

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - 3G/GSM - PCB Type - Stable And Reliable Performance - 824-960MHz & 1710-2170MHz - Compact Size With Efficient Reception 	<ul style="list-style-type: none"> - GSM/3G Position Routers & Tracking Systems - Automotive Sensors - Smart Outdoor Devices - Machine To Machine Wireless Communication - Mobile Systems



PART NUMBERING GUIDE

SUNTSU → **S** **AT** **PC** - **35A7AF** - **CE** **B4** ← **FREQUENCY BAND (MHz)**
 B4: 824-960MHz
 1710-2170MHz

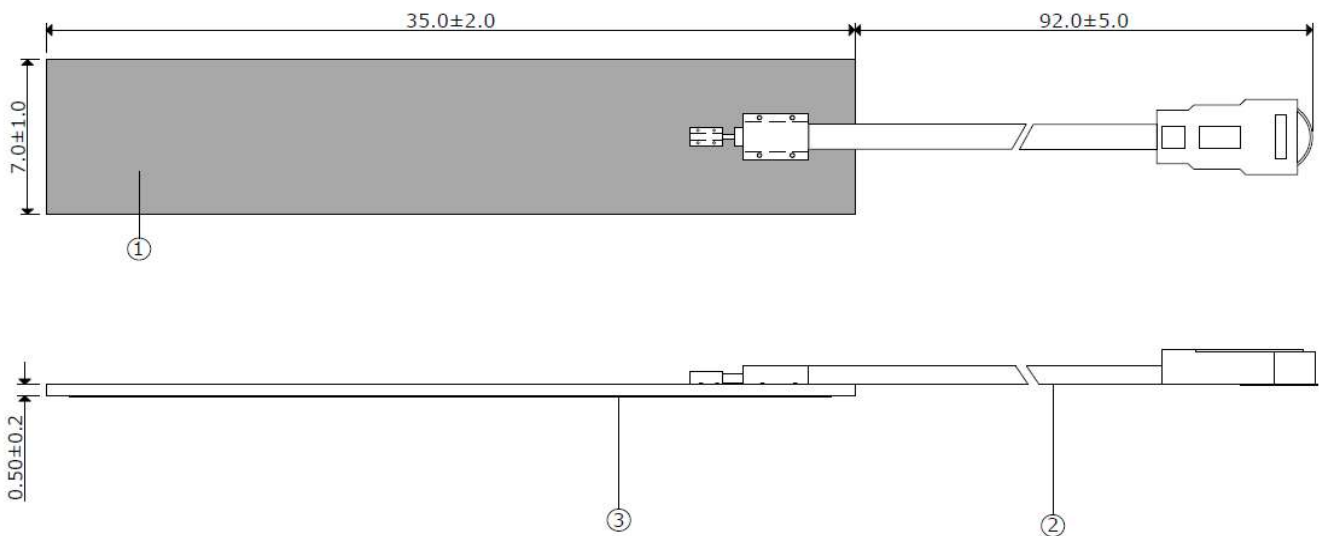
ANTENNA → **AT** **APPLICATION**
 CE: Cellular

PCB ANTENNA → **PC** *** PACKAGE SIZE**
 35A7AF: 35.0mm x 7.0mm x 0.5mm

* Where letters denote decimal location A=.0, B=.1, C=.2, etc. Ex: B5=0.15, 3A5=3.05, 9A=9.0
 To customize your parameters, contact a Suntsu representative.

ELECTRICAL PARAMETERS (At 25°C)	UNITS	MIN.	TYP.	MAX	REMARKS
Frequency Band	MHz	824		960	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		0.4		At 890MHz
Efficiency	%		35		At 890MHz
Operating Temperature	°C	-40		85	
Frequency Band	MHz	1710		2170	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		1.5		At 1950MHz
Efficiency	%		45		At 1950MHz
Operating Temperature	°C	-40		85	

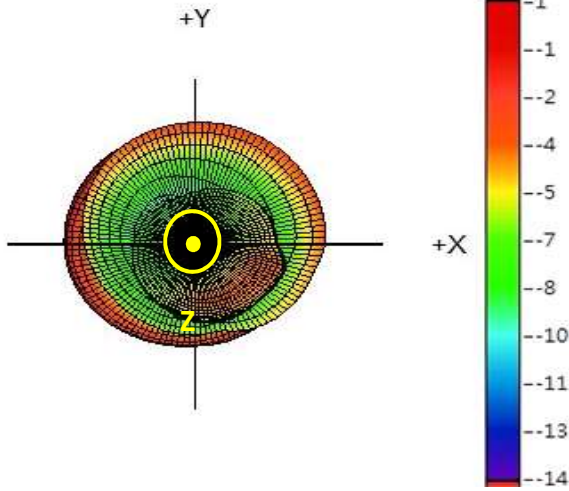
OUTLINE DRAWING (NOTE: All dimensions are in millimeters [mm], unless otherwise noted. Drawings are not to scale.)



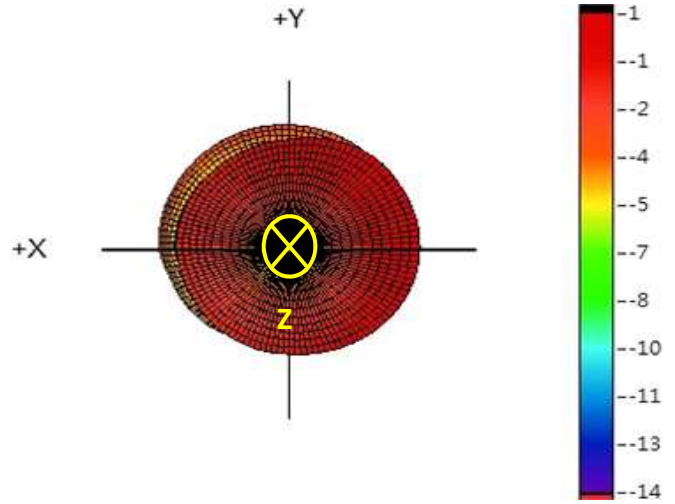
Item	Material
1	FR4 PCB
2	IPEX Connector and Cable with OD of 1.13
3	Adhesive Tape

3D RADIATION PATTERN (UNIT: dBi) AND EFFICIENCY vs FREQUENCY

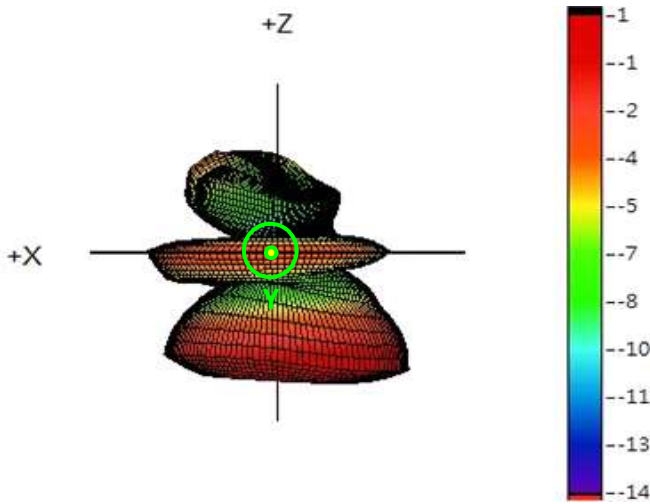
890MHz



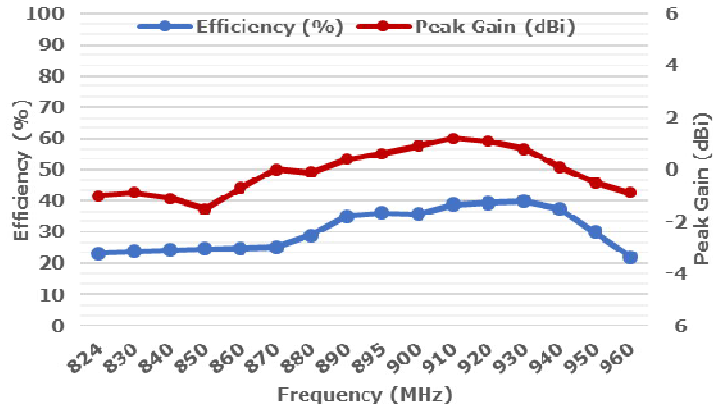
890MHz



890MHz

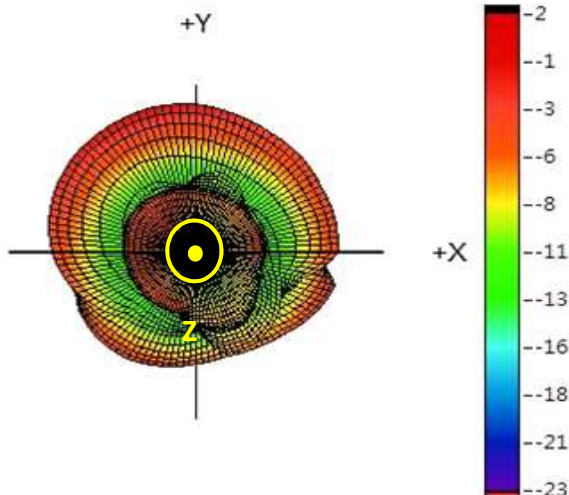


890MHz

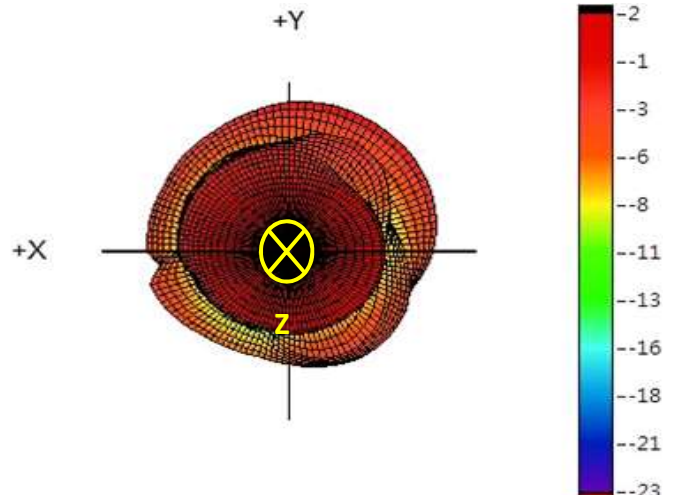


Freq.	824	830	840	850	860	870	880	890	895	900	910	920	930	940	950	960
Eff. (%)	23.3	23.7	24.1	24.5	24.7	25.1	29.00	35.20	36.1	35.7	38.7	39.4	39.9	37.5	30	22
P.G.	-1	-0.9	-1.1	-1.5	-0.7	0	-0.1	0.4	0.6	0.9	1.2	1.1	0.8	0.1	-0.5	-0.9

1950MHz

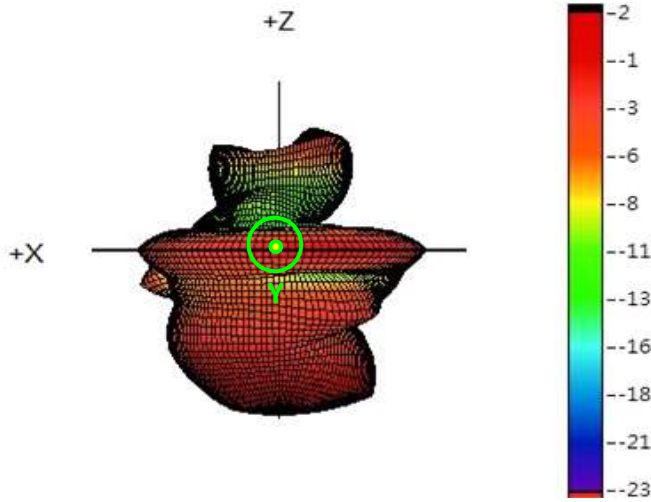


1950MHz

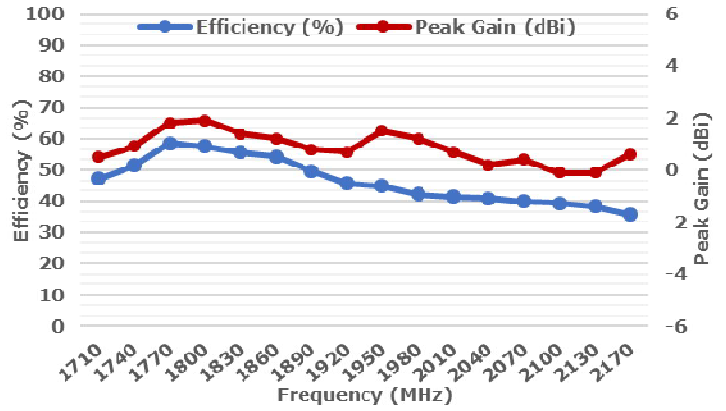


3D RADIATION PATTERN (UNIT: dBi) AND EFFICIENCY vs FREQUENCY

1950MHz



1950MHz

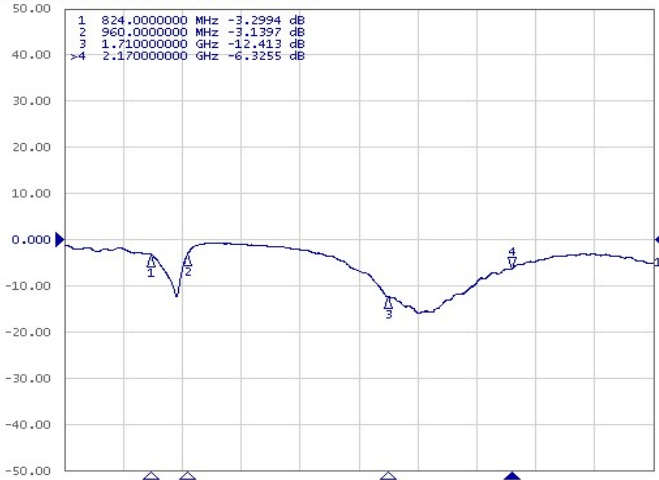


Freq.	1710	1740	1770	1800	1830	1860	1890	1920	1950	1980	2010	2040	2070	2100	2130	2170
Eff. (%)	47.2	51.5	58.5	57.5	55.6	54.3	49.70	45.70	44.9	42.2	41.5	40.8	40	39.4	38.4	35.7
P.G.	0.5	0.9	1.8	1.9	1.4	1.2	0.8	0.7	1.5	1.2	0.7	0.2	0.4	-0.1	-0.1	0.6

ELECTRICAL TEST

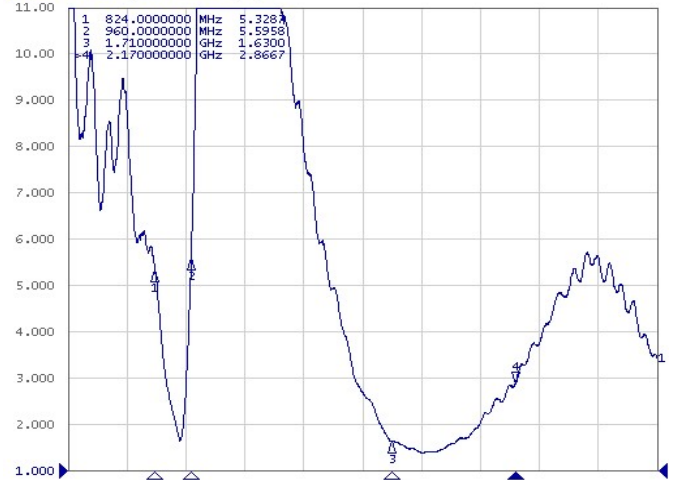
RETURN LOSS

[F1] S22 Log Mag 10.00dB/ Ref 0.000dB [F1]



VSWR

[F1] S22 SWR 1.000/ Ref 1.000 [F1]



ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

High Temperature Test	85°C for 500 hours, and then to normal temperature/humidity for 24hours.
Low Temperature Test	-30°C for 500 hours, and then to normal temperature/humidity for 24hours.
Humidity Test	85°C / 90-95% for 96 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.