.000/ Ref 1.000 [F2]



Tr2 S11 Smith (R+jX) Scale 1.000u [F2]

1	2.4000000 GHz	59.350 Ω	10.654 Ω	706.52 pF
2	2.4500000 GHz	50.986 Ω	-1.5319 Ω	42.405 pF
>3	2.5000000 GHz	41.526 Ω	-8.7723 Ω	7.2571 pF



Environmental & Mechanical Specifications

High Temperature Test	70°C for 48 hours, and then to normal temperature/humidity High Temperature Test for 24hours.
Low Temperature Test	-20°C for 48 hours, and then to normal temperature/humidity for 24hours.
Humidity Test	65°C / 90%RH for 48 hours, and then to normal temperature/humidity for 24hours.
Thermal Shock Test	-20°C for 30 min and +70°C for 30 min. 48 cycles, then expose to normal temperature/humidity for 24 hours or more.