

Features
<ul style="list-style-type: none"> <li>WiFi / Bluetooth</li> <li>Indoor Type</li> <li>50 Ohm Impedance</li> <li>2400-2500MHz</li> <li>Omni Radiation</li> </ul>

Applications
<ul style="list-style-type: none"> <li>Bluetooth &amp; IEEE 802.11a/b/g</li> <li>Wireless Communication</li> <li>Portable Device</li> <li>Machine To Machine Communication</li> <li>Network Devices</li> </ul>



### Part Numbering Guide

**S AT IA 109A7J WF B1**

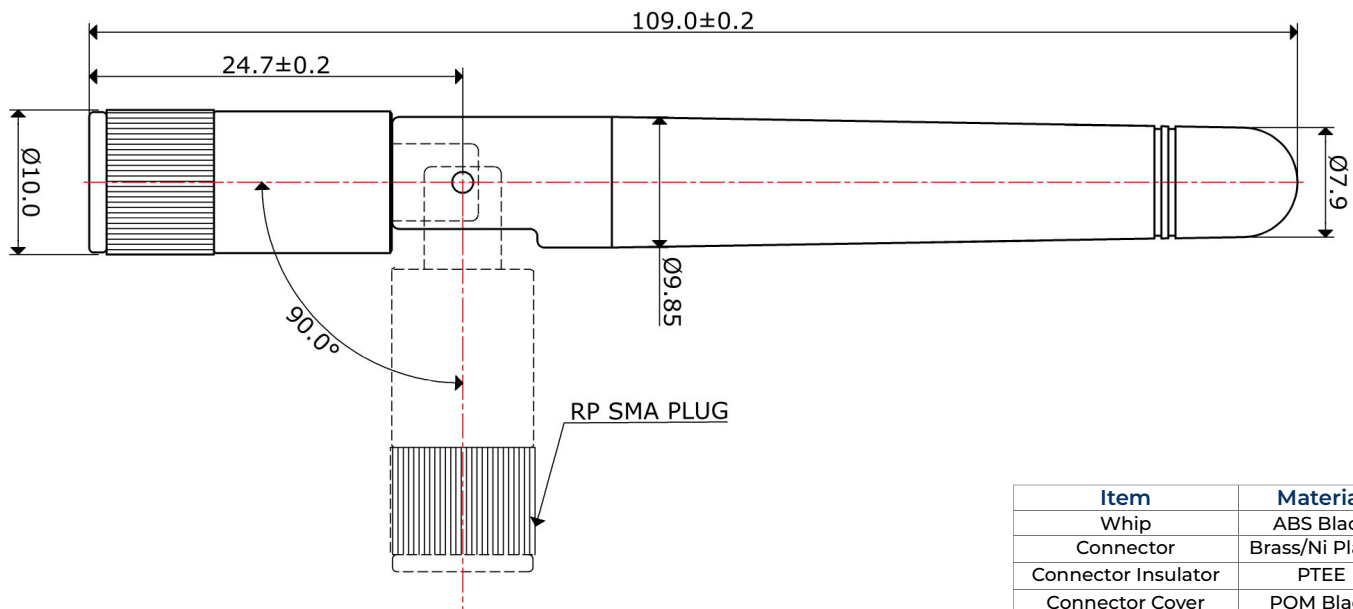


\* Where letters denote decimal location (A=.0, B=.1, C=.2, etc.); e.g. B5=0.15, 3A5=3.05, 9A=9.0

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	2400		2500	
Impedance	$\Omega$		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

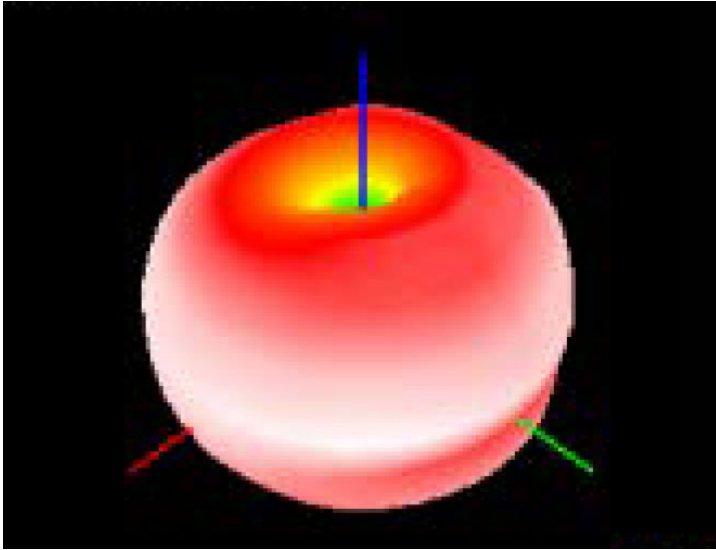
All dimensions are in millimeters (mm) unless otherwise noted.  
 Drawings are not to scale.



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

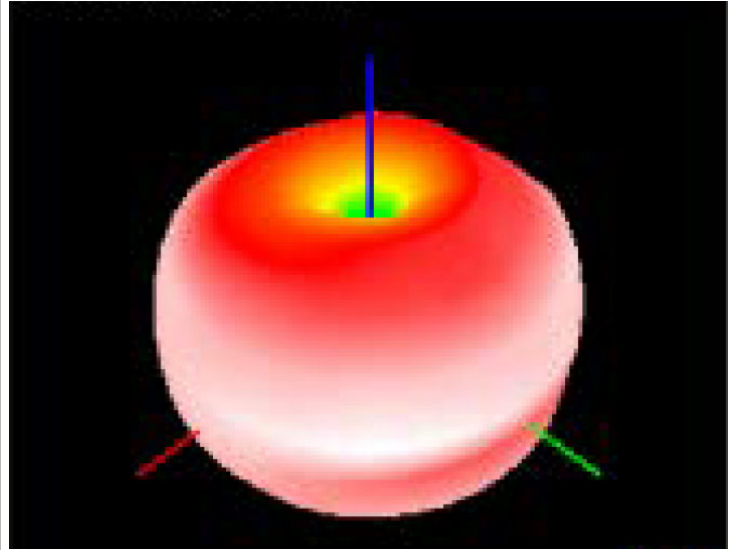
3D Radiation Pattern (Unit: dBi)

2400MHz



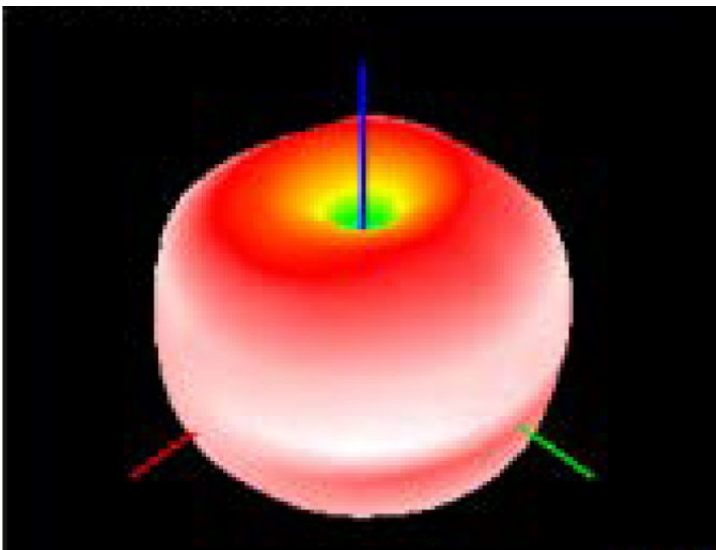
3D Radiation Pattern (Unit: dBi)

2450MHz

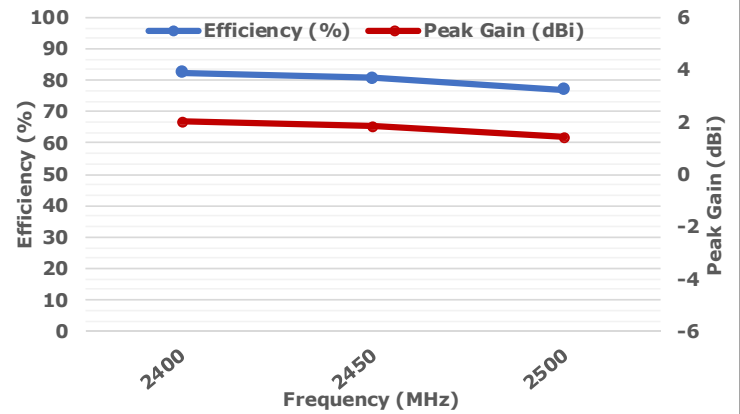


3D Radiation Pattern (Unit: dBi)

2500MHz



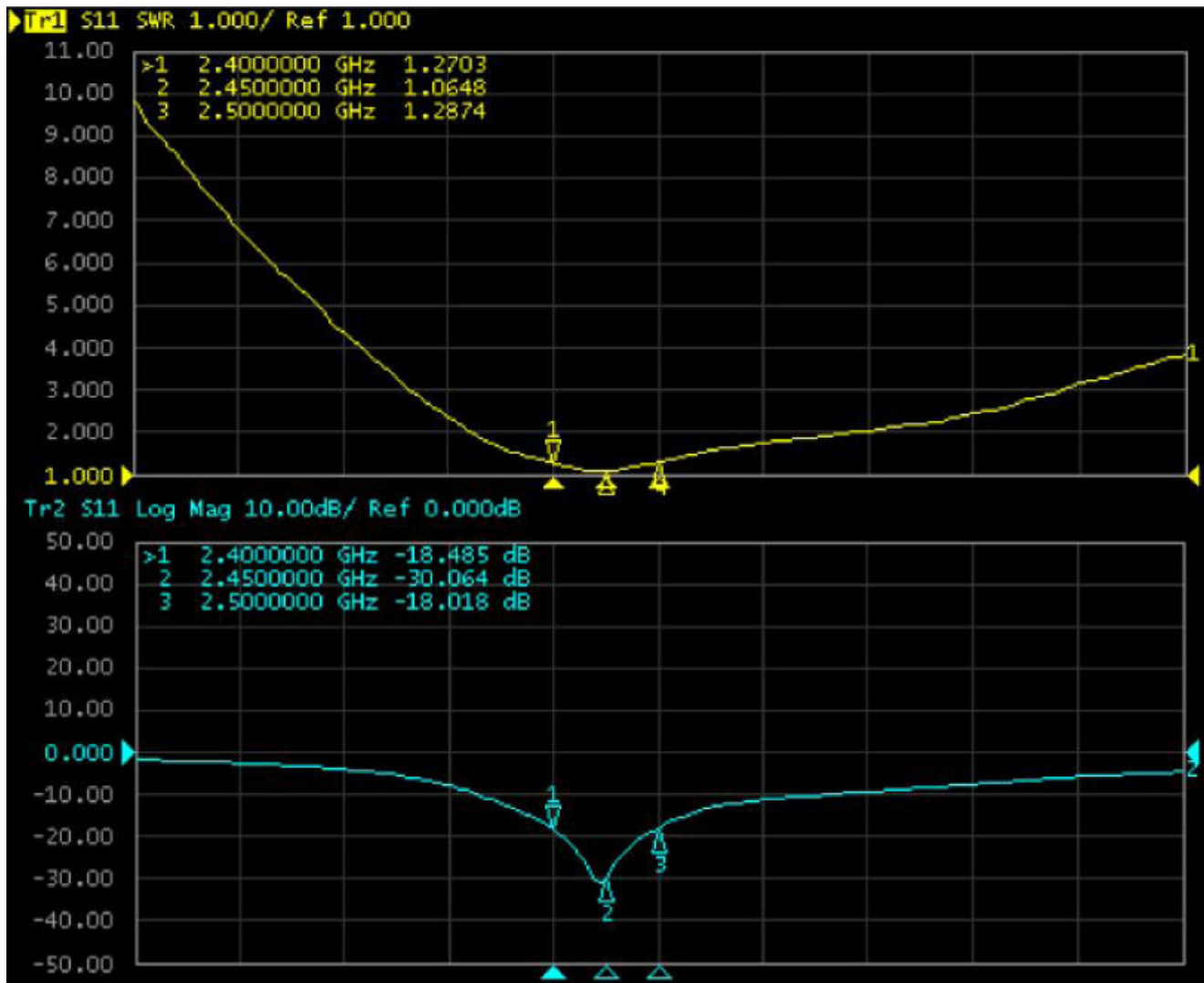
Efficiency vs Frequency



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.