


FEATURES	APPLICATIONS	
<ul style="list-style-type: none"> - GPS & GLONASS - Low Temperature Coefficient Of Frequency - Stable And Reliable Performance - 1575.42MHz & 1598-1606MHz - Compact Size With Efficient Reception 	<ul style="list-style-type: none"> - Satellite Navigation And Tracking Systems - Vehicle/Vessel Management Systems - Base Station Of Cellular Phone Systems - Smart Hand Held Devices - For Use With a 70mm x 70mm Ground Plate 	

PART NUMBERING GUIDE

SUNTSU → **S** **AT** **PA** - **25A25A4A** - **GP** **B7** ← FREQUENCY BAND (MHz)

B7: 1575.42MHz Using a 70x70mm
1598-1606MHz Ground Plate

ANTENNA → **S** **AT** **PA** APPLICATION
GP: GPS

PATCH ANTENNA → **S** **AT** **PA** * PACKAGE SIZE
25A25A4A: 25.0mm x 25.0mm x 4.0mm

* 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 (FOR GPS MODE)	UNITS	MIN.	TYP.	MAX	REMARKS
Frequency Band	MHz		1575.42		
Impedance	Ω		50		
Polarization			RHCP		
Gain @Zenith	dBi		4		At 1575.42MHz
Gain @ 10° Elevation			-3.1		At 1575.42MHz
Frequency Temperature Coefficient	ppm/°C			0 ±20	
VSWR				2	At Center Frequency
Operating Temperature	°C	-40		85	

ELECTRICAL PARAMETERS (FOR GLONASS MODE)	UNITS	MIN.	TYP.	MAX	REMARKS
Frequency Band	MHz	1598		1606	
Impedance	Ω		50		
Polarization			RHCP		
Gain @Zenith	dBi		4.2		At Center Frequency
Gain @ 10° Elevation			-2.5		At Center Frequency
Frequency Temperature Coefficient	ppm/°C			0 ±20	
VSWR				2	At Center Frequency
Operating Temperature	°C	-40		85	

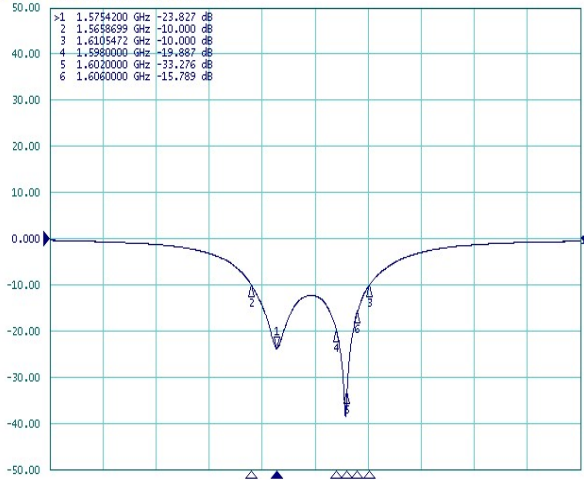
OUTLINE DRAWING (NOTE: All dimensions are in millimeters [mm], unless otherwise noted. Drawings are not to scale.)

Item	Material
1	Patch Antenna
2	Adhesive Tape

ELECTRICAL TEST

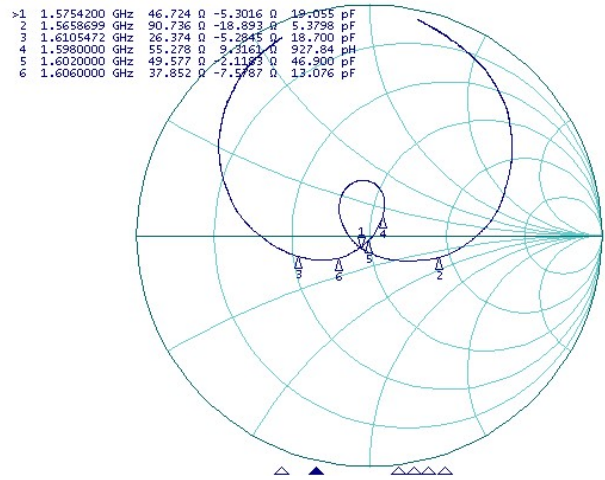
Return Loss

▶ S11 Log Mag 10.00dB/ Ref 0.000dB [F1]



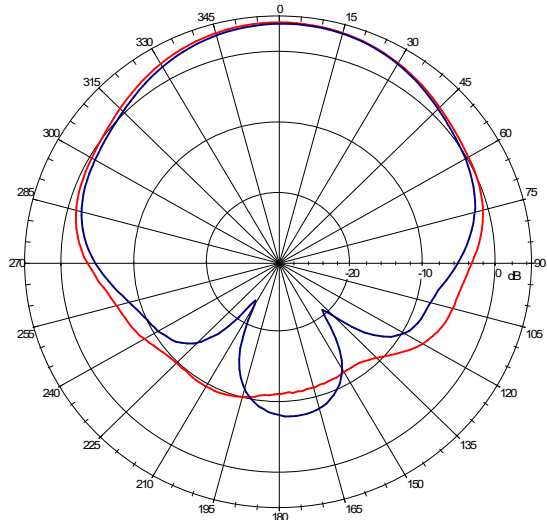
SMITH CHART

▶ S11 Smith (R+jX) Scale 1.000U [F1]

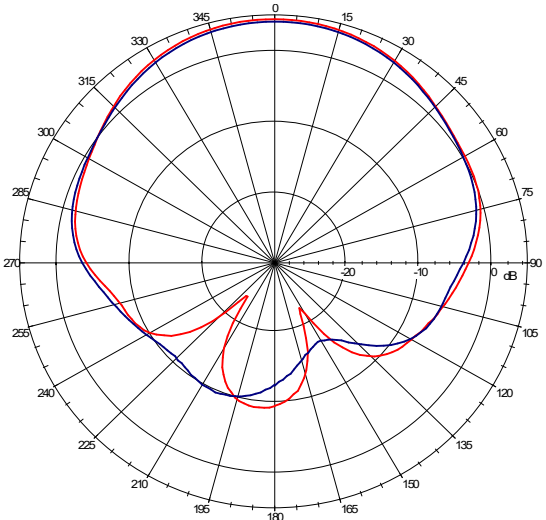


RADIATION PATTERN (UNIT: dBi)

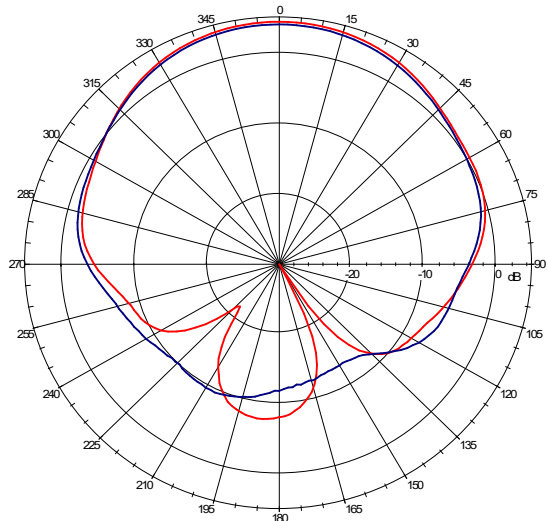
1575.42MHz



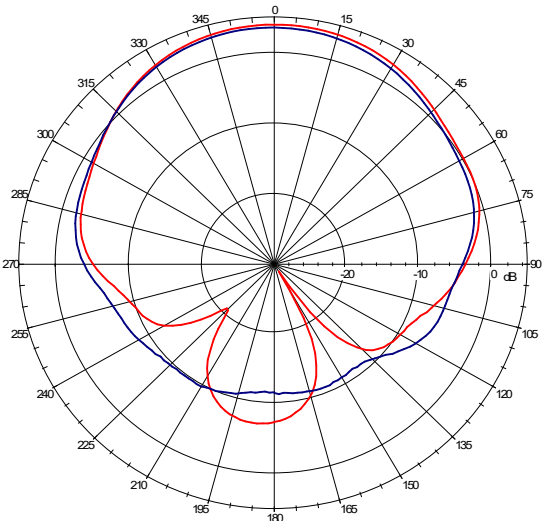
1598MHz



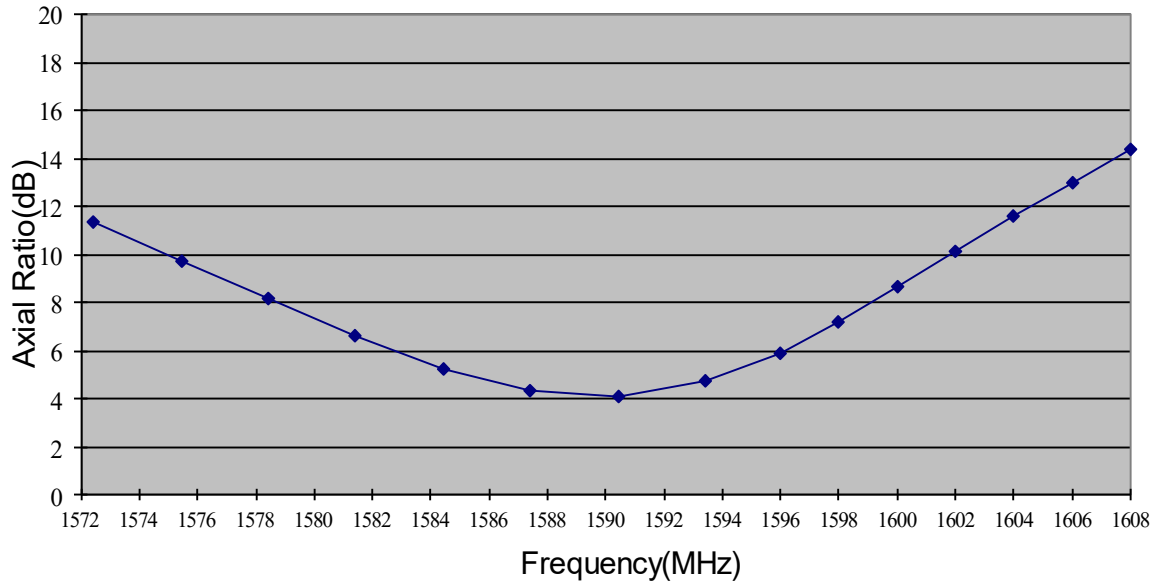
1602MHz



1606MHz



AXIAL RATIO (70MM X 70MM GROUND PLANE)



ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

High Temperature Test	85°C for 240 hours, and then to normal temperature/humidity for 24hours.
Low Temperature Test	-30°C for 240 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.