

Features

- WiFi / Bluetooth
- Indoor Type
- 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 109A7J WF B1

SUNTSU

ANTENNA

INDOOR ANTENNA

PACKAGE SIZE*

109A7J = 109.0mm x 7.9mm

APPLICATION

WF = WiFi

FREQUENCY

B1 = 2400-2500MHz

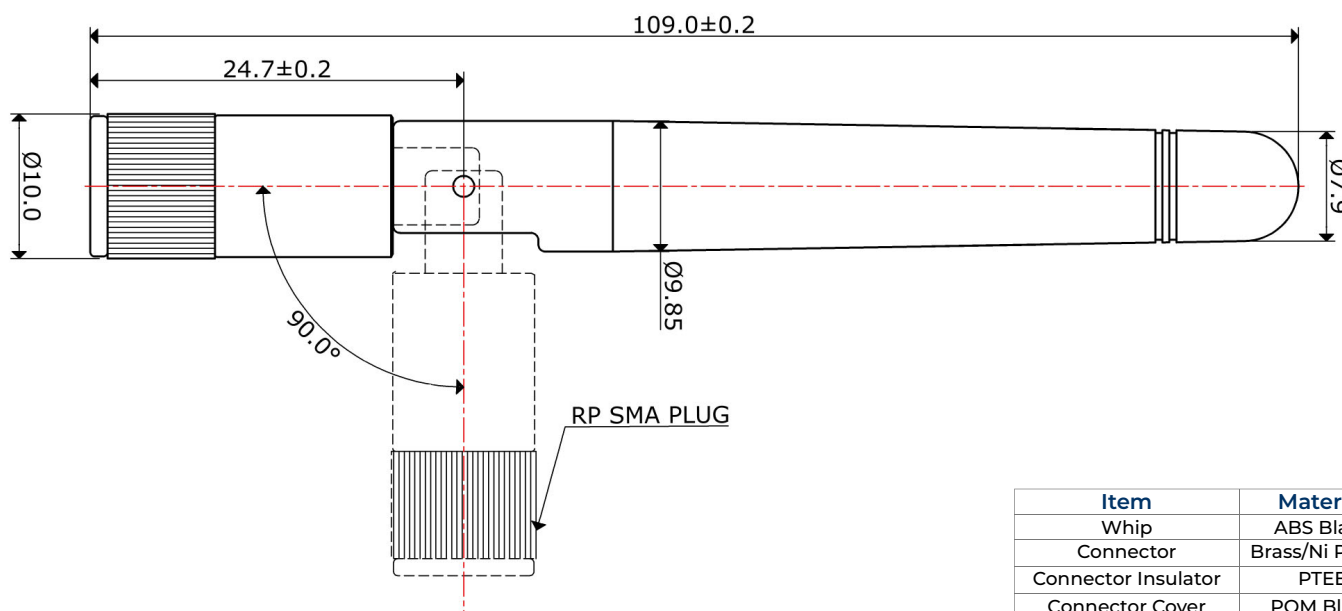


* Where letters denote decimal location (A=.0, B=.1, C=.2, etc.); e.g. B5=0.15, 3A5=3.05, 9A=9.0

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	2400		2500	
Impedance	Ω		50		
Polarization			Vertical		
Peak Gain	dBi		2.0		At 2450MHz
Efficiency	%		80.7		At 2450MHz
VSWR				2.0	At Center Frequency
Operating Temperature	$^{\circ}\text{C}$	-20		65	

Outline Drawing

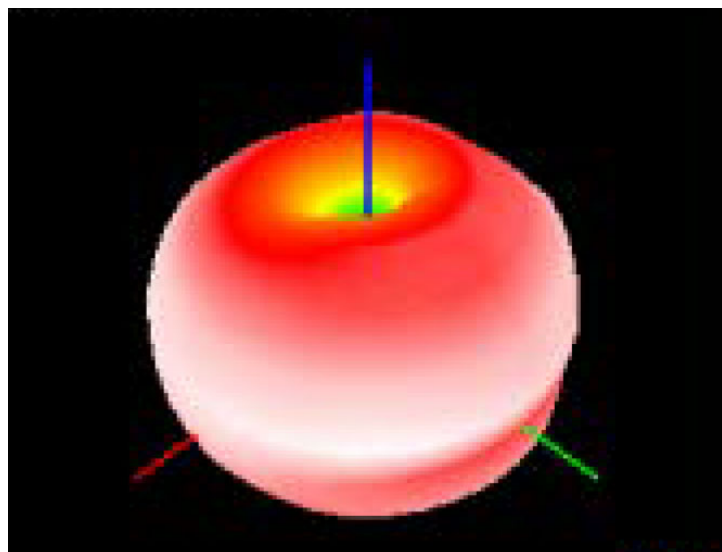
All dimensions are in millimeters (mm) unless otherwise noted.
 Drawings are not to scale.



Item	Material
Whip	ABS Black
Connector	Brass/Ni Plated
Connector Insulator	PTEE
Connector Cover	POM Black

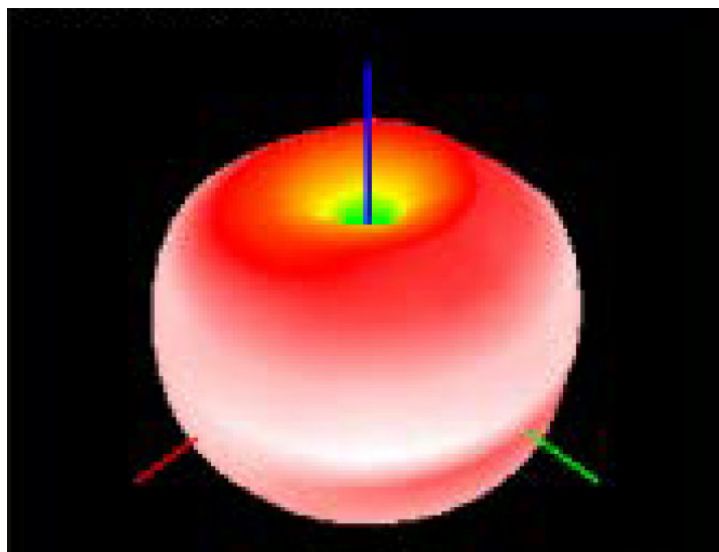
3D Radiation Pattern (Unit: dBi)

2400MHz



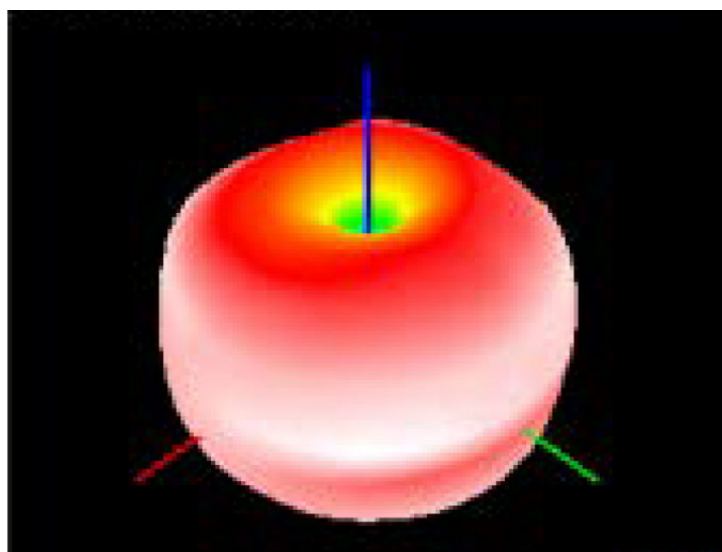
3D Radiation Pattern (Unit: dBi)

2450MHz

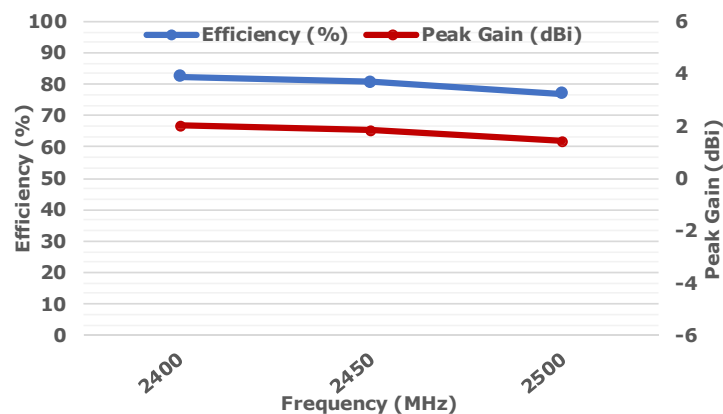


3D Radiation Pattern (Unit: dBi)

2500MHz



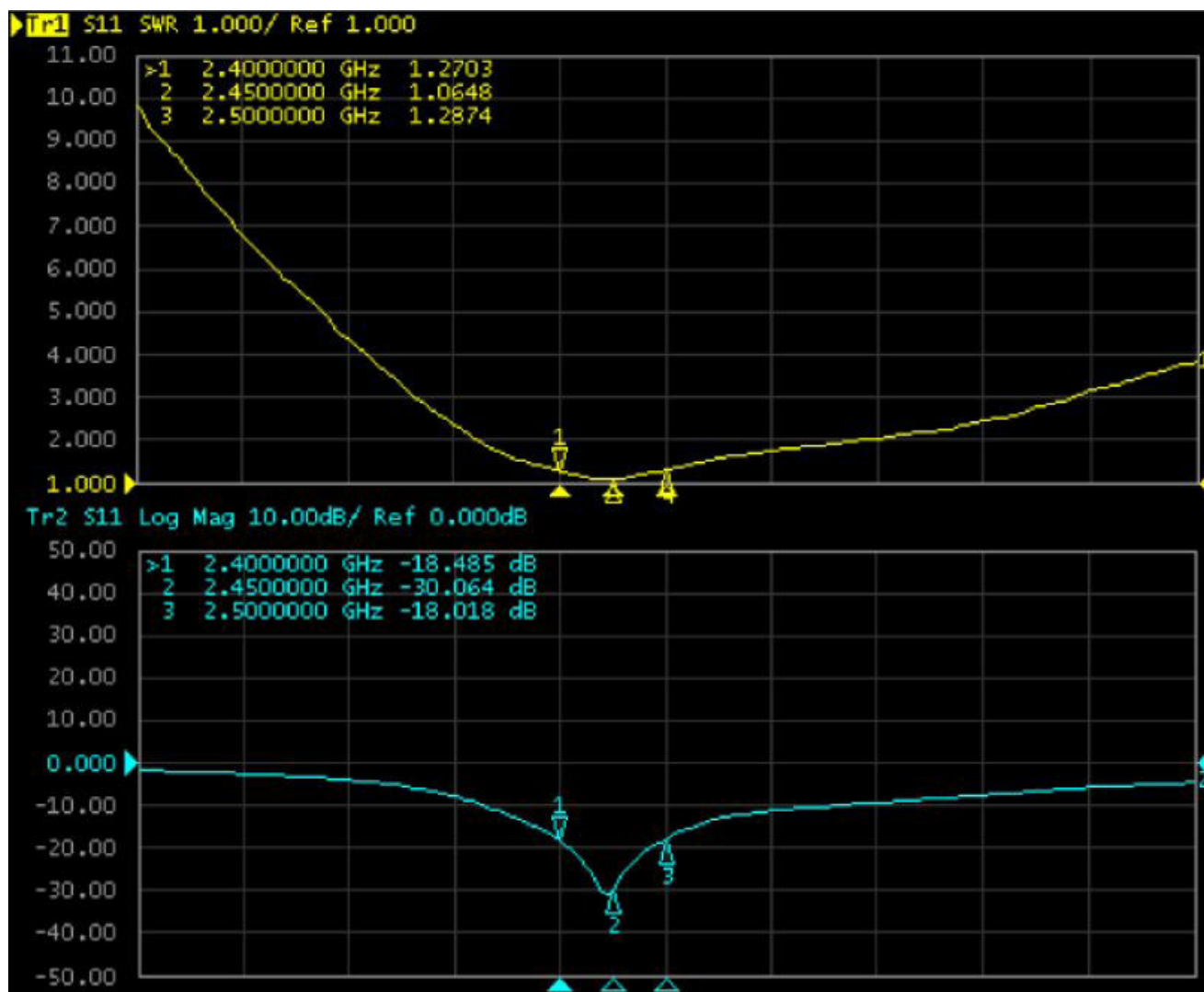
Efficiency vs Frequency



Frequency	2400	2450	2500
Efficiency	82.30	80.70	77.00
Peak Gain	2.02	1.83	1.43

Electrical Test

Return Loss & VSWR



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.