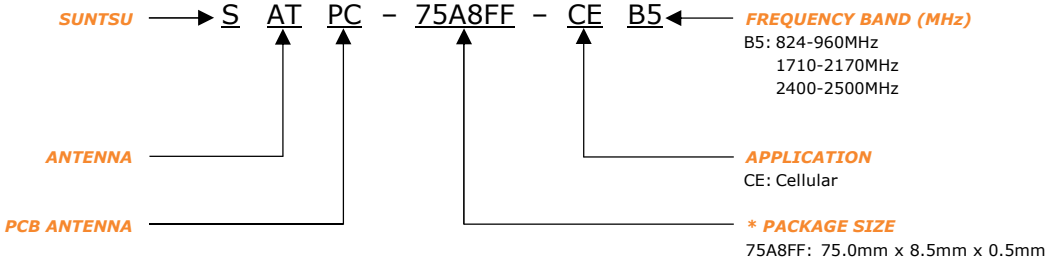
SATPC-75A8FF-CEB5

75.0mm x 8.5mm x 0.5mm PCB ANTENNA

FEATURES	APPLICATIONS
- 3G / GSM & WiFi - PCB Type - Stable And Reliable Performance - 824-960MHz, 1710-2170MHz & 2400-2500MHz - Compact Size With Efficient Reception	- IEEE802.11 (b/g/n) & 3G / GSM - Automotive Sensors - Smart Outdoor Devices - Machine To Machine Wireless Communication - Mobile Systems

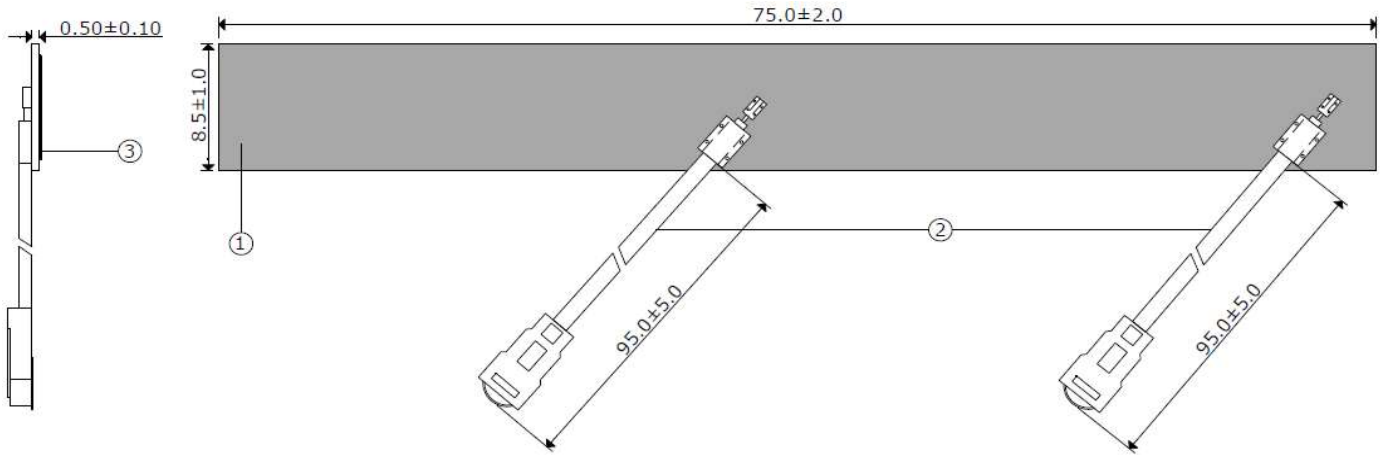
PART NUMBERING GUIDE



* 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 25ºC)	UNITS	MIN.	TYP.	MAX	REMARKS
Frequency Band	MHz	824		960	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		2.2		At 890MHz
Efficiency	%		66		At 890MHz
VSWR				3	At Center Frequency
Operating Temperature	ºC	-40		85	
Frequency Band	MHz	1710		2170	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		2.0		At 1950MHz
Efficiency	%		64		At 1950MHz
VSWR				3	At Center Frequency
Operating Temperature	ºC	-40		85	
Frequency Band	MHz	2400		2500	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		1.5		At 2442MHz
Efficiency	%		65		At 2442MHz
VSWR				3	At Center Frequency
Operating Temperature	ºC	-40		85	

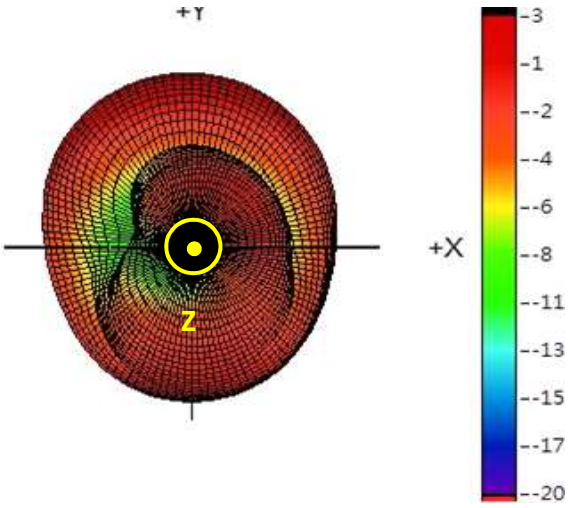
OUTLINE DRAWING (NOTE: All dimensions are in millimeters [mm], unless otherwise noted. Drawings are not to scale.)



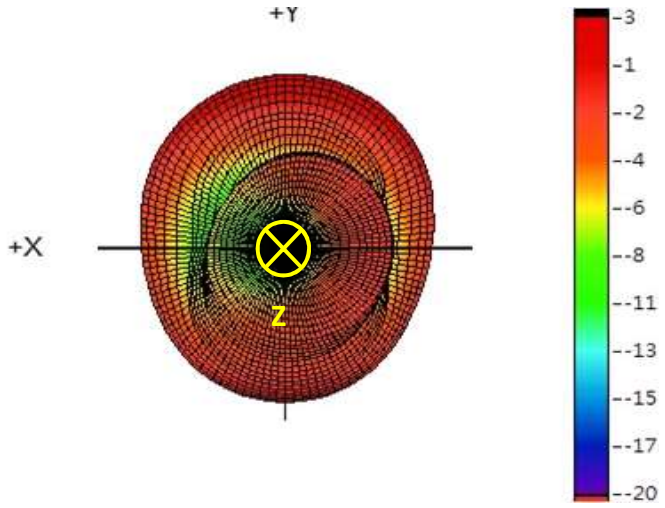
Item	Material
1	FR4 PCB
2	IPEX Connector and Cable with OD of 1.13
3	Adhesive Tape

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

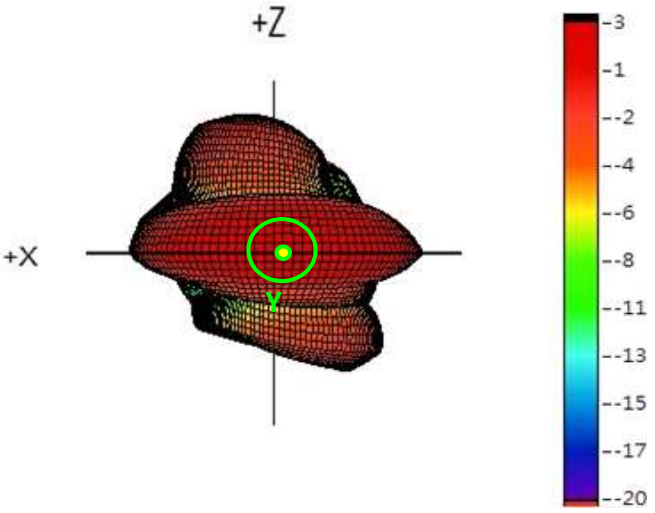
890MHz



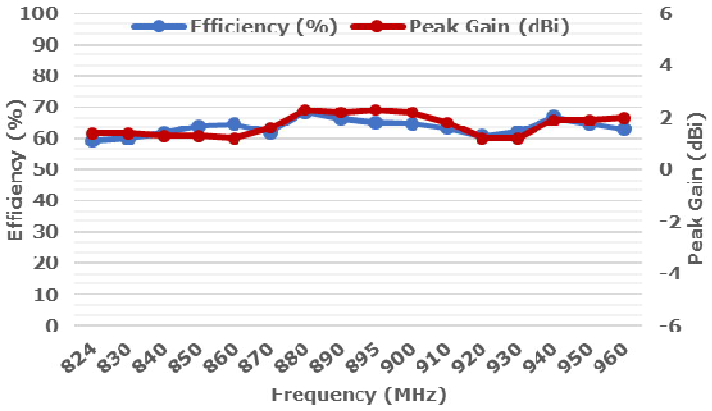
890MHz



890MHz

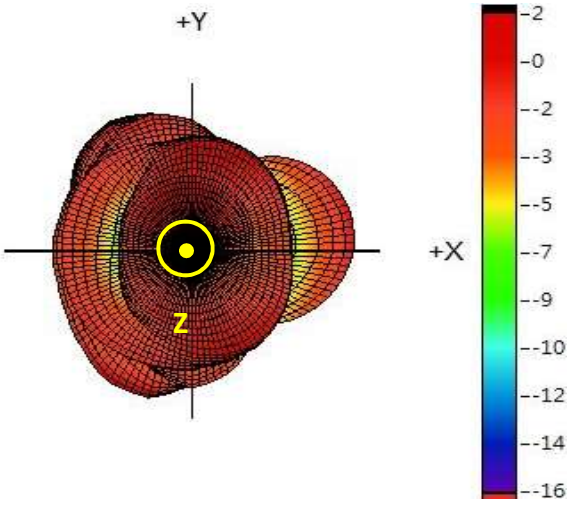


890MHz

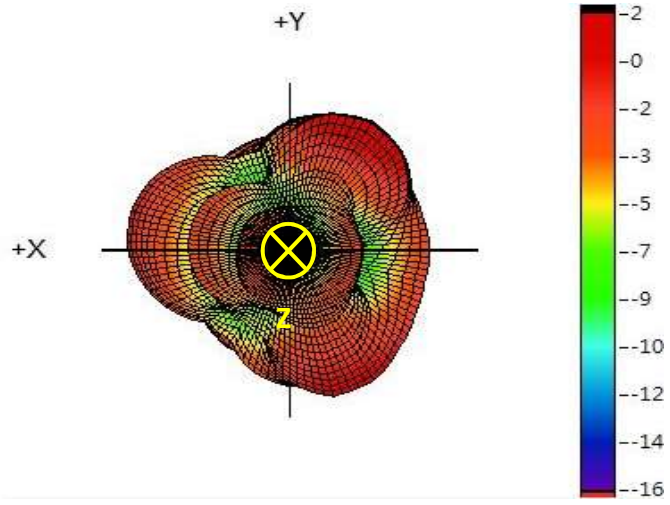


Freq.	824	830	840	850	860	870	880	890	895	900	910	920	930	940	950	960
Eff. (%)	59.2	60.1	61.6	63.9	64.5	62	68.50	66.30	65.1	64.6	63.3	60.7	62	66.8	64.7	63
P.G.	1.4	1.4	1.3	1.3	1.2	1.6	2.3	2.2	2.3	2.2	1.8	1.2	1.2	1.9	1.9	2

1950MHz

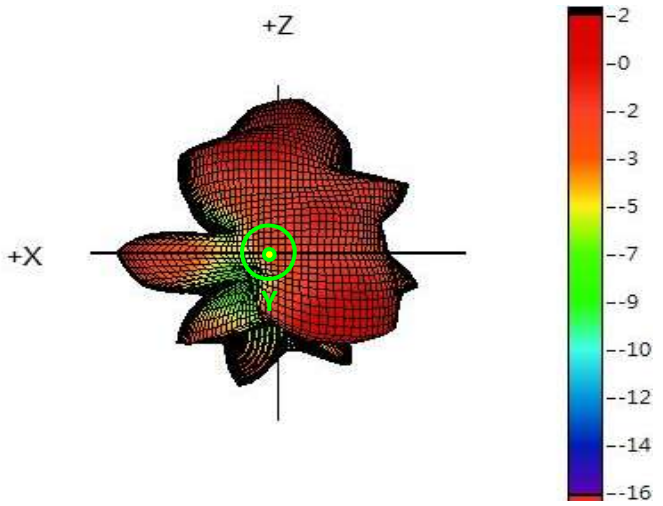


1950MHz

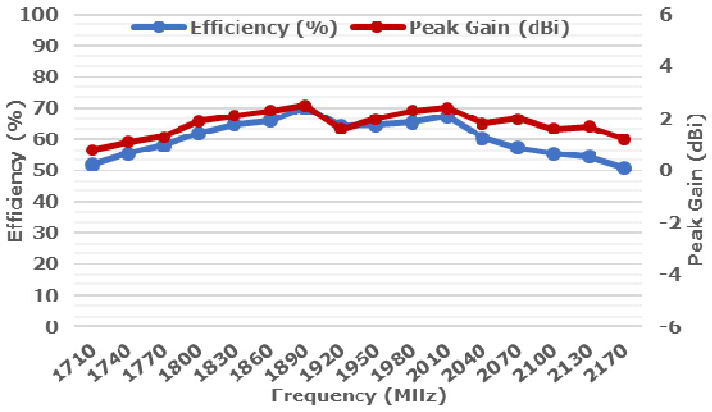


3D RADIATION PATTERN (UNIT: dBi) AND EFFICIENCY vs FREQUENCY

1950MHz

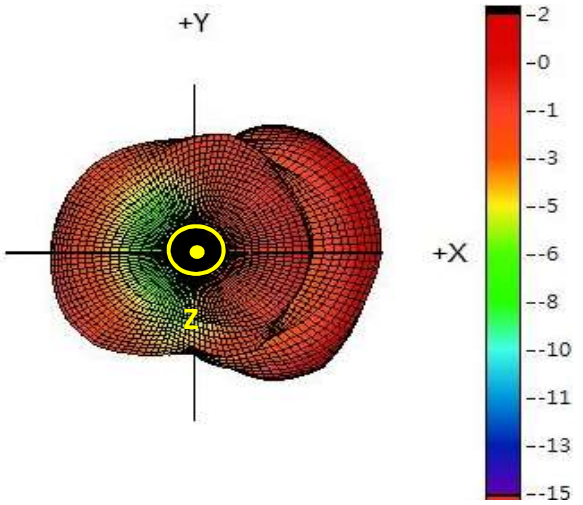


1950MHz

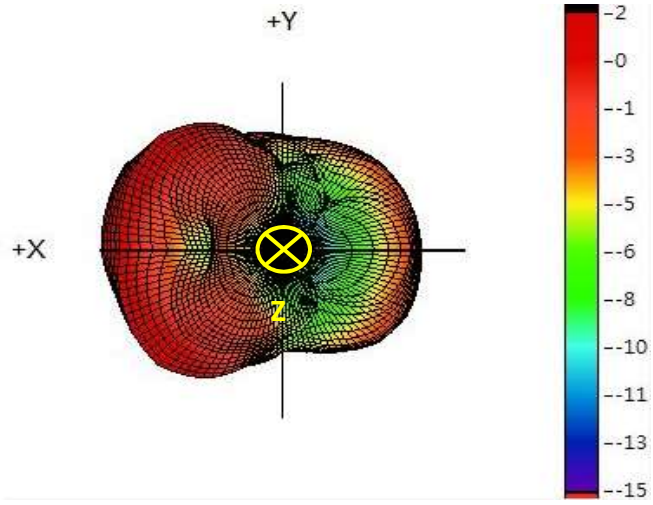


Freq.	1710	1740	1770	1800	1830	1860	1890	1920	1950	1980	2010	2040	2070	2100	2130	2170
Eff. (%)	52	55.5	58.1	61.9	64.9	66.1	70.00	64.30	64.7	65.5	67.3	60.5	57.1	55.4	54.4	50.9
P.G.	0.8	1.1	1.3	1.9	2.1	2.3	2.5	1.6	2	2.3	2.4	1.8	2	1.6	1.7	1.2

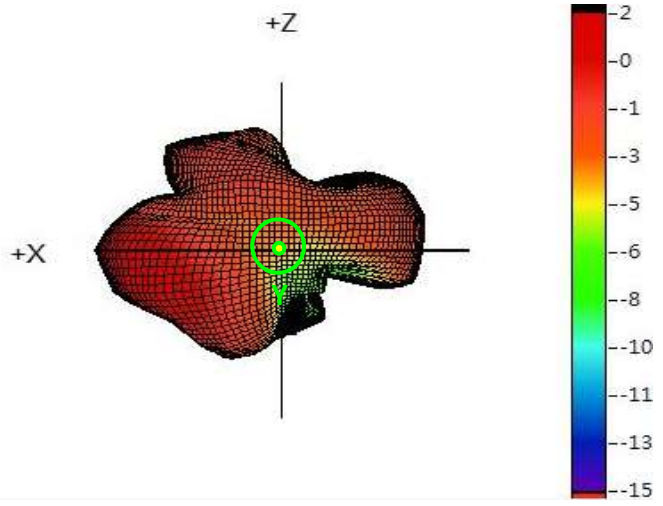
2442MHz



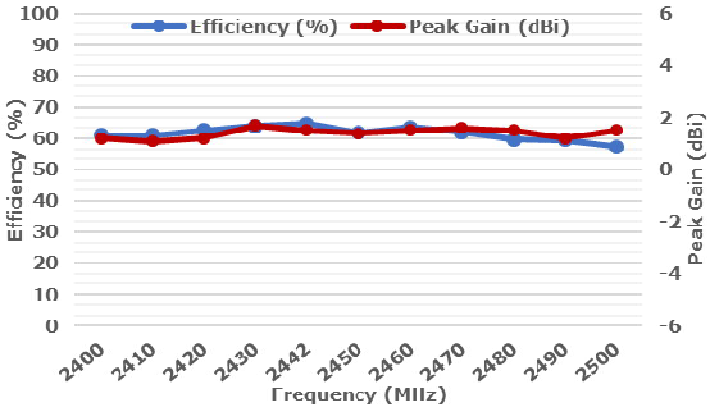
2442MHz



2442MHz



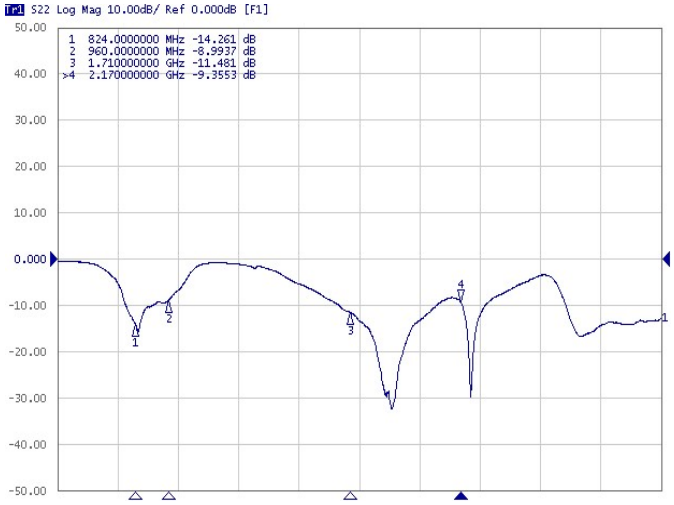
2442MHz



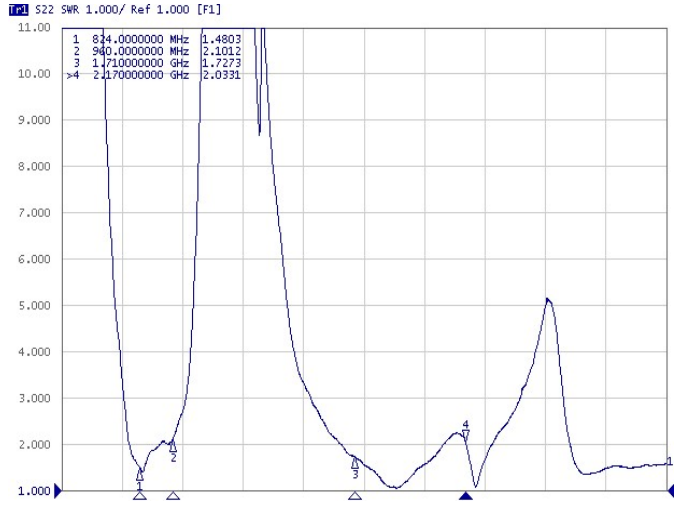
Freq.	2400	2410	2420	2430	2442	2450	2460	2470	2480	2490	2500
Eff. (%)	61.1	61.1	62.6	63.9	64.7	61.8	63.50	61.90	59.7	59.4	57.4
P.G.	1.2	1.1	1.2	1.7	1.5	1.4	1.5	1.6	1.5	1.2	1.5

ELECTRICAL TEST (FOR 3G & GSM)

RETURN LOSS

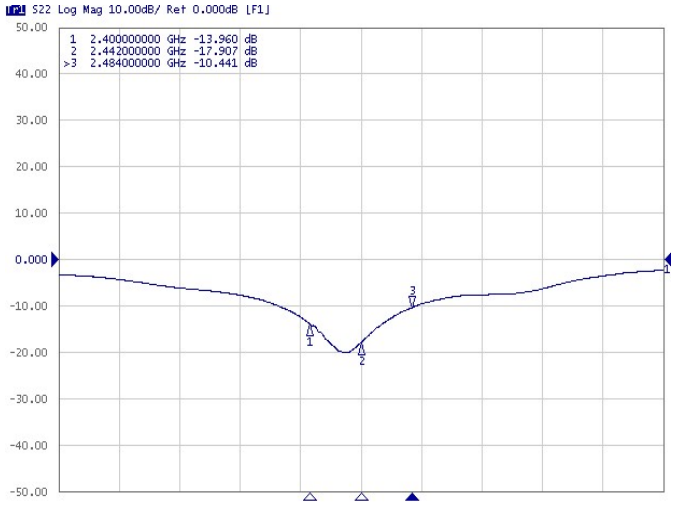


VSWR

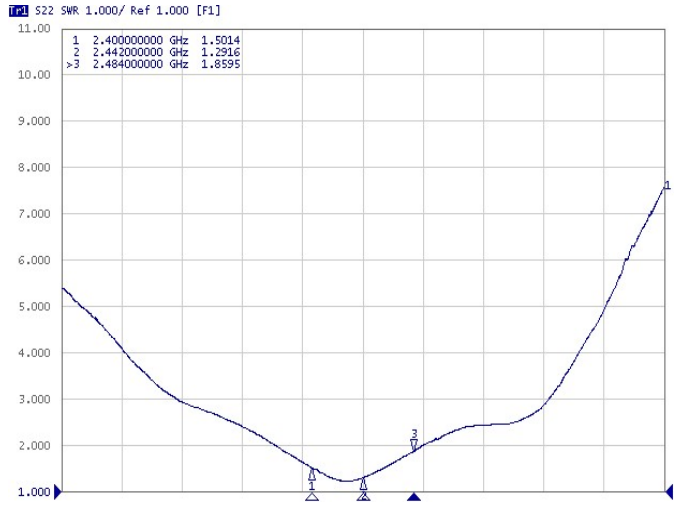


ELECTRICAL TEST (FOR WiFi)

RETURN LOSS

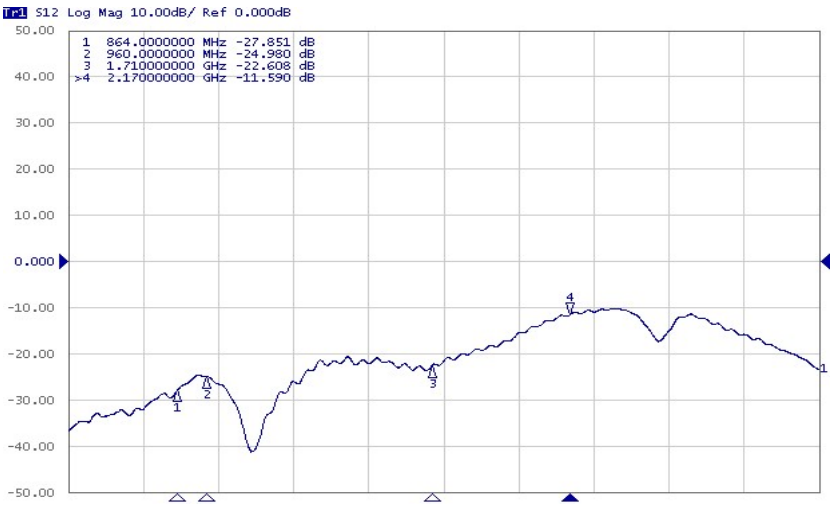


VSWR



ELECTRICAL TEST (CONT.)

ISOLATION



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.