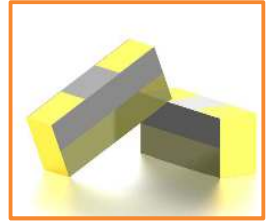
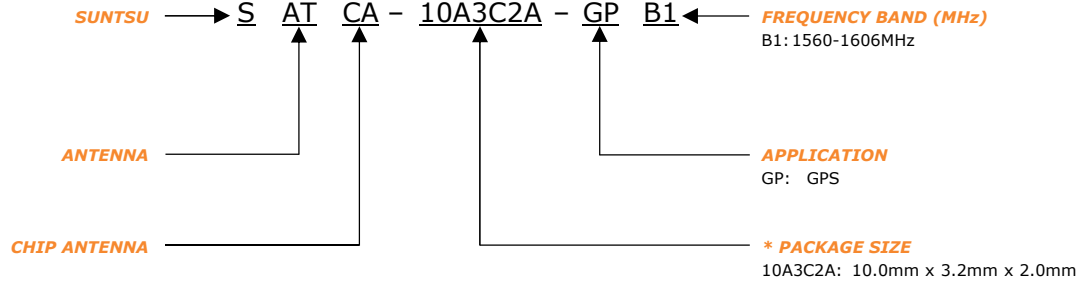


FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>- GPS</li> <li>- Chip Type</li> <li>- Stable And Reliable Performance</li> <li>- 1560-1606MHz</li> <li>- SMT Process Compatible</li> </ul>	<ul style="list-style-type: none"> <li>- Navigation Systems</li> <li>- Tracking Systems</li> <li>- Hand-Held GPS Devices (PDA, Smart Phone, PND)</li> <li>- Fleet Management</li> <li>- Telematics</li> </ul>



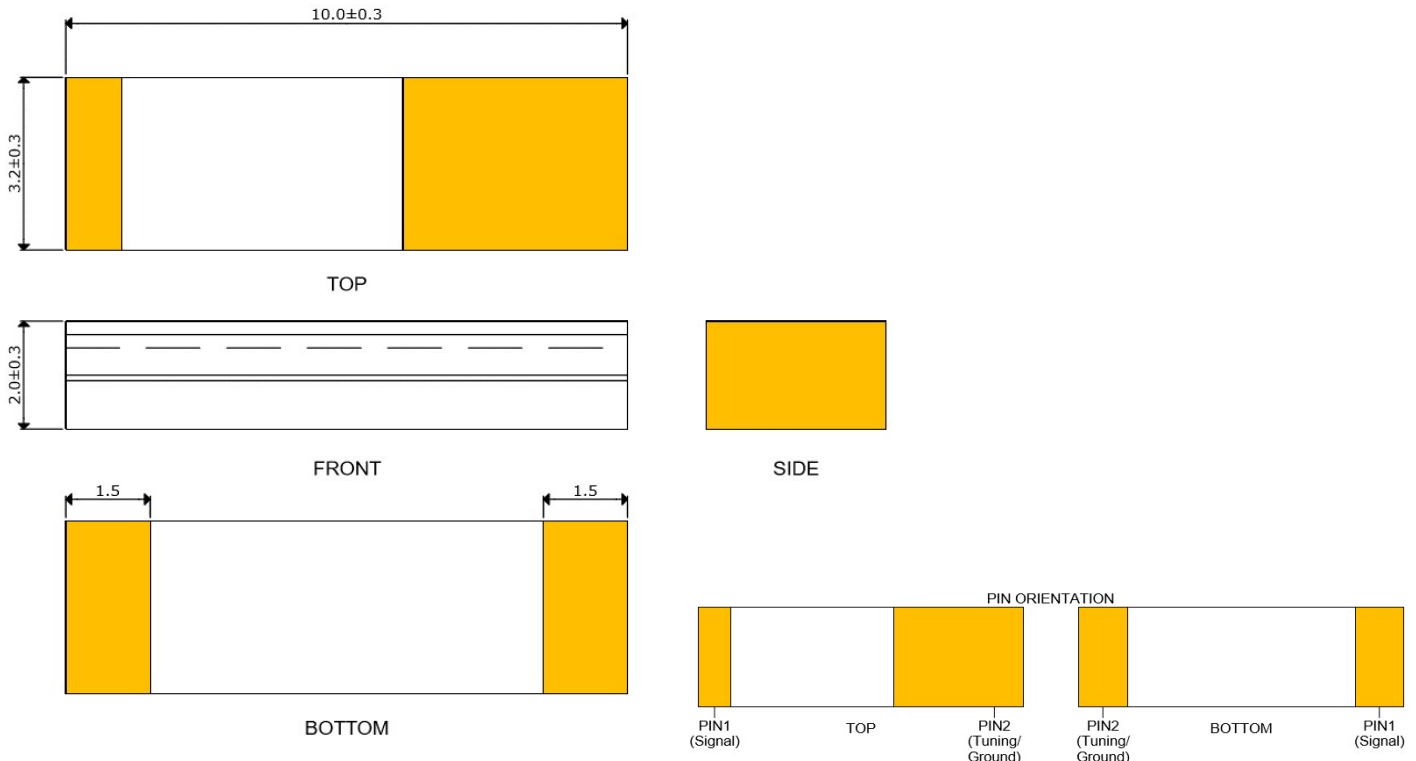
### PART NUMBERING GUIDE



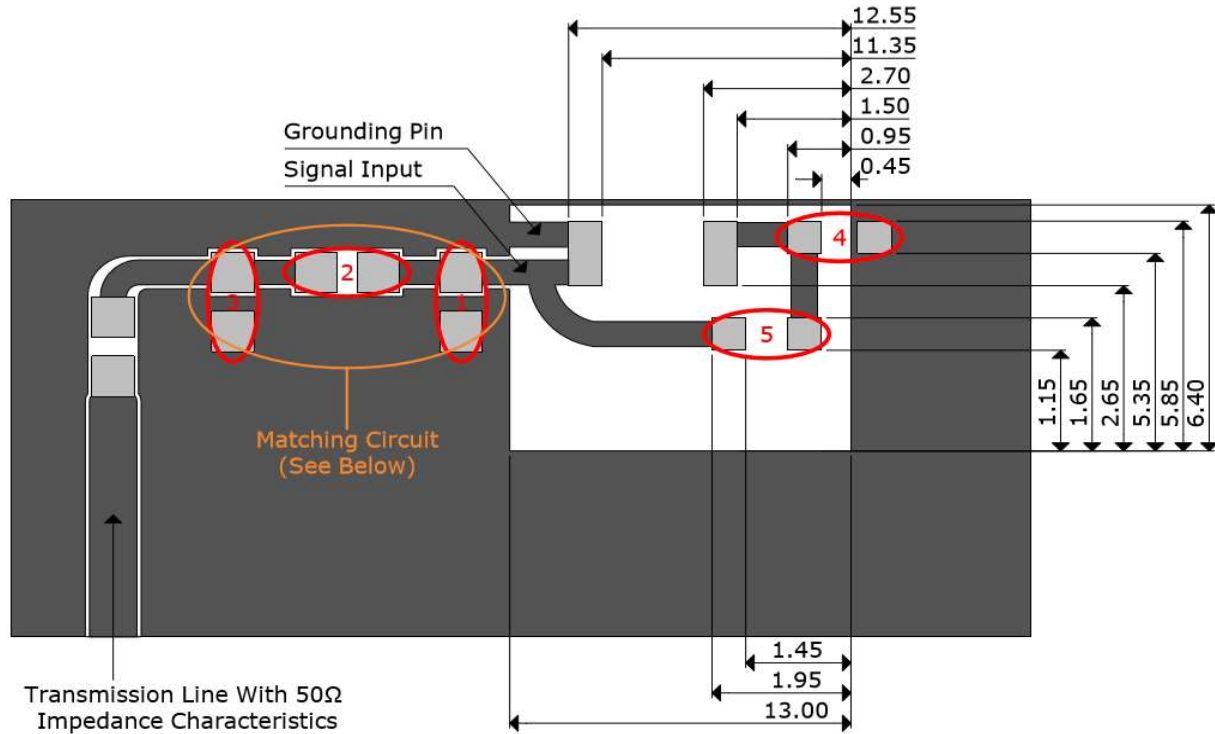
\* Where letters denote decimal location A=.0, B=.1, C=.2, etc. Ex: B5=0.15, 3A5=3.05, 9A=9.0  
 To customize your parameters, contact a Suntsu representative.

ELECTRICAL PARAMETERS (At 25°C)	UNITS	MIN.	TYP.	MAX	REMARKS
Frequency Band	MHz	1560		1606	
Impedance	$\Omega$		50		
Polarization			Linear		
Peak Gain	dBi		2.7		At 1575MHz
Efficiency	%		75		At 1575MHz
VSWR				2	At Center Frequency
Operating Temperature	°C	-40		85	

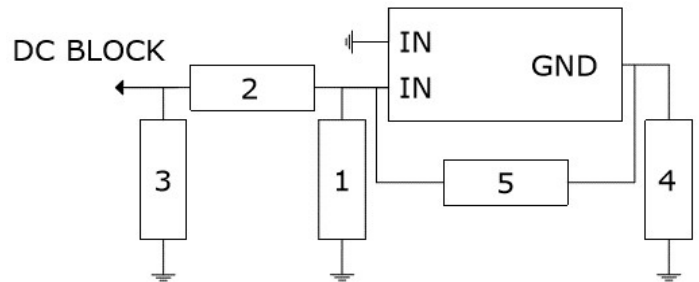
### OUTLINE DRAWING (NOTE: All dimensions are in millimeters [mm], unless otherwise noted. Drawings are not to scale.)



**RECOMMENDED LAND PATTERN & FREQUENCY TUNING SCENARIO CIRCUIT** (NOTE: All dimensions are in mm, unless otherwise noted. Drawings are not to scale.)

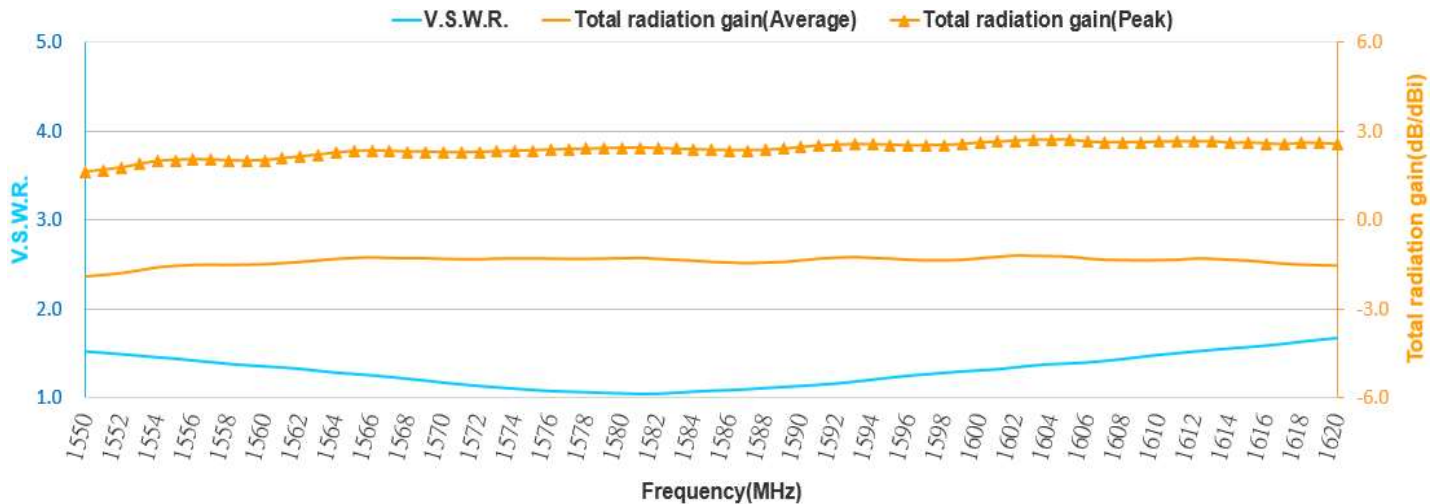


System Matching Circuit Components			
Location	Description	Vendor	Tolerance
1	N/A	N/A	N/A
2	1.5nH, 0402	MURATA	±0.3nH
3	1.5pF, 0402	MURATA	±0.05pF
4 (Fine Tuning)	1.8pF, 0402	MURATA	±0.05pF
5 (Fine Tuning)	0.7pF, 0402	MURATA	±0.05pF



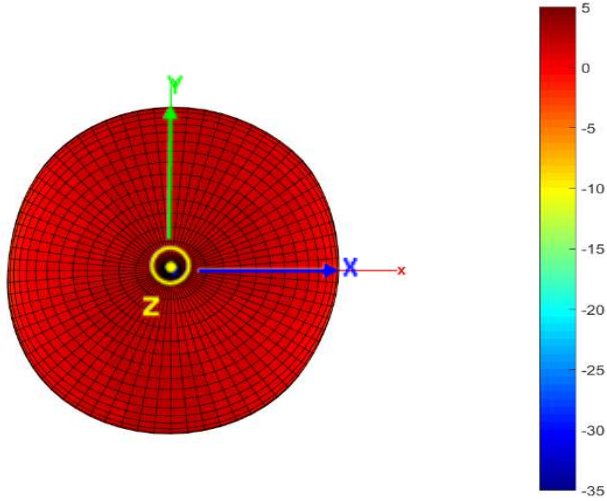
For these suggested values for the matching and tuning of components, the average frequency will be around 1575.42MHz on a standard 80 x 40mm<sup>2</sup> Evaluation board.  
Please note, these are average reference values which may need to be changed when different circuit boards or manufactures are used.

**ELECTRICAL TEST**

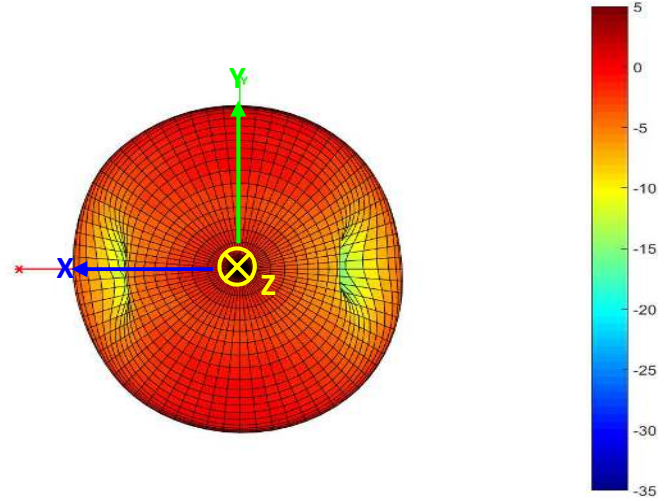


**3D RADIATION PATTERN (UNIT: dBi) AND EFFICIENCY vs FREQUENCY**

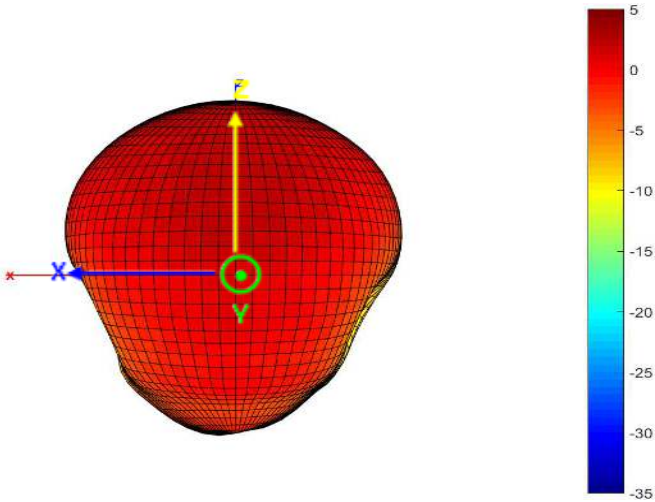
1561MHz



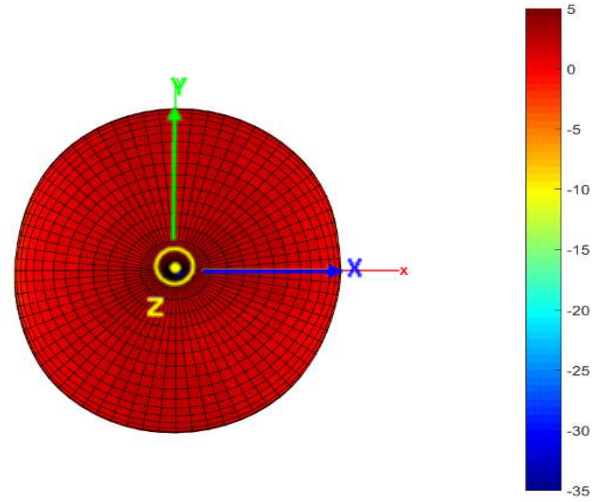
1561MHz



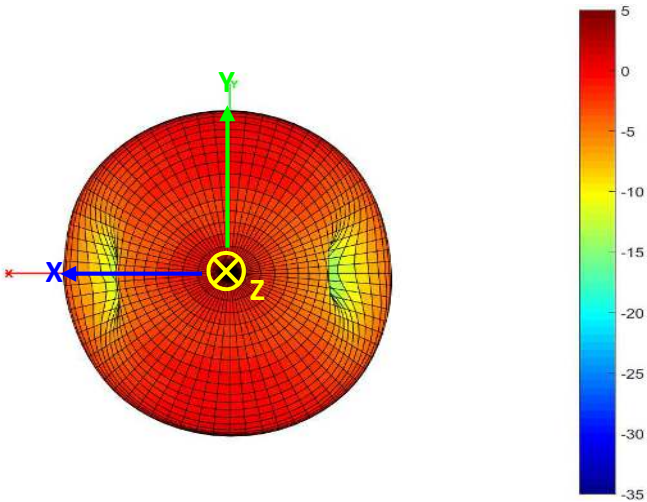
1561MHz



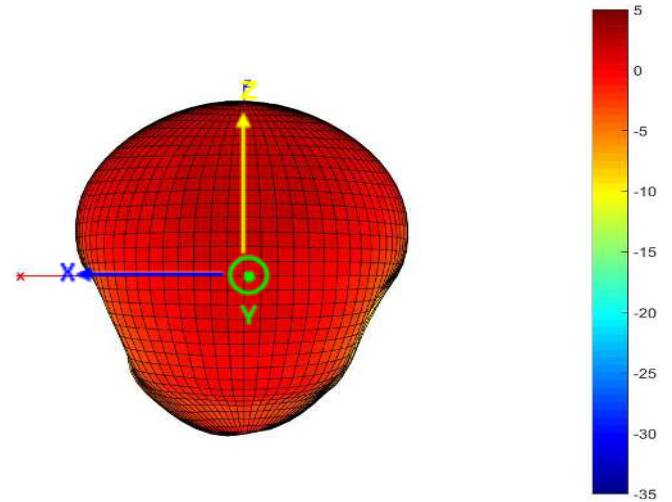
1575.42MHz



1575.42MHz

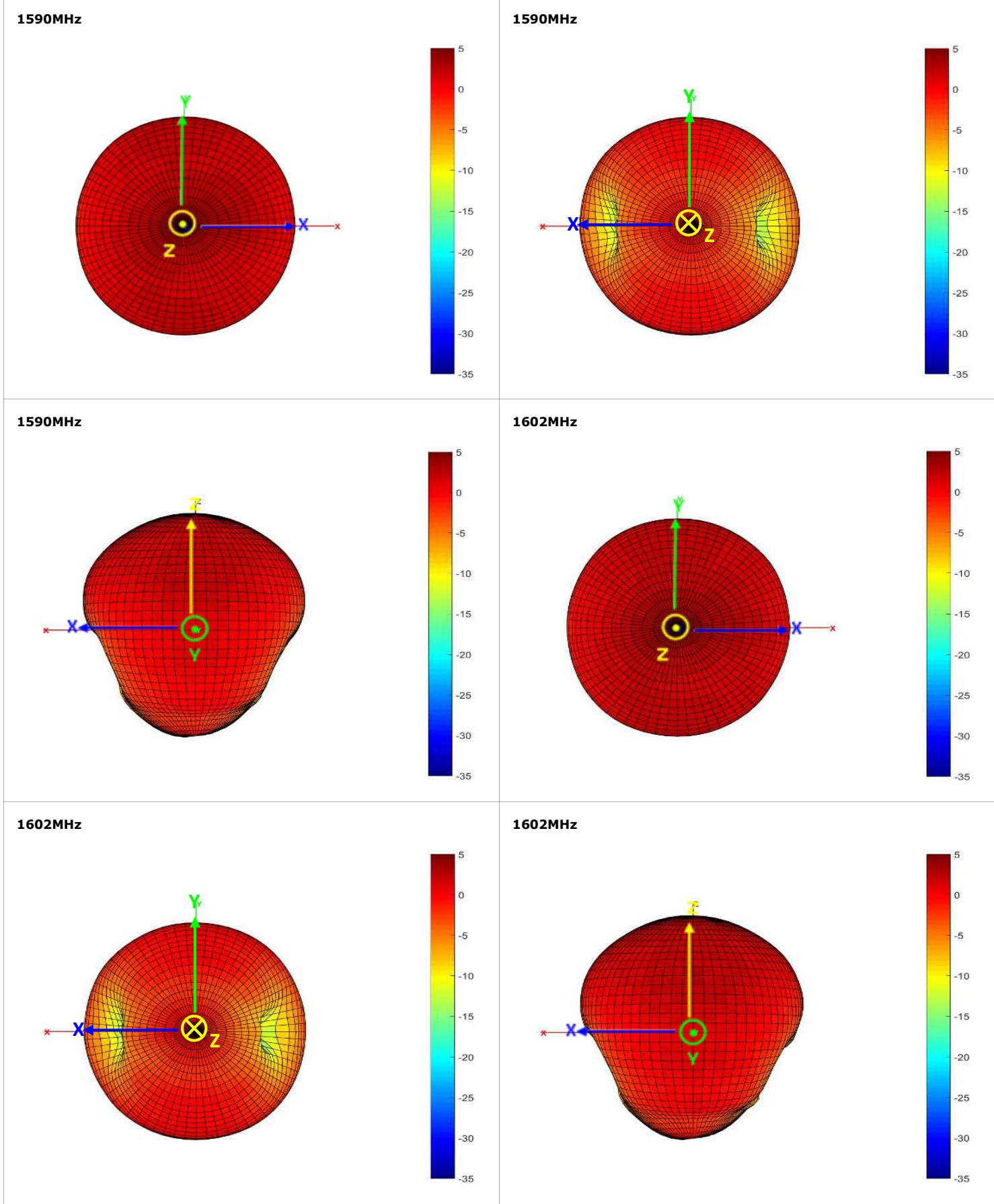


1575.42MHz



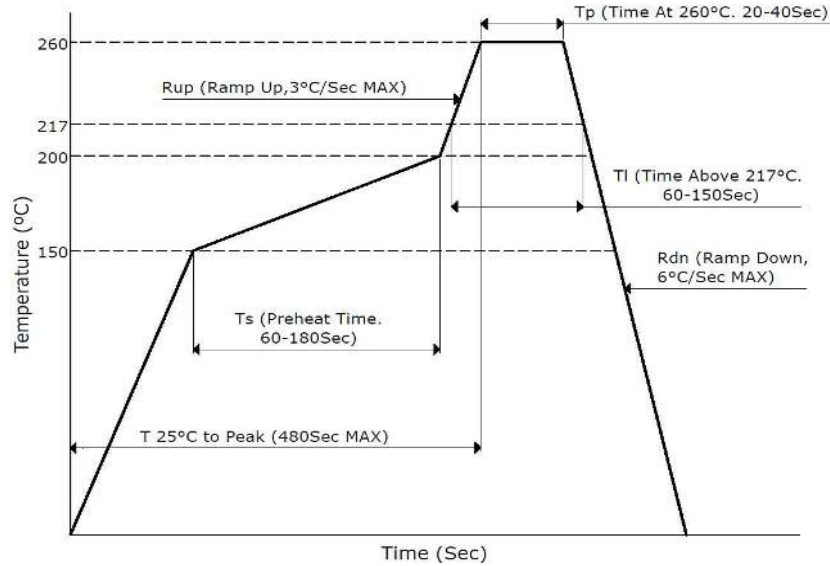


**3D RADIATION PATTERN (UNIT: dBi) AND EFFICIENCY vs FREQUENCY (CONT.)**



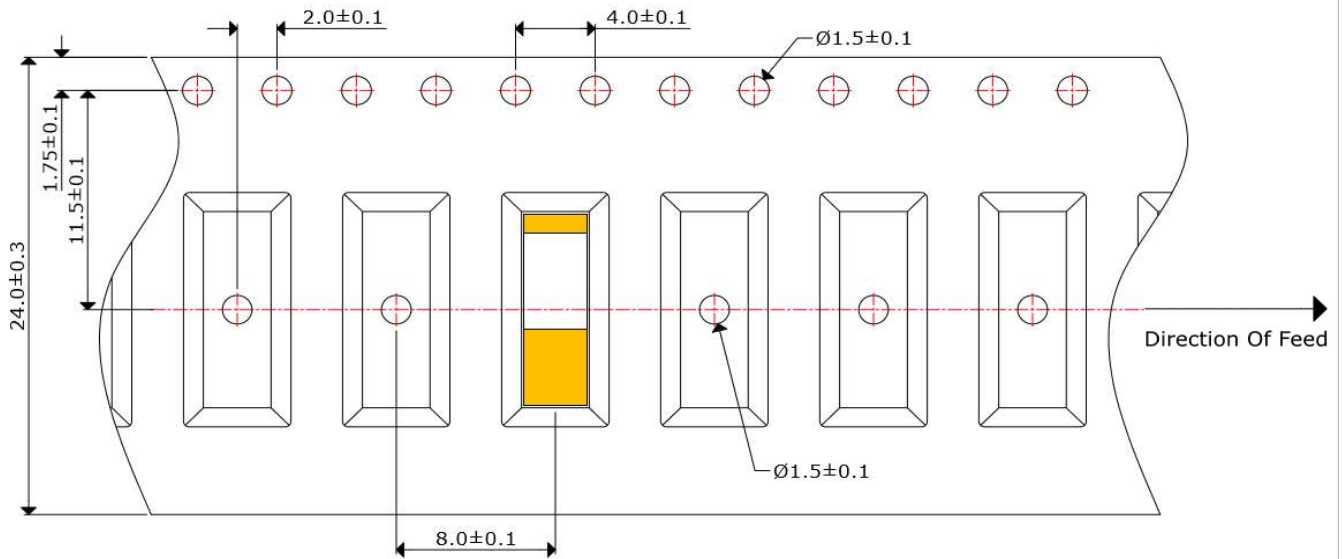
### SOLDERING CONDITIONS

Typical Soldering Profile For Lead-Free Process



### PACKAGING - TAPE AND REEL (NOTE: All dimensions are in mm, unless otherwise noted. Drawings are not to scale.)

2,000pcs / Reel



### 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.