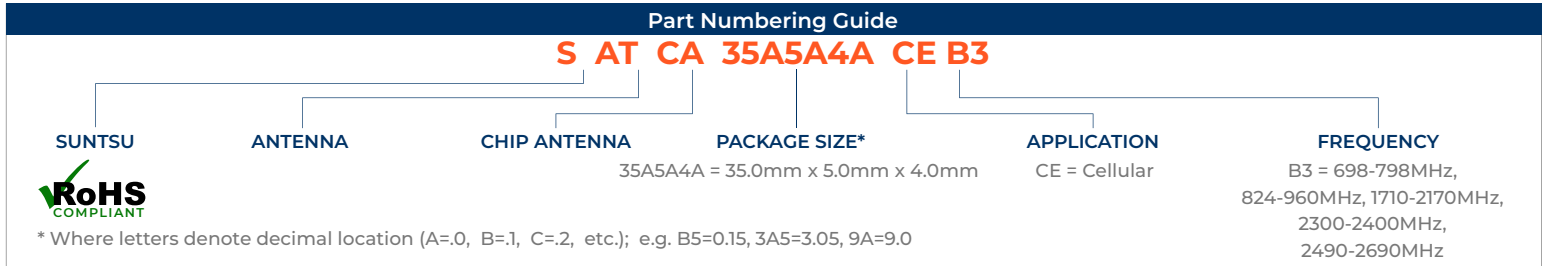
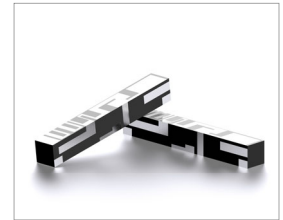


Features
<ul style="list-style-type: none"> LTE Full Band / 3G / 2G Chip Type Stable And Reliable Performance 698-798MHz, 824-960MHz, 1710-2170MHz, 2300-2400MHz and 2490-2690MHz

Applications
<ul style="list-style-type: none"> LTE Full Band / 3G / 2G LTE / GSM / CDMA / DCS / PCS / WCDMA / UMTS HSDPA / GPRS / EDGE / IMT. Machine To Machine Communication



Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	698		798	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		1.3		At 748MHz
Efficiency	%		54		At 748MHz
VSWR				3	At Center Frequency
Operating Temperature	C	-40		85	

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	824		960	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		0.5		At 900MHz
Efficiency	%		56		At 900MHz
VSWR				3	At Center Frequency
Operating Temperature	C	-40		85	

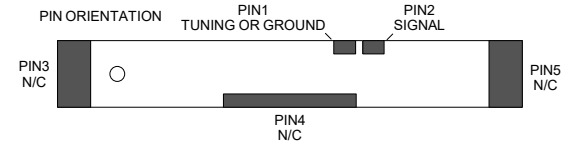
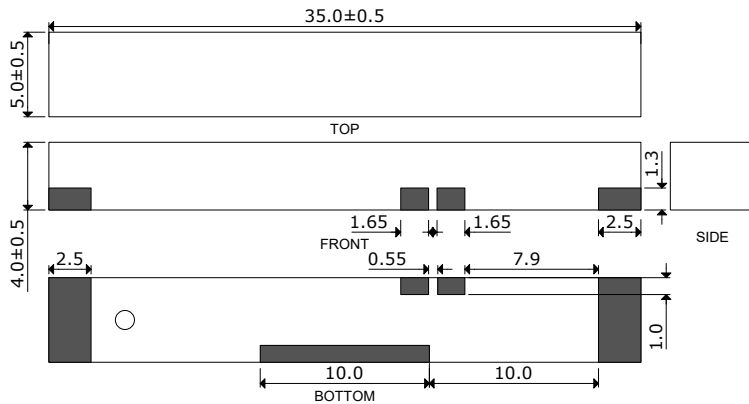
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	1710		2170	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		2.6		At 1950MHz
Efficiency	%		54		At 1950MHz
VSWR				3	At Center Frequency
Operating Temperature	C	-40		85	

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	2300		2400	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		3		At 2350MHz
Efficiency	%		65		At 2350MHz
VSWR				3	At Center Frequency
Operating Temperature	C	-40		85	

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	2490		2690	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		2.4		At 2590MHz
Efficiency	%		69		At 2590MHz
VSWR				3	At Center Frequency
Operating Temperature	C	-40		85	

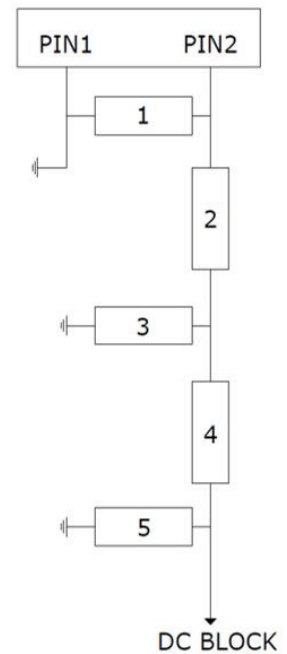
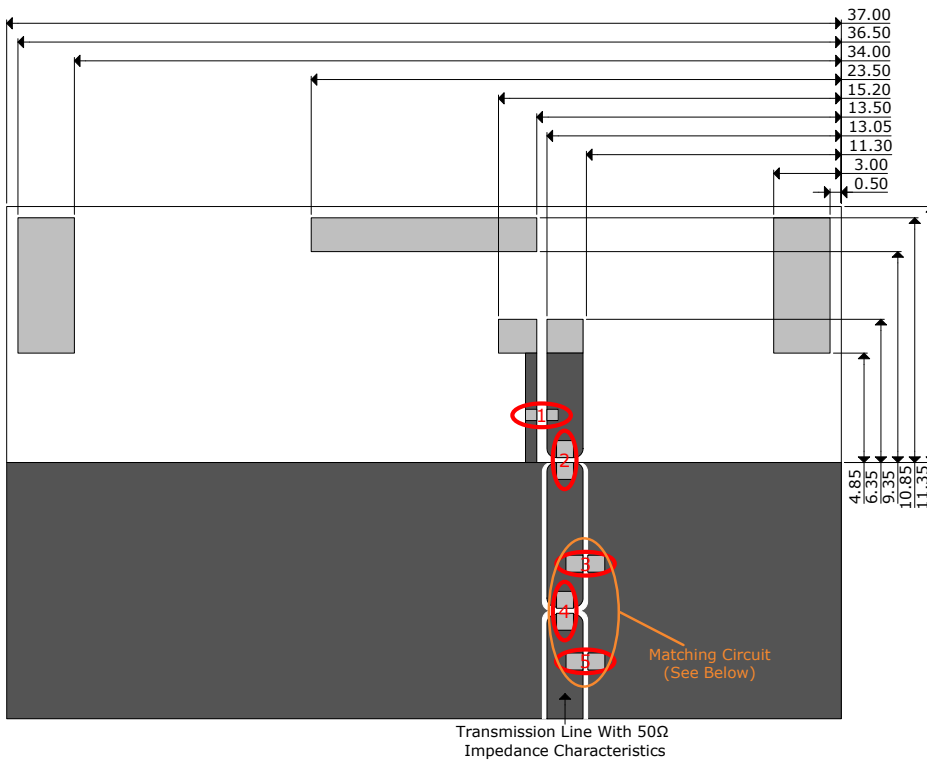
Outline Drawing

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



Recommended Land Pattern & Frequency Tuning Scenario Circuit

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

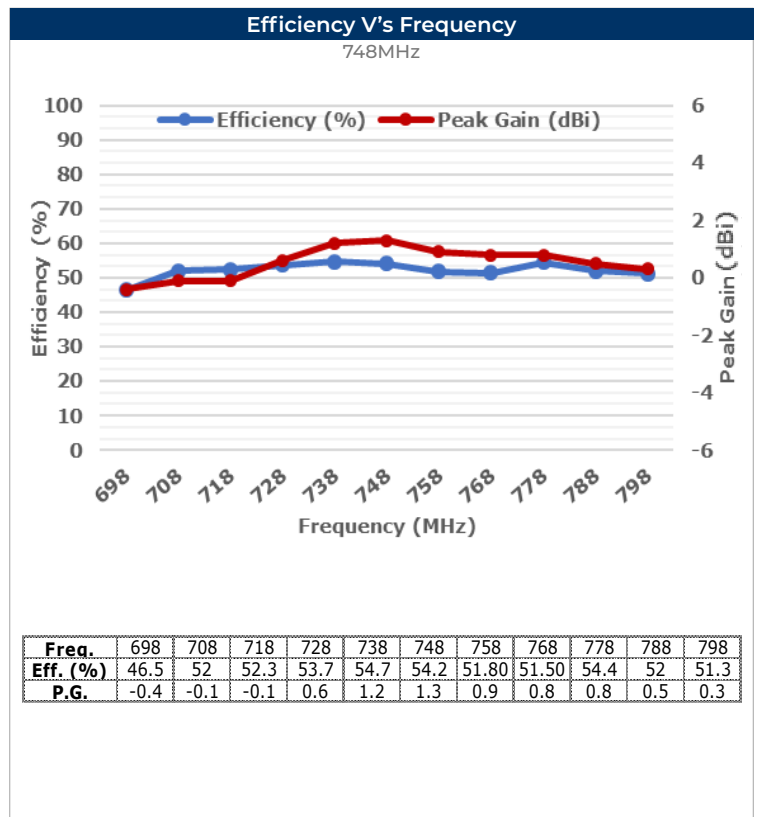
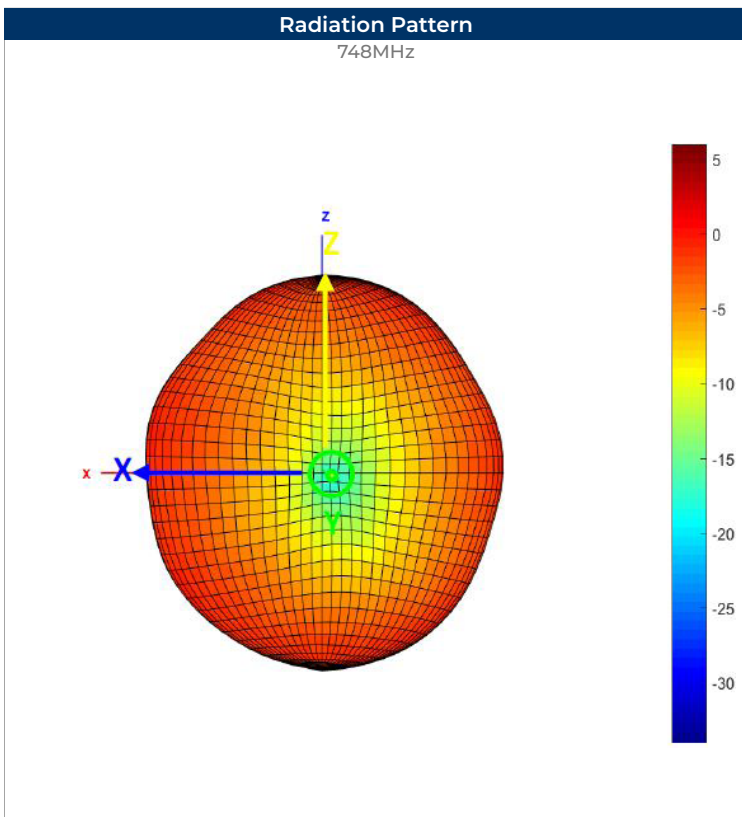
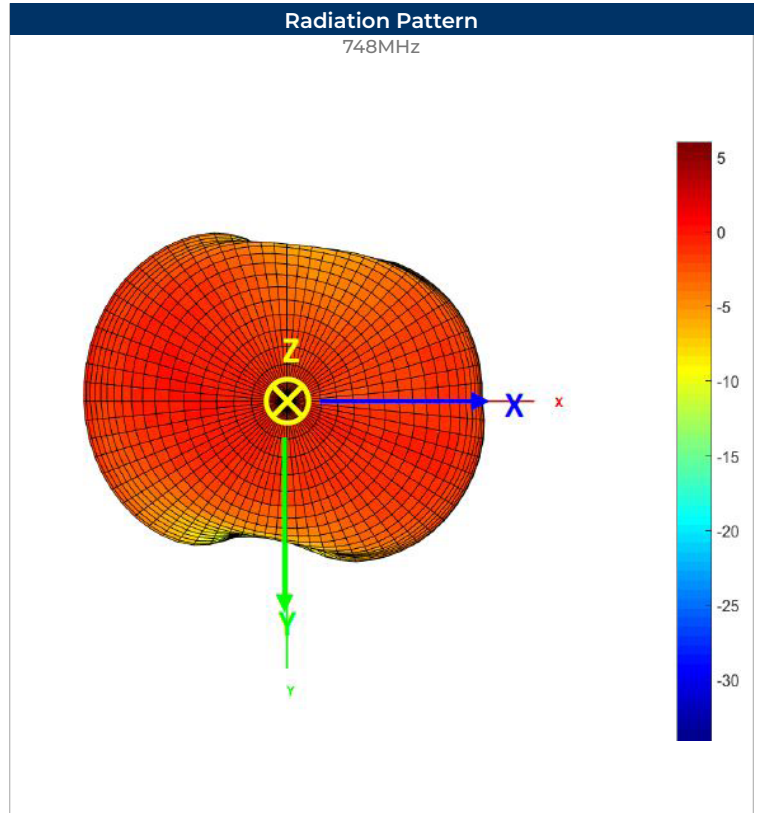
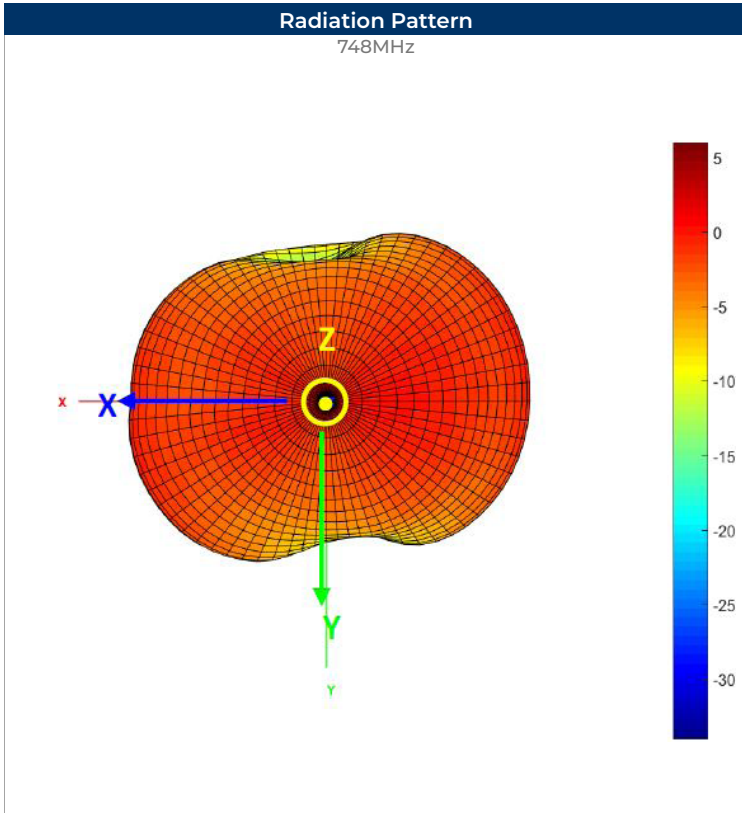


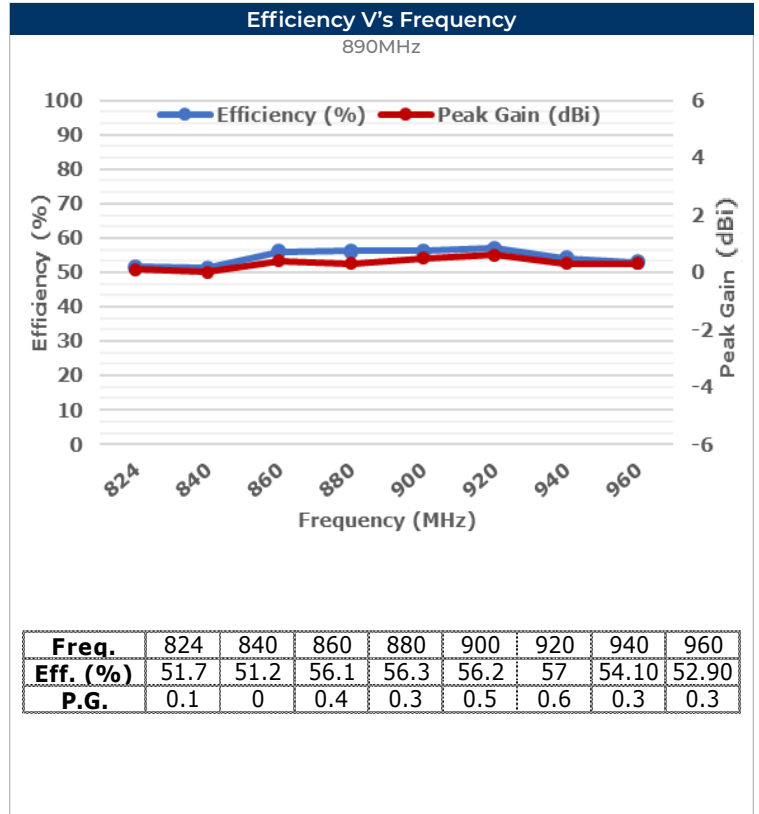
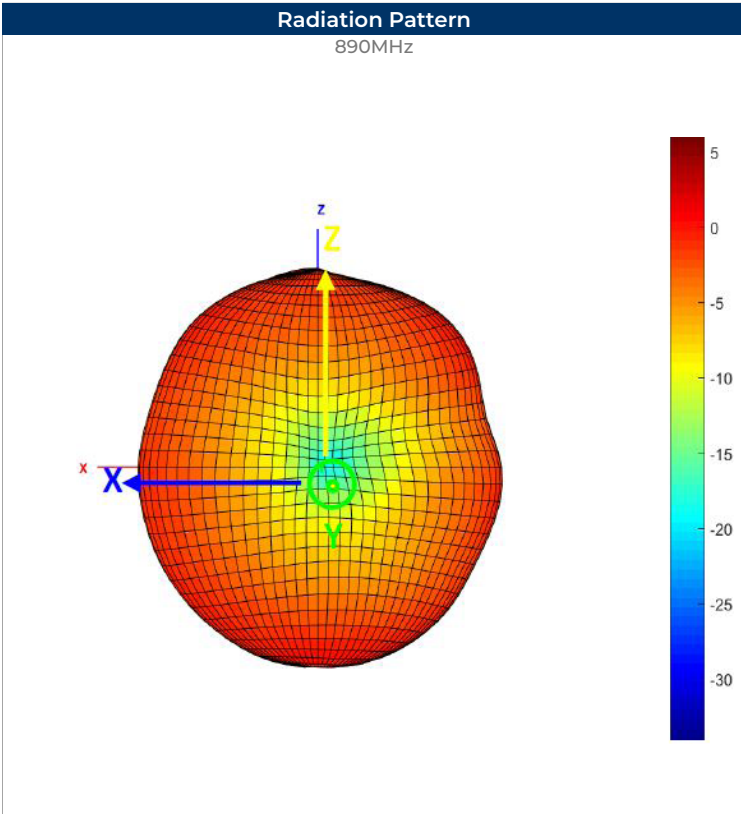
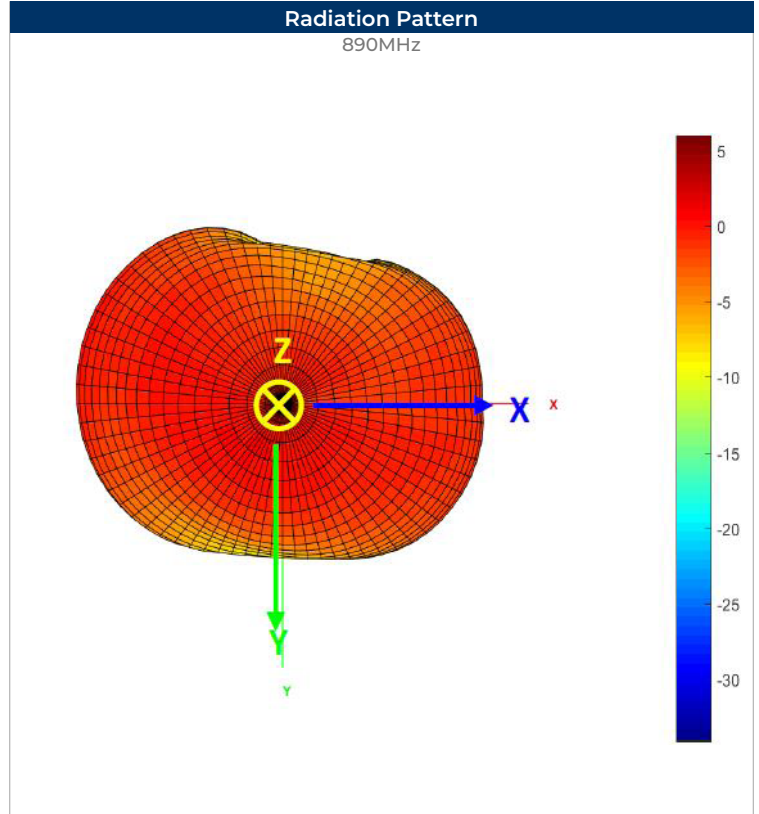
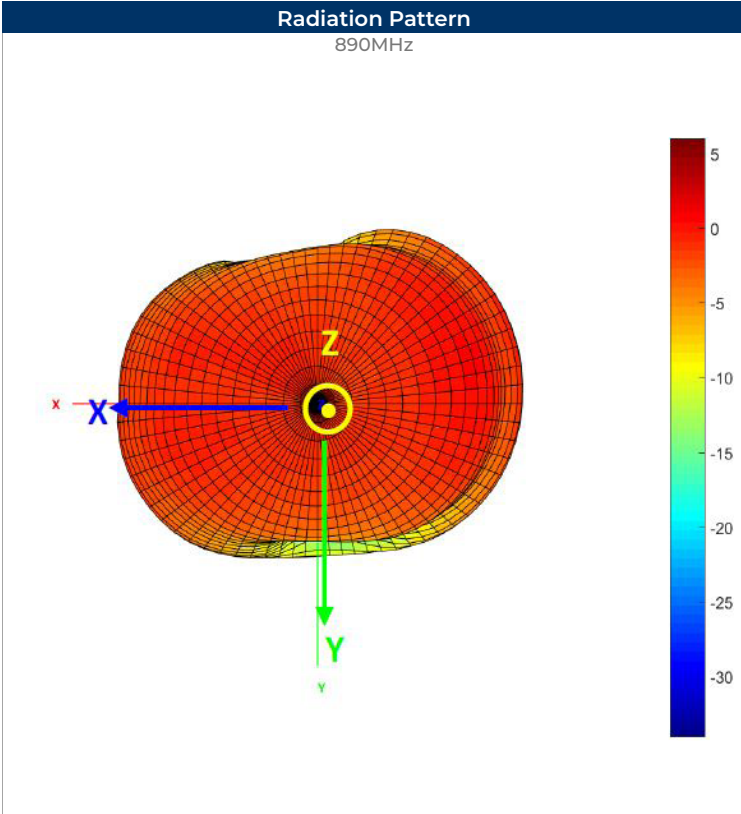
System Matching Circuit Components

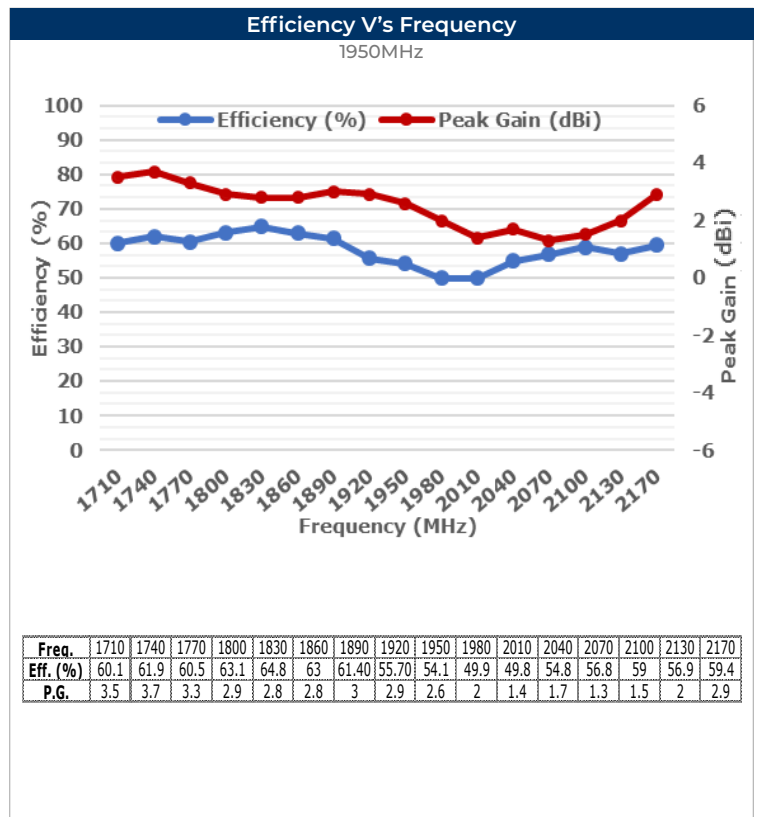
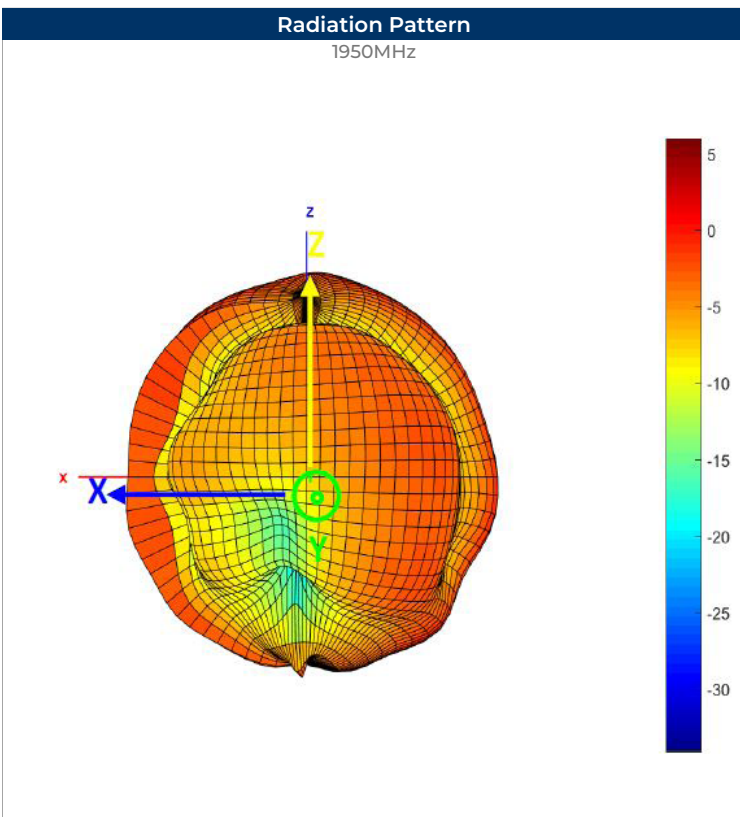
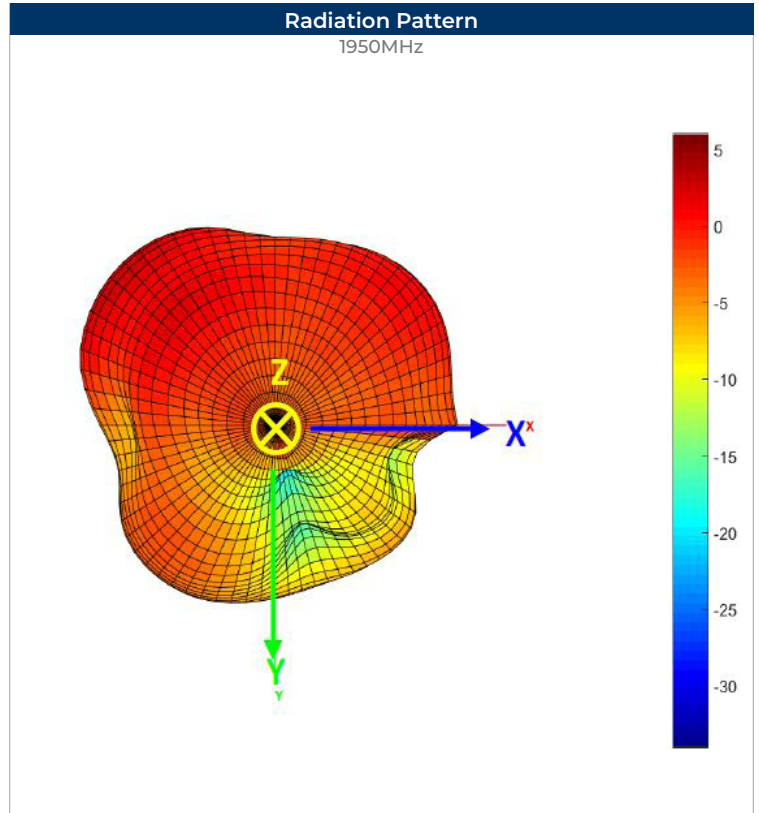
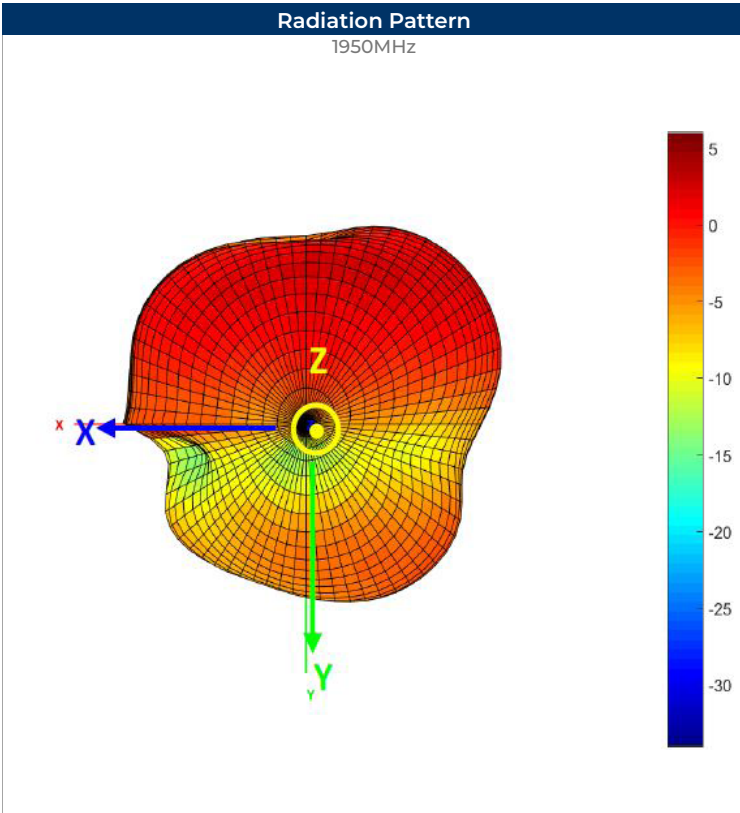
Location	Description	Vendor	Tolerance
1 (Fine Tuning)	6.8nH (0402)	MURATA	±0.1nH
2 (Fine Tuning)	3.9pF, (0402)	MURATA	±0.05pF
3	N/A	-	-
4	0Ω, (0402)	-	-
5	N/A	-	-

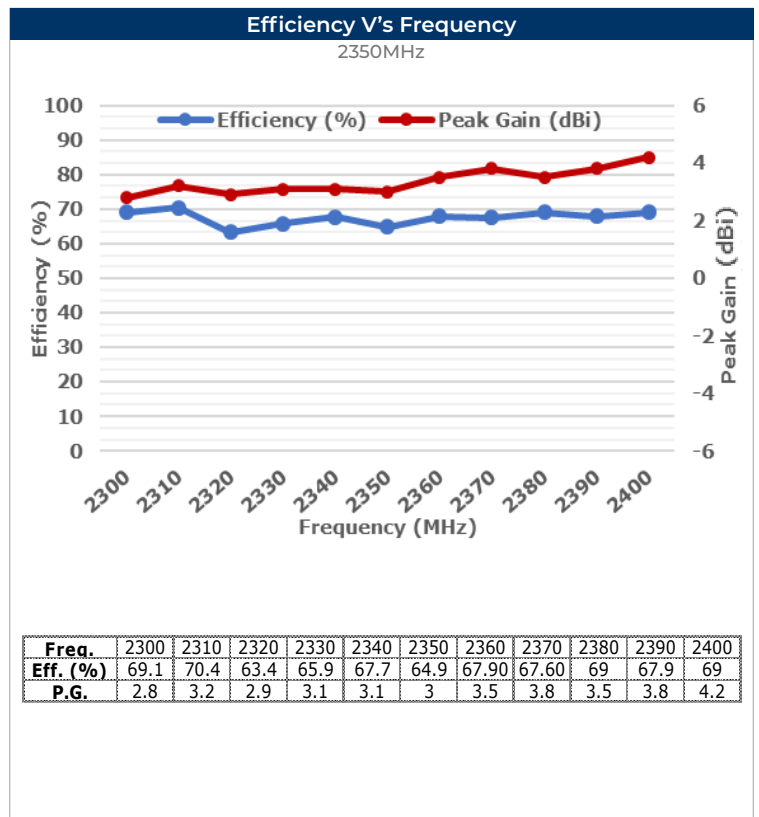
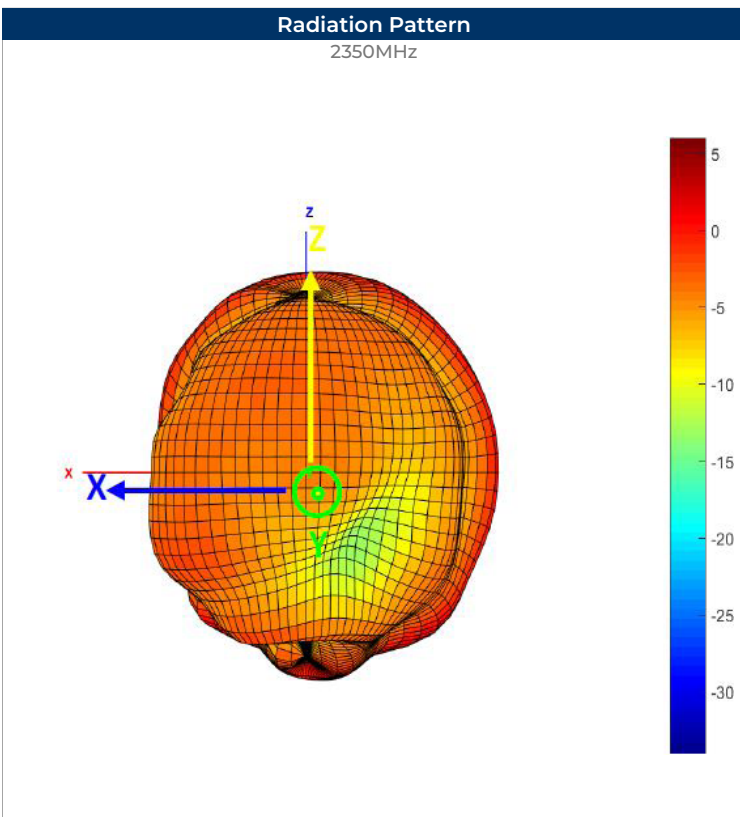
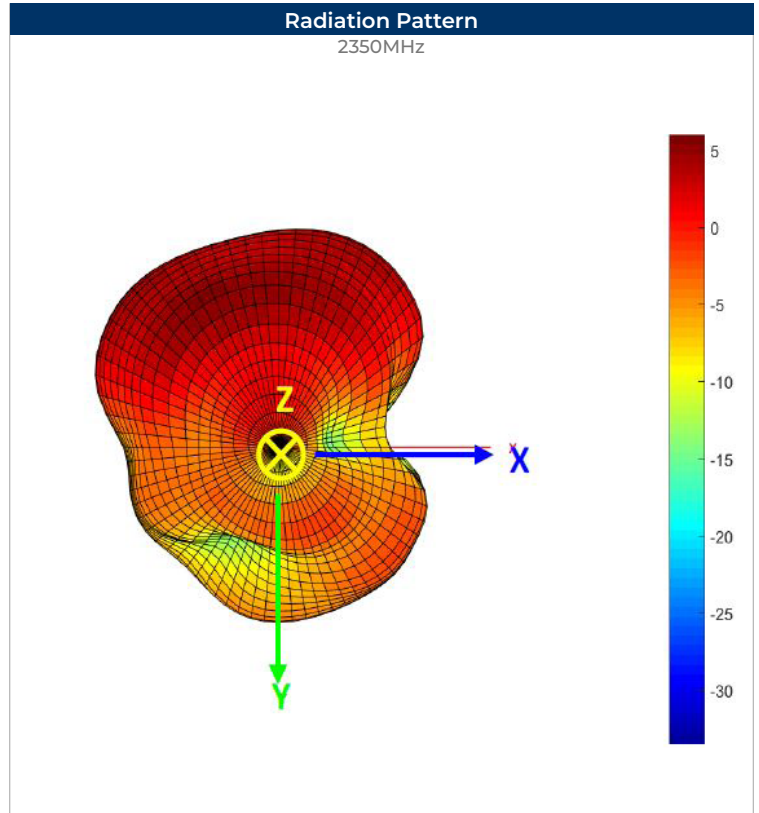
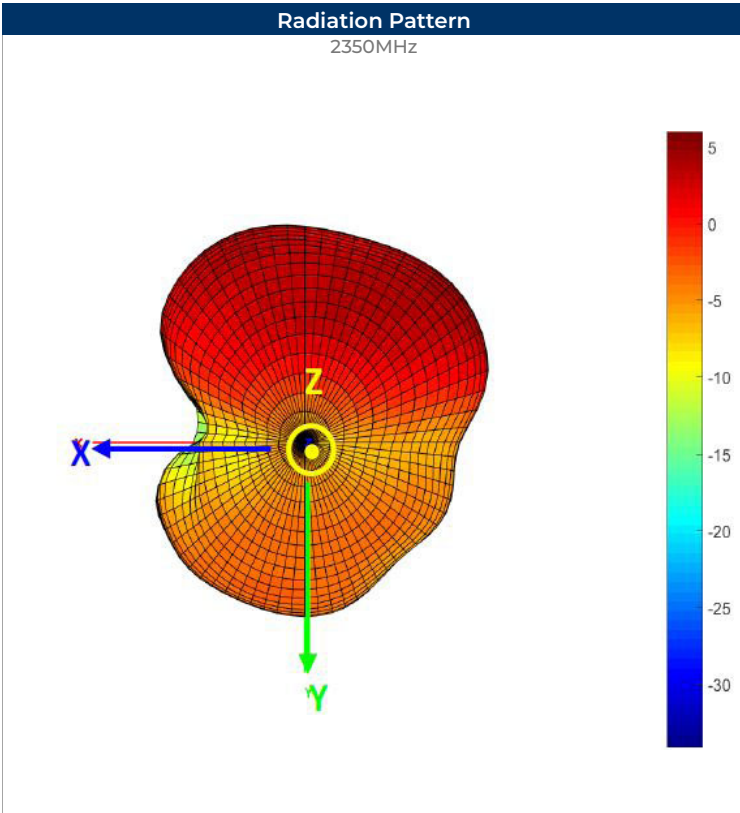
For these suggested values for the matching and tuning of components, the average frequency will be 698-690MHz & 1710-2690MHz on a standard 118.5 x 37mm² Evaluation board.

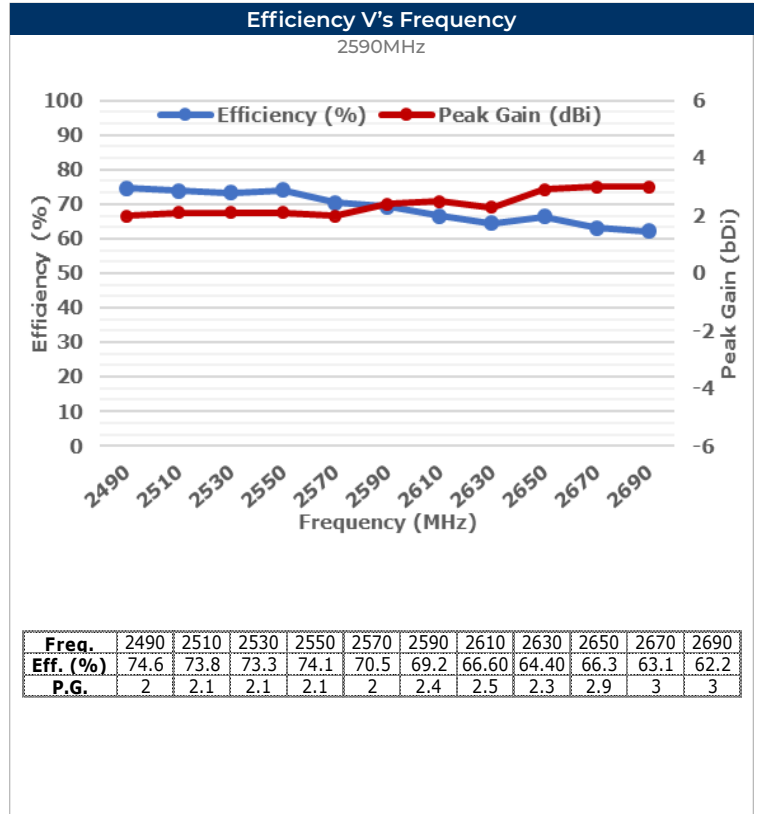
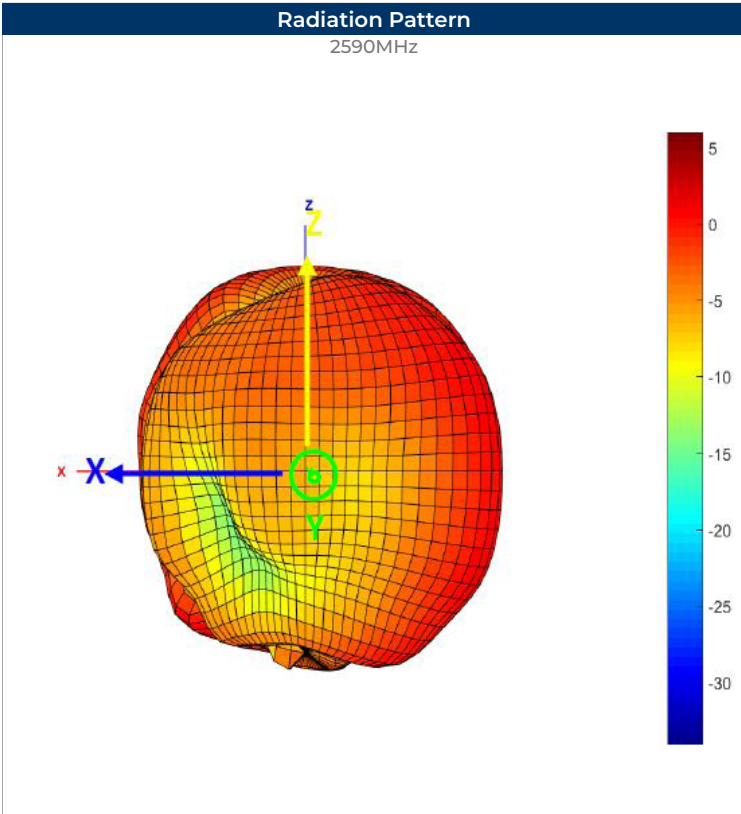
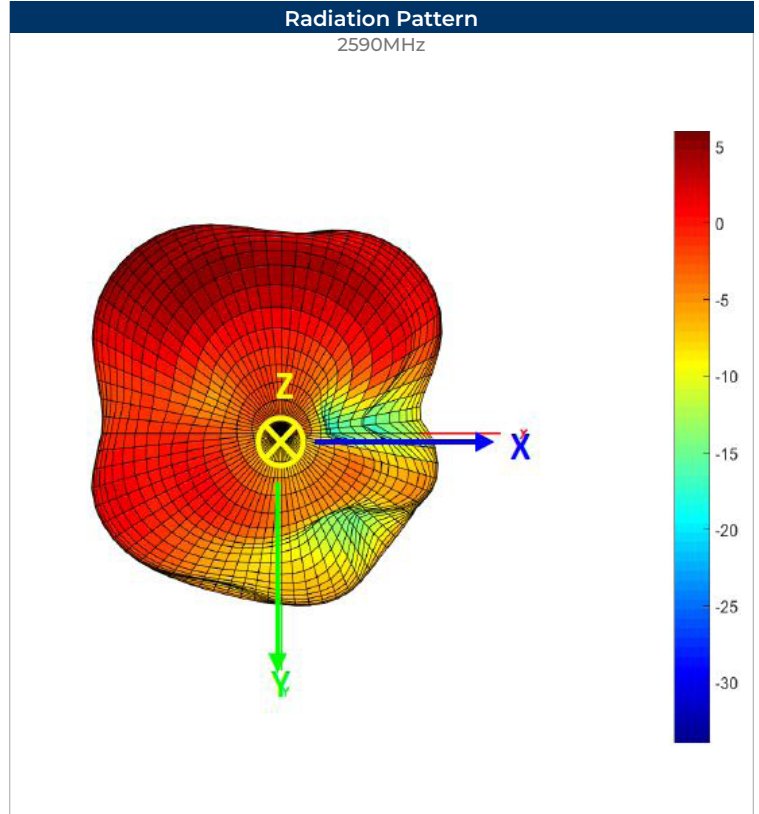
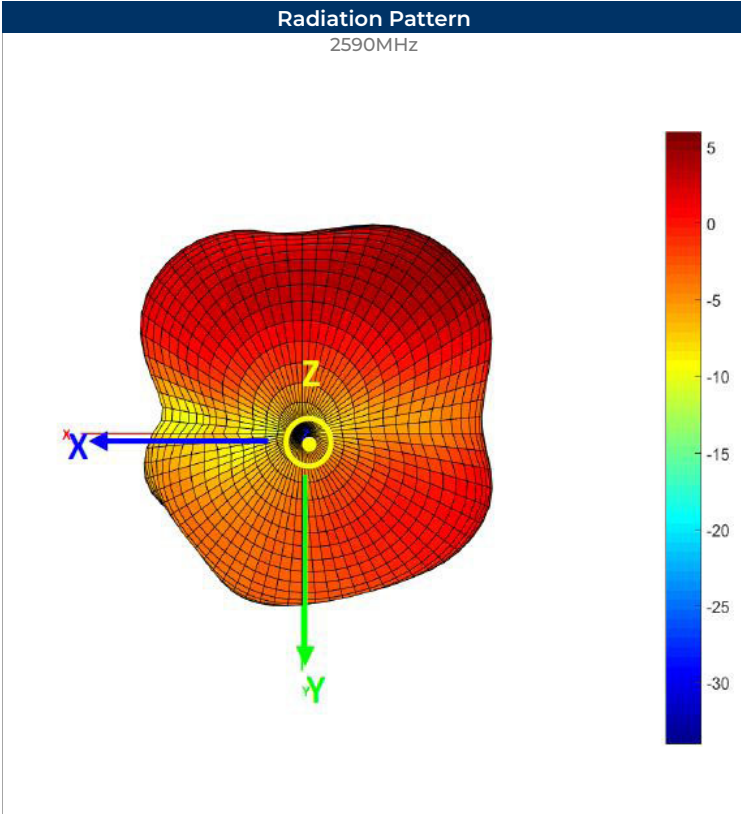
Please note, these are average reference values which may need to be changed when different circuit boards or manufactures are used.





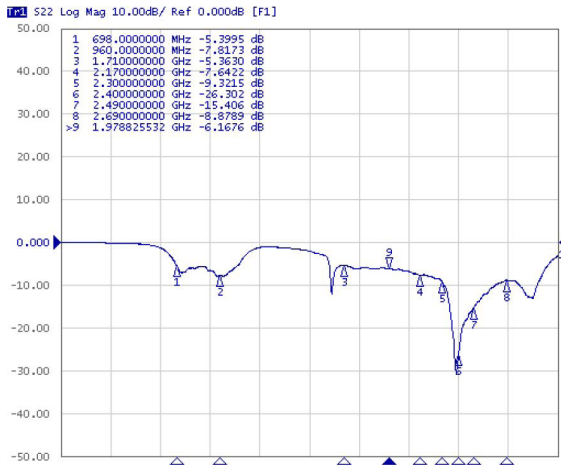






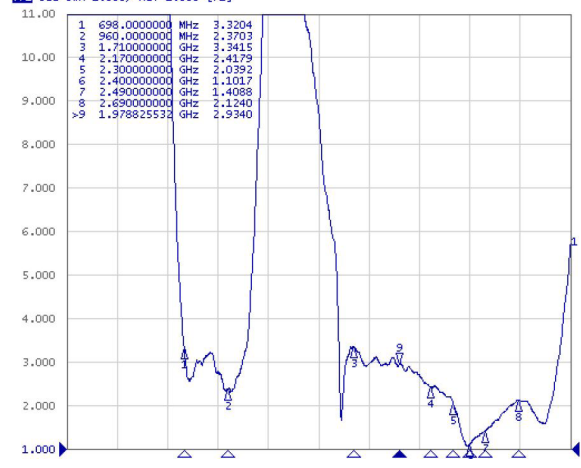
Electrical Test

Return Loss



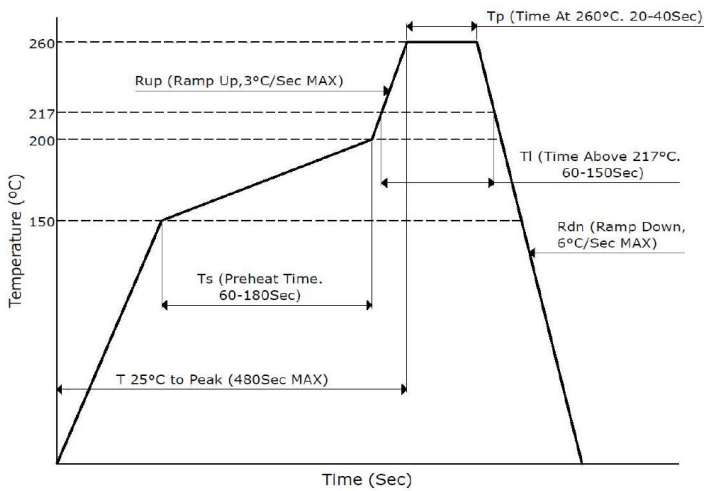
Electrical Test

VSWR



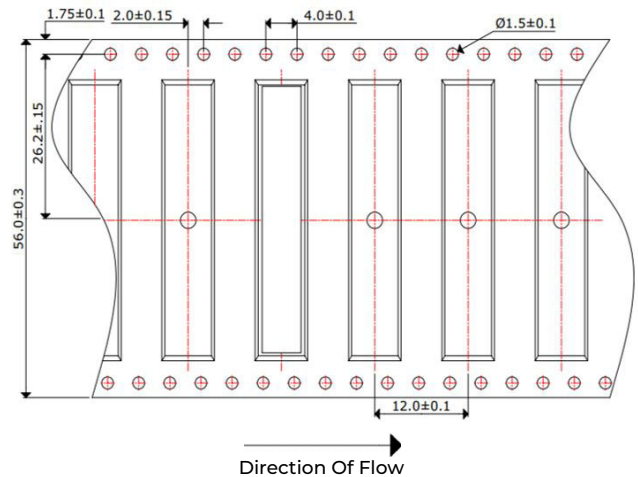
Soldering Conditions

Typical Soldering Profile For Lead-Free Process



Packaging - Tape And Reel

1000Pcs / 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%RH 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.