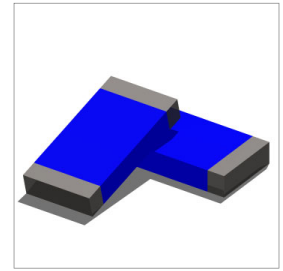
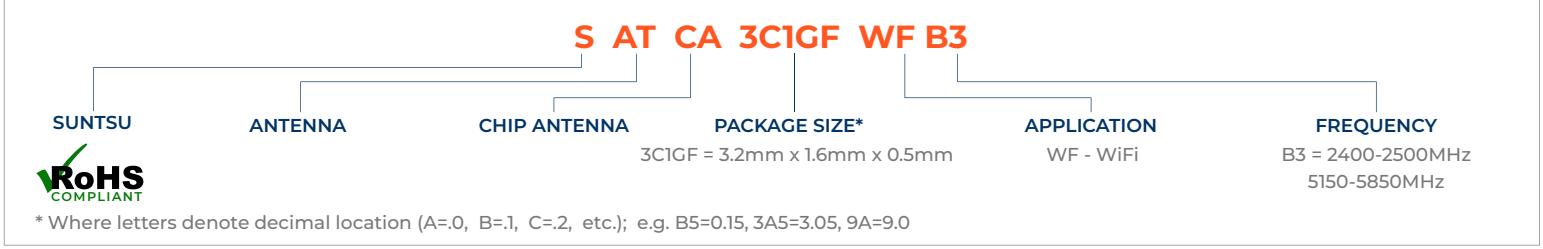


Features
<ul style="list-style-type: none"> Dual Band WiFi Chip Type Stable And Reliable Performance 2400-2500MHz & 5150-5850MHz SMT Process Compatible

Applications
<ul style="list-style-type: none"> Wireless Communication Devices WiFi Certified AC Applications IoT Applications Machine To Machine Communication Wireless PCMCIA Cards Or USB Dongles



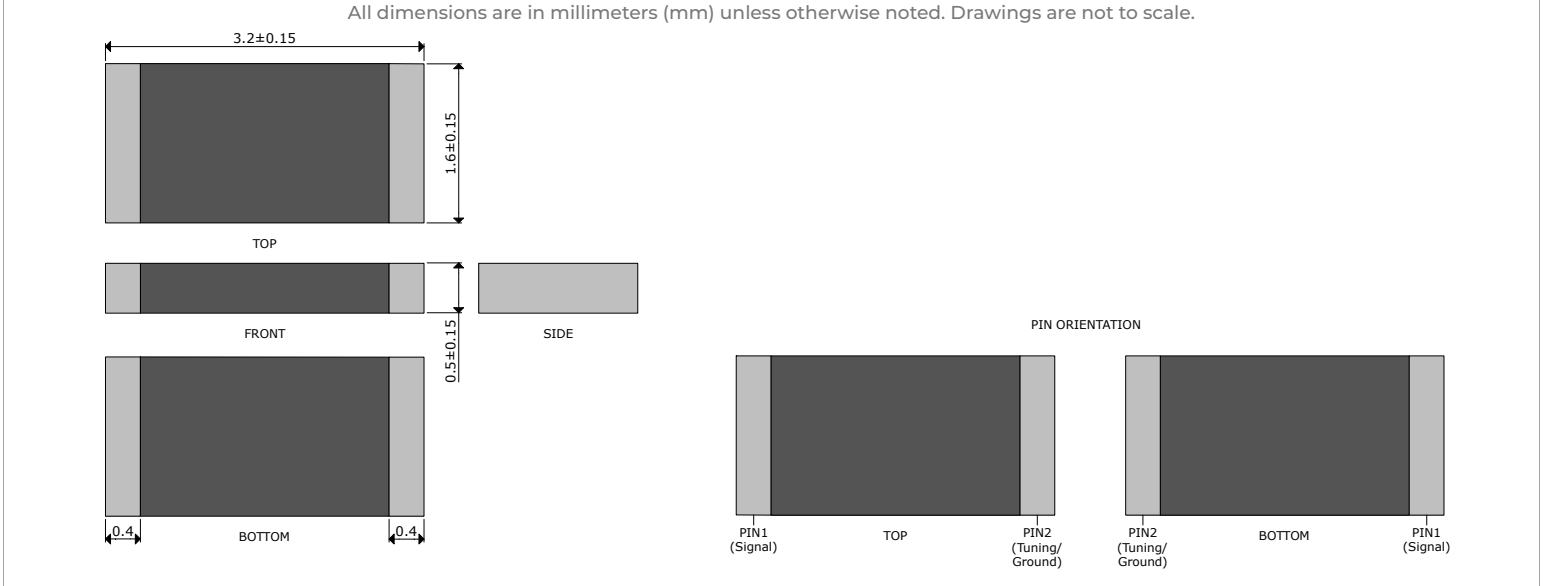
Part Numbering Guide



Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	2400		2500	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		1.4		At 2442MHz
Efficiency	%		76		At 2442MHz
VSWR				2	At Center Frequency
Operating Temperature	C	-40		85	

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Band	MHz	5150		5800	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		2.3		At 5550MHz
Efficiency	%		67		At 5550MHz
VSWR				2	At Center Frequency
Operating Temperature	C	-40		85	

Outline Drawing

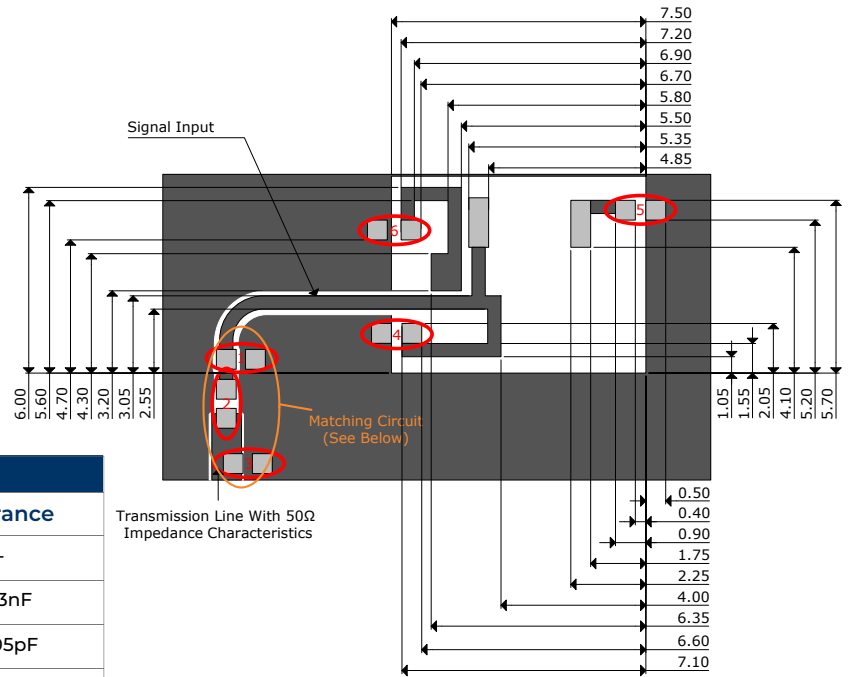
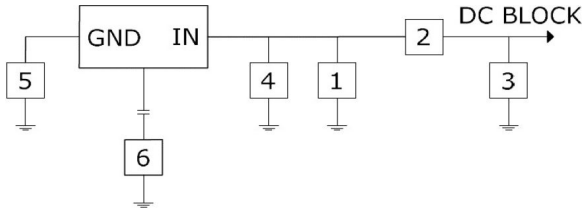


Recommended Land Pattern & Frequency Tuning Scenario Circuit

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

For these suggested values for the matching and tuning of components, the average frequency will be around 2442MHz for the lower Band and around 5550MHz for the higher on a standard 80 x 40mm² Evaluation board.

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

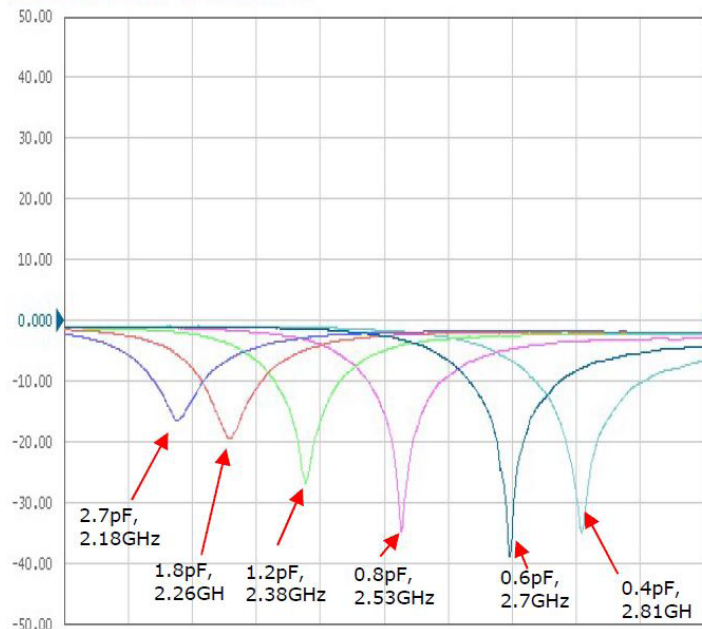


System Matching Circuit Components

Location	Description	Vendor	Tolerance
1	N/A	-	-
2	1nH, (0402)	DARFON	±0.3nF
3	0.2pF, (0402)	DARFON	±0.05pF
4	22pF, (0402)	DARFON	±5%
5 (Fine Tuning)	1pF, (0402)	DARFON	±0.05pF
6 (Fine Tuning)	0.2pF, (0402)	DARFON	±0.05pF

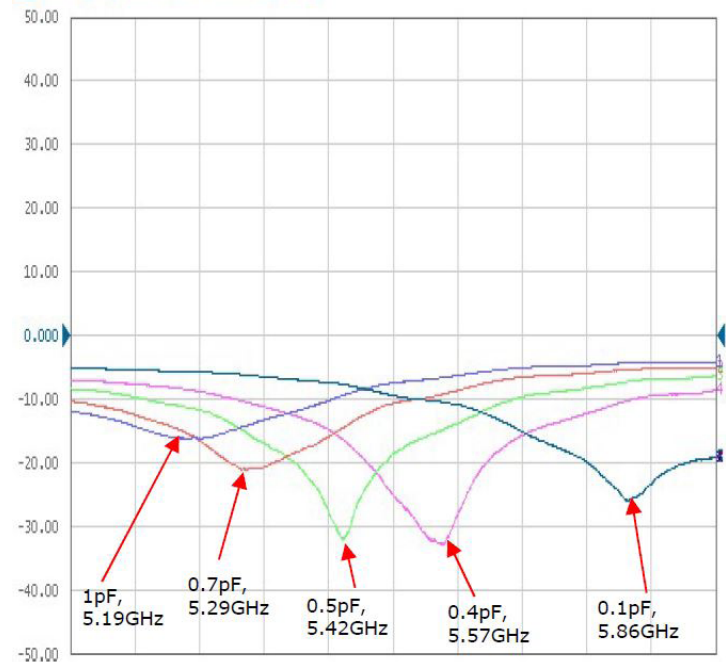
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr2 S11 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr3 S11 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr4 S11 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr5 S11 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr6 S11 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]

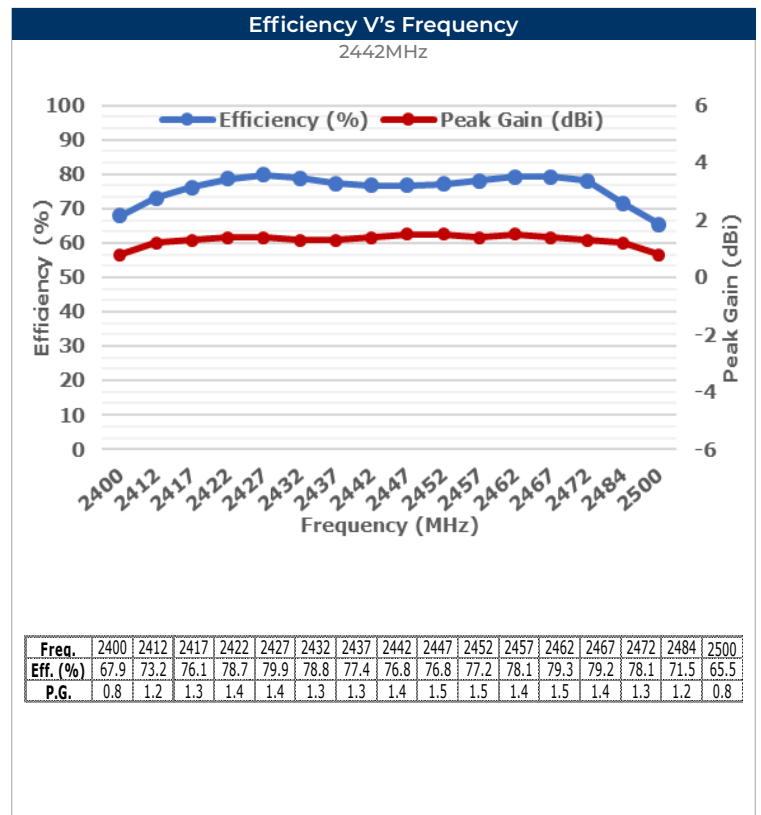
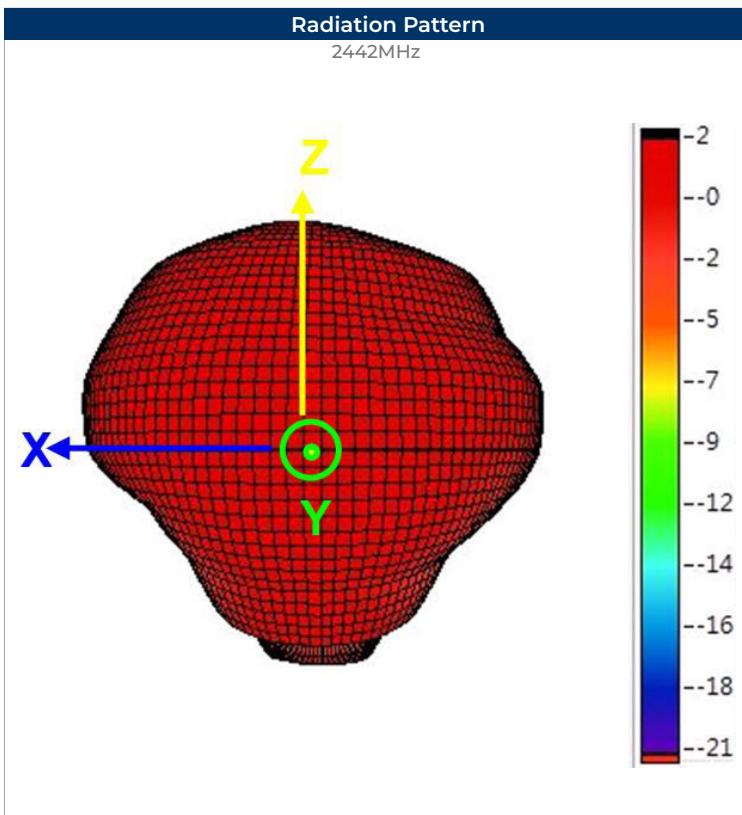
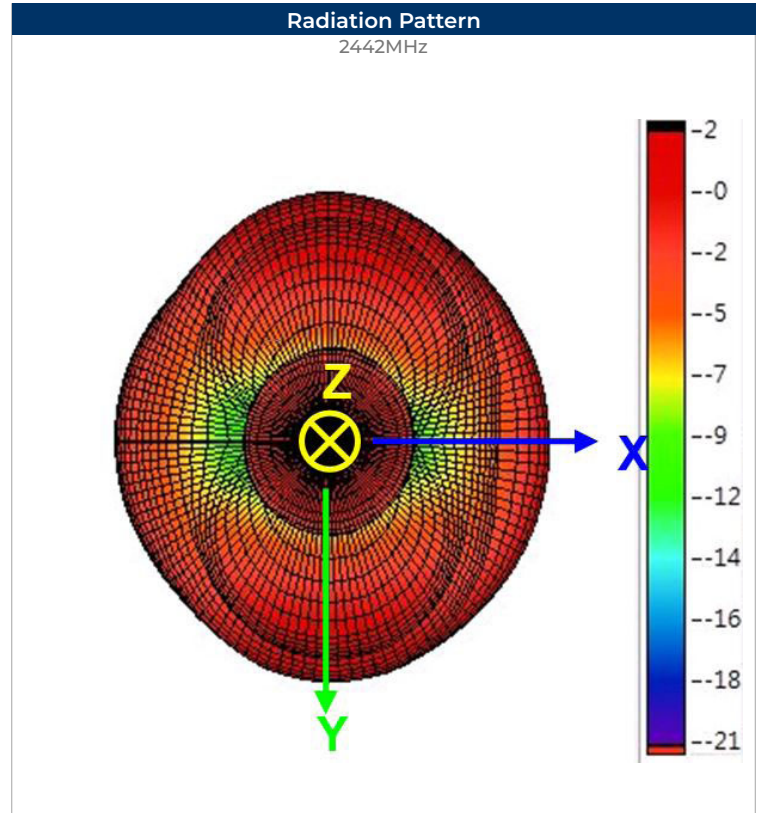
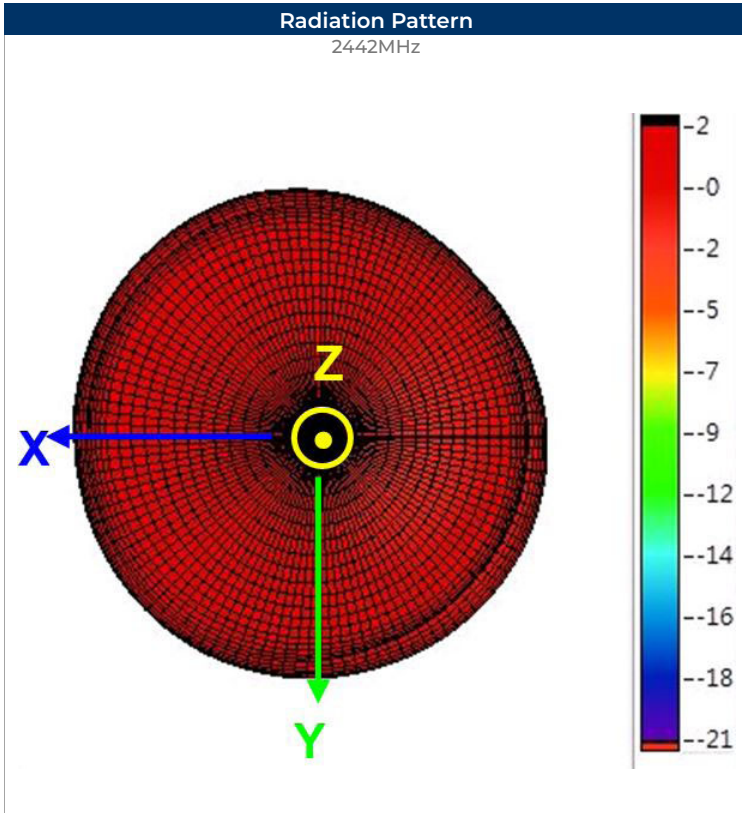
Reference chart for the
 2400-2500MHz Band

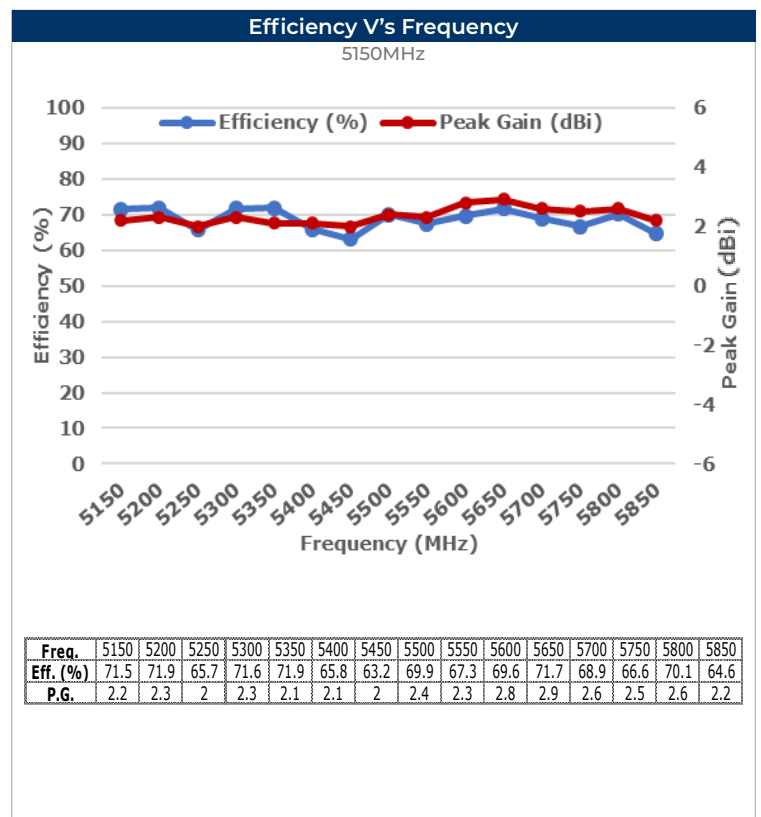
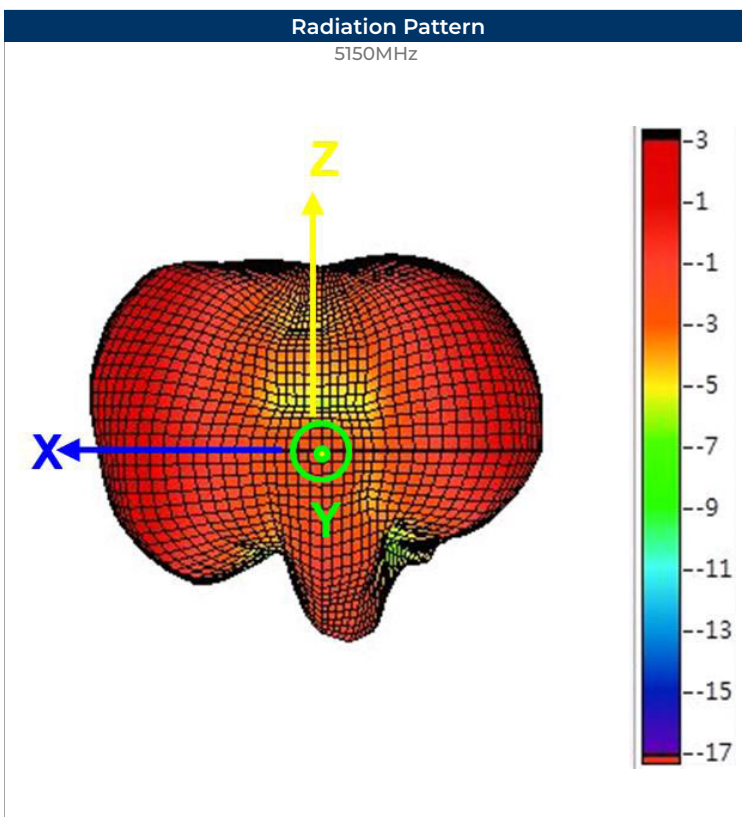
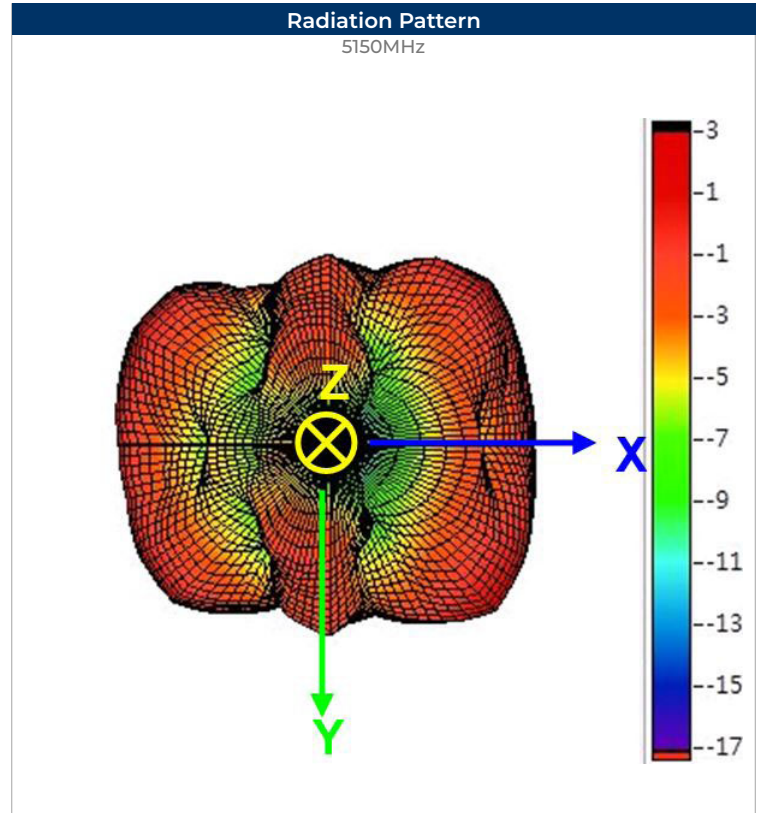
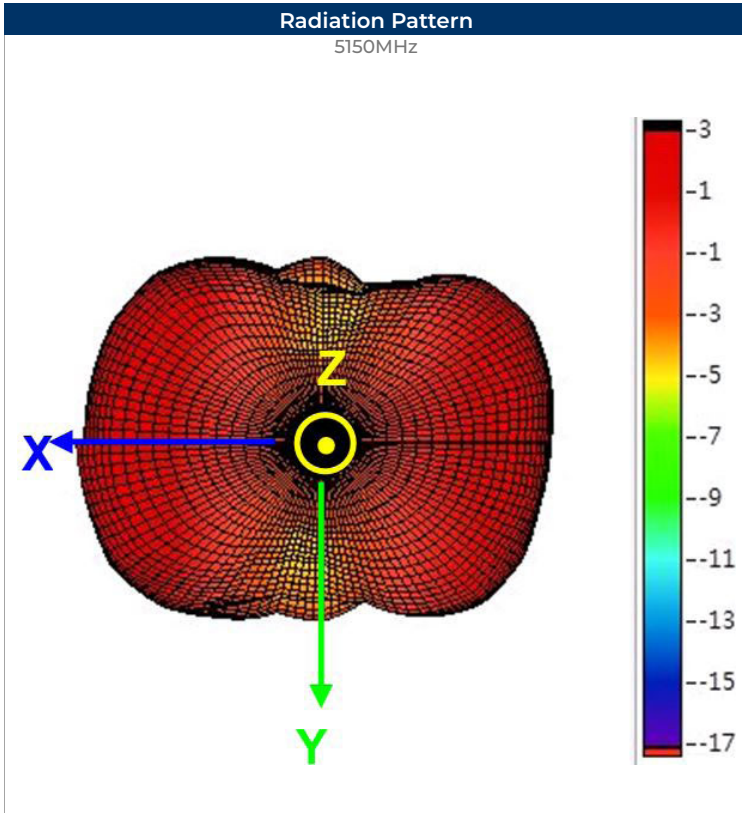


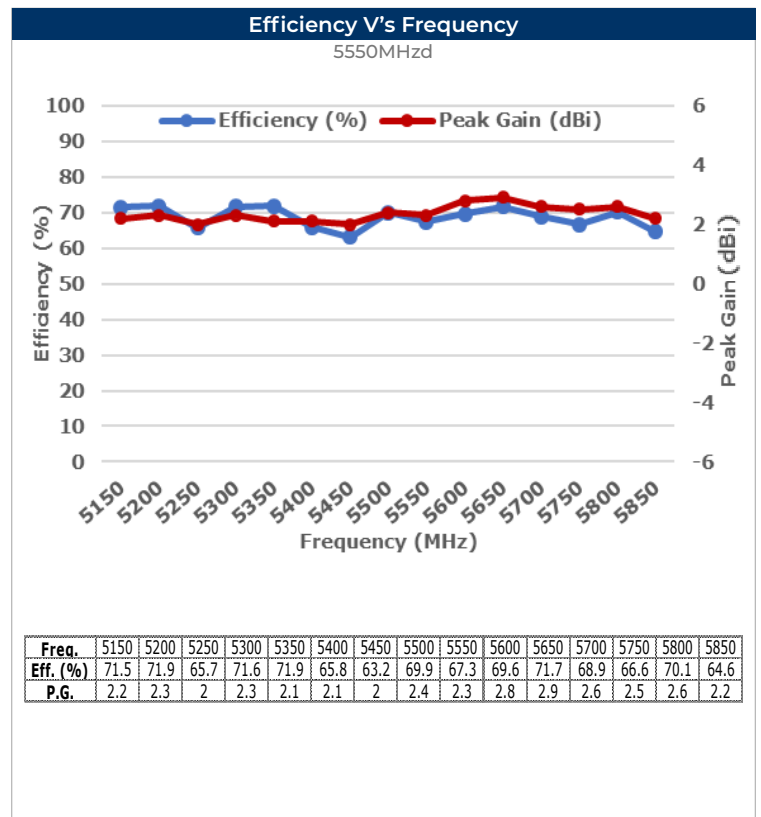
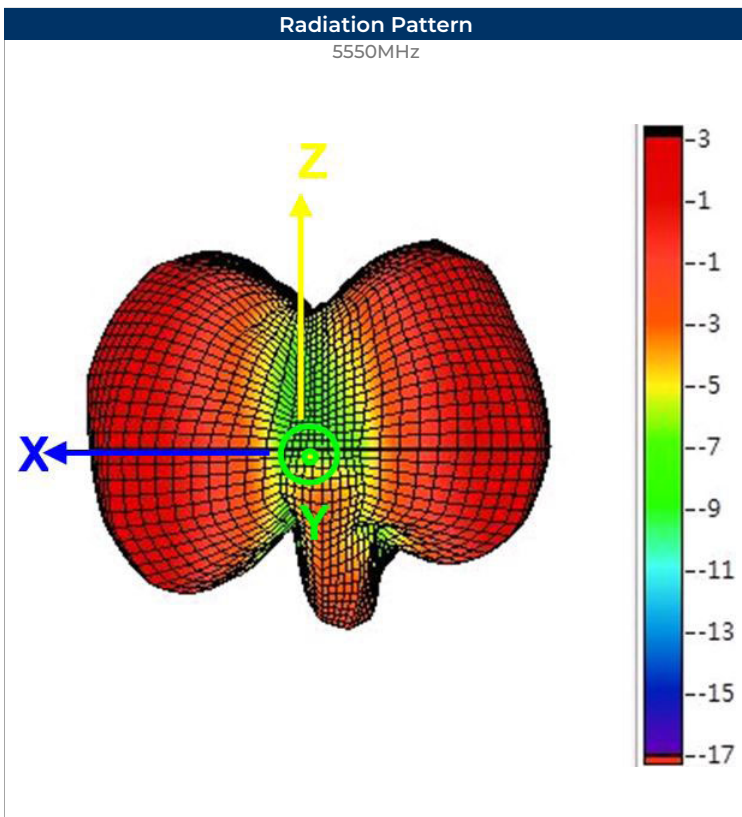
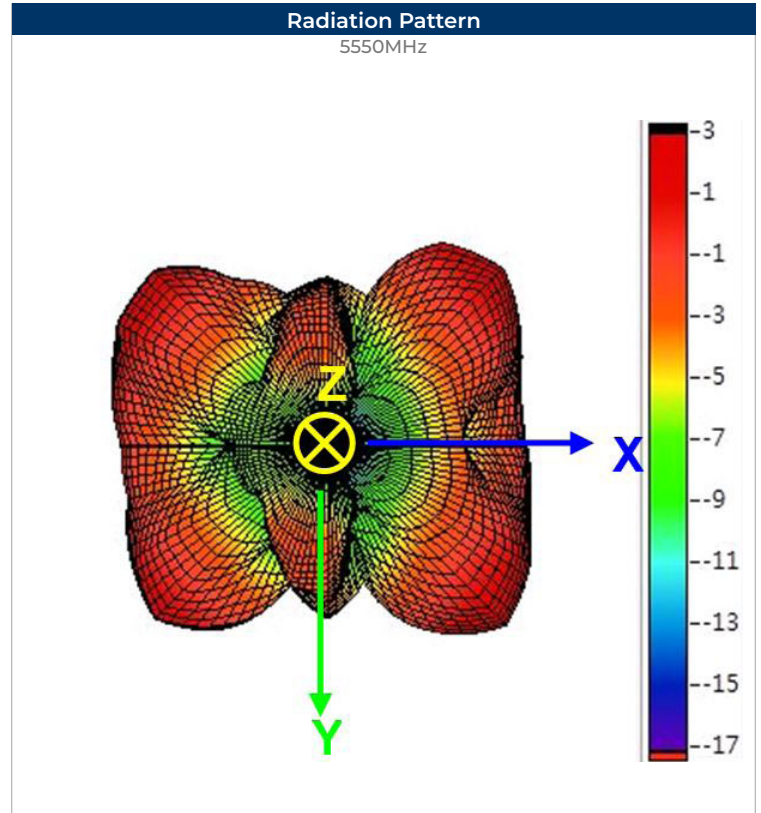
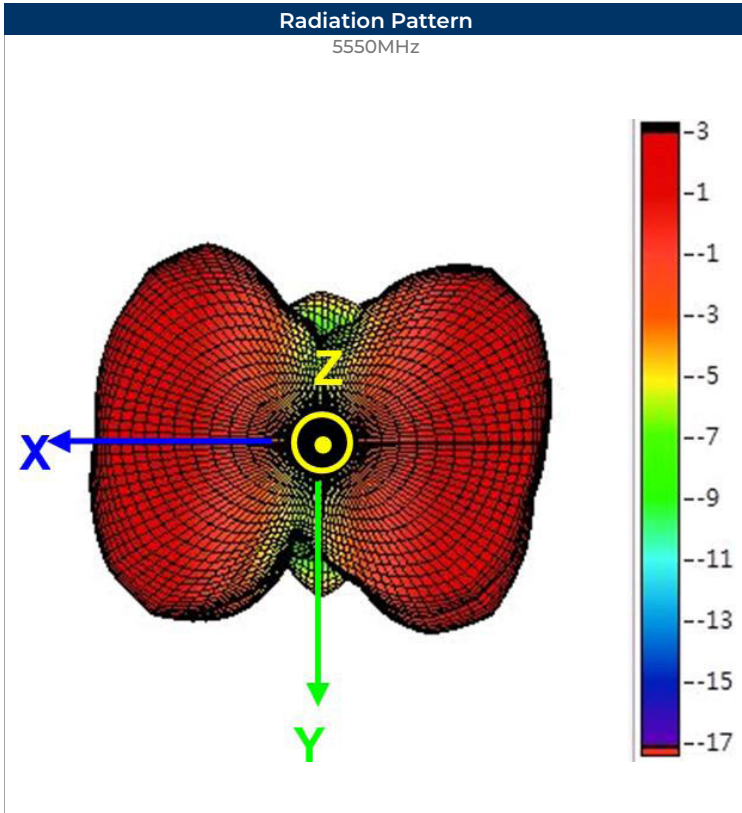
Tr1 S22 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr2 S22 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr3 S22 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr4 S22 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]
 Tr5 S22 Log Mag 10.00dB/ Ref 0.000dB [F1 D&M]

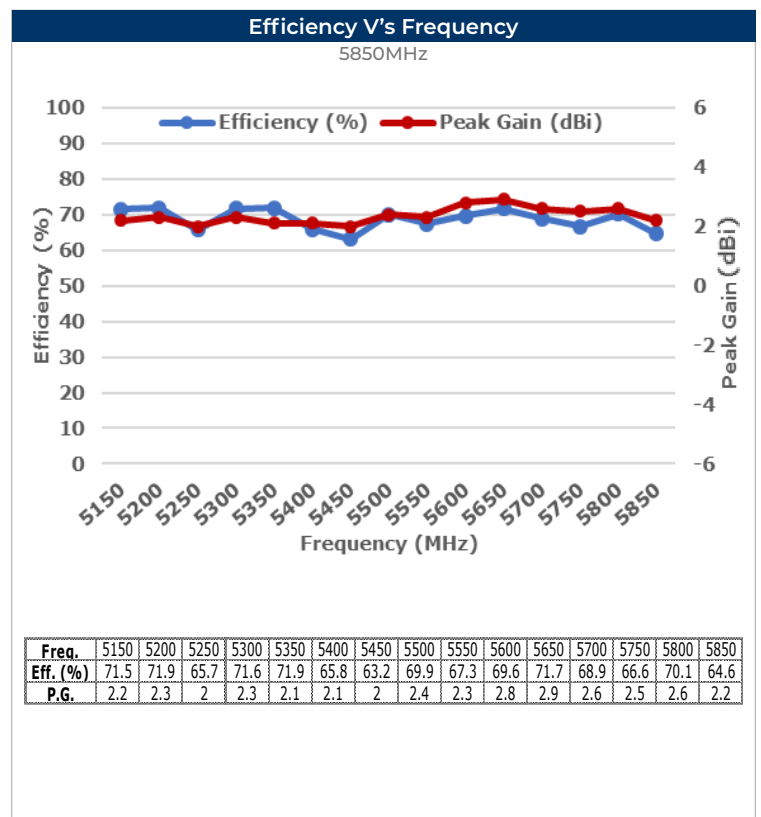
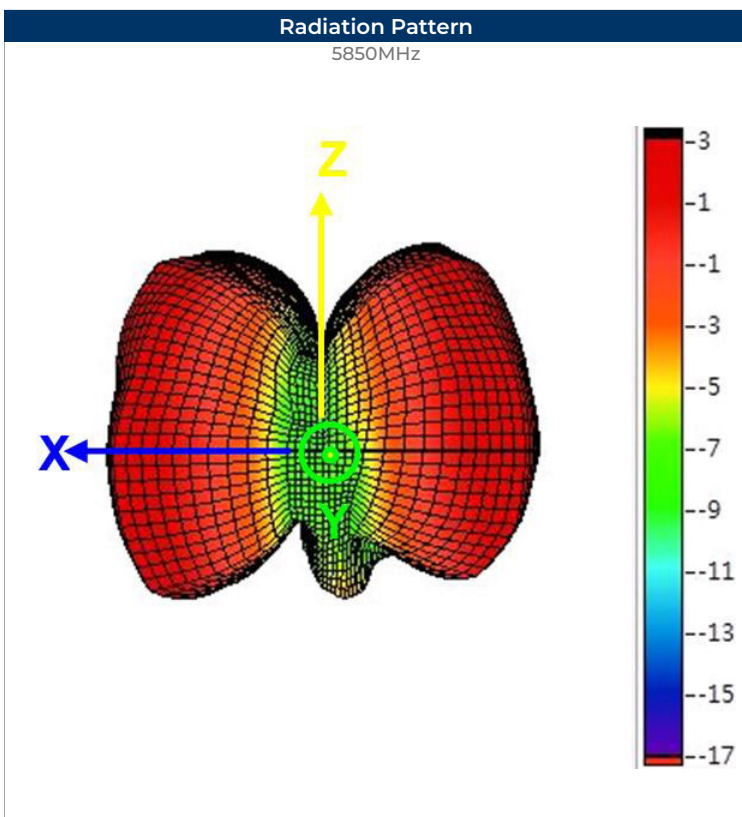
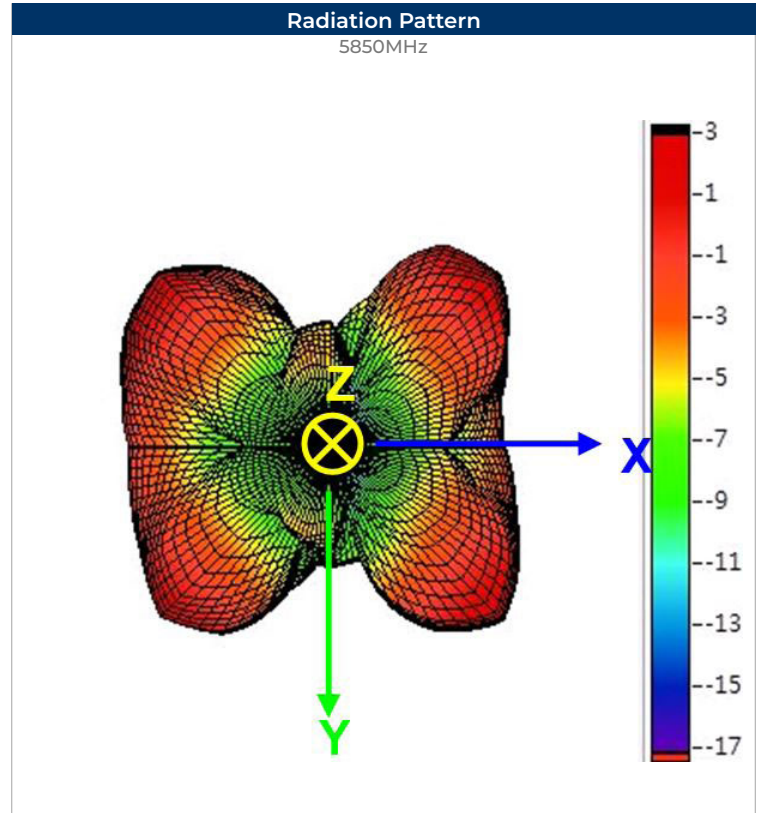
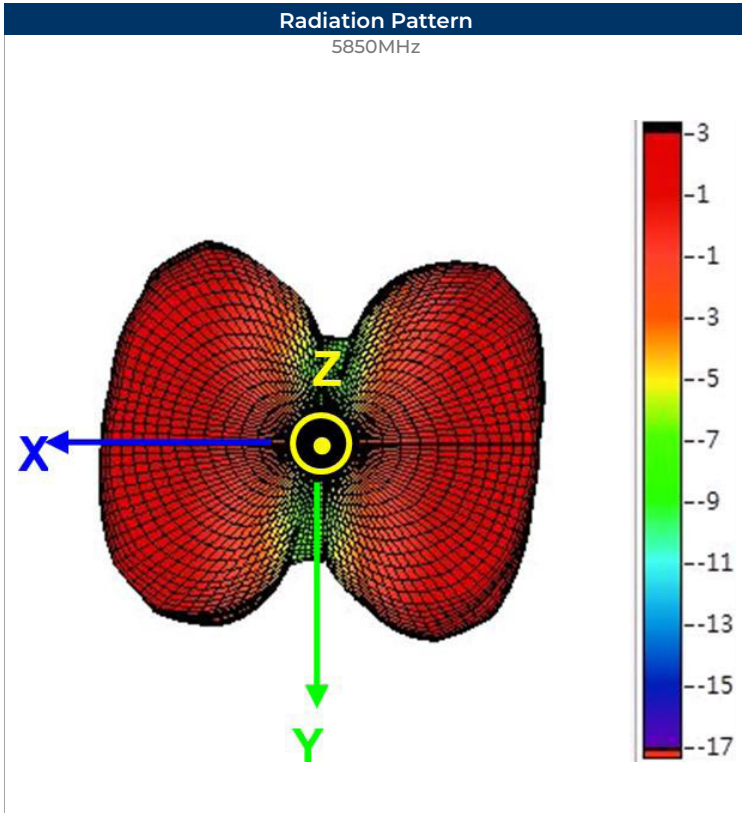
Reference chart for the
 5150-5850MHz Band





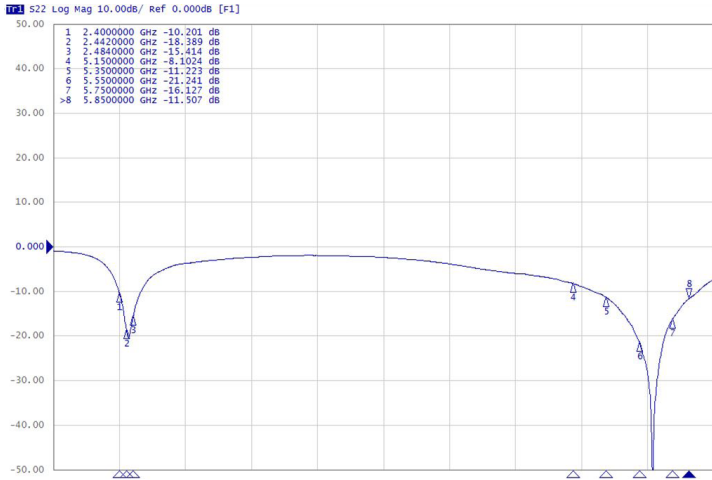






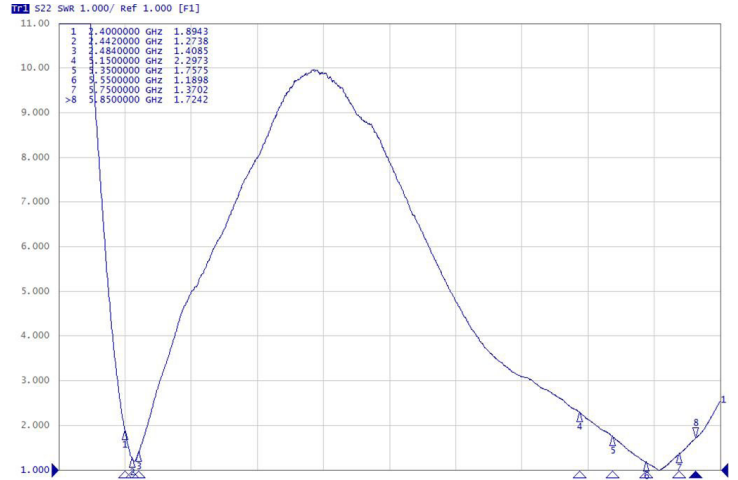
Electrical Test

Return Loss



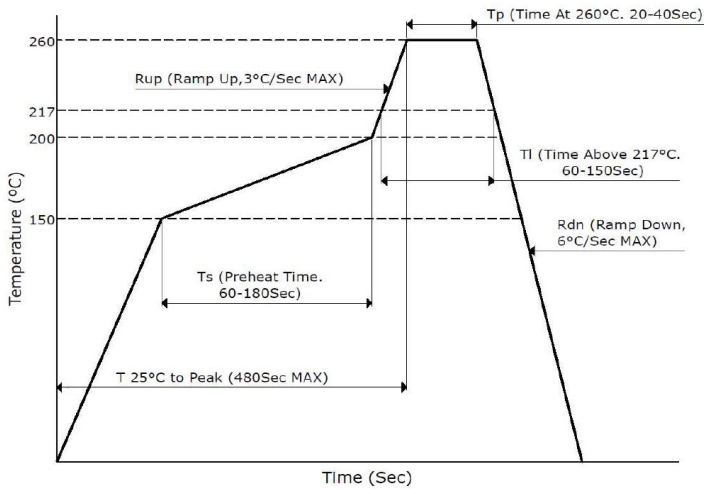
Electrical Test

VSWR



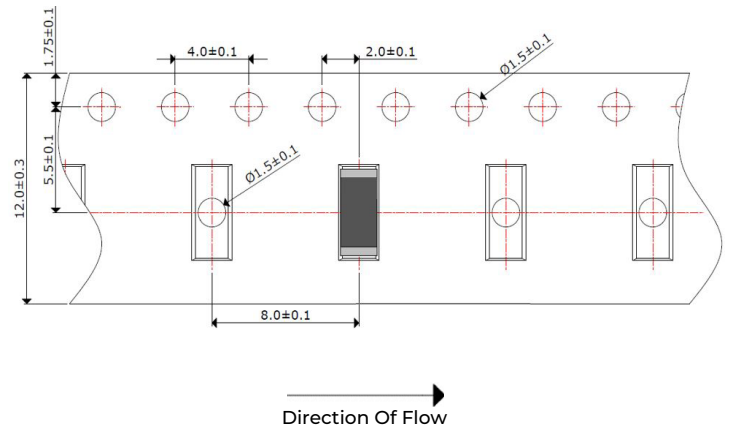
Soldering Conditions

Typical Soldering Profile For Lead-Free Process



Packaging - Tape And Reel

5000Pcs / 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.