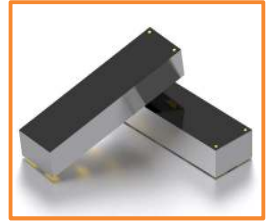
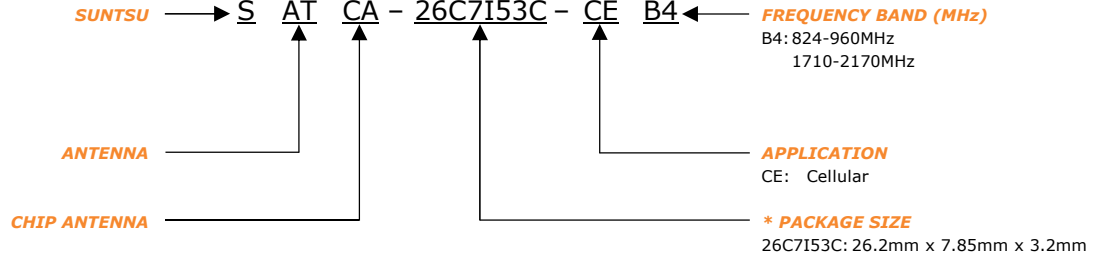


FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - GSM/3G - Chip Type - Stable And Reliable Performance - 824-960MHz & 1710-2170MHz - SMT Process Compatible 	<ul style="list-style-type: none"> - GSM/3G Position Routers & Tracking Systems - Femto Base Stations - Machine To Machine Communication - Smart Outdoor Devices - Mobile Systems



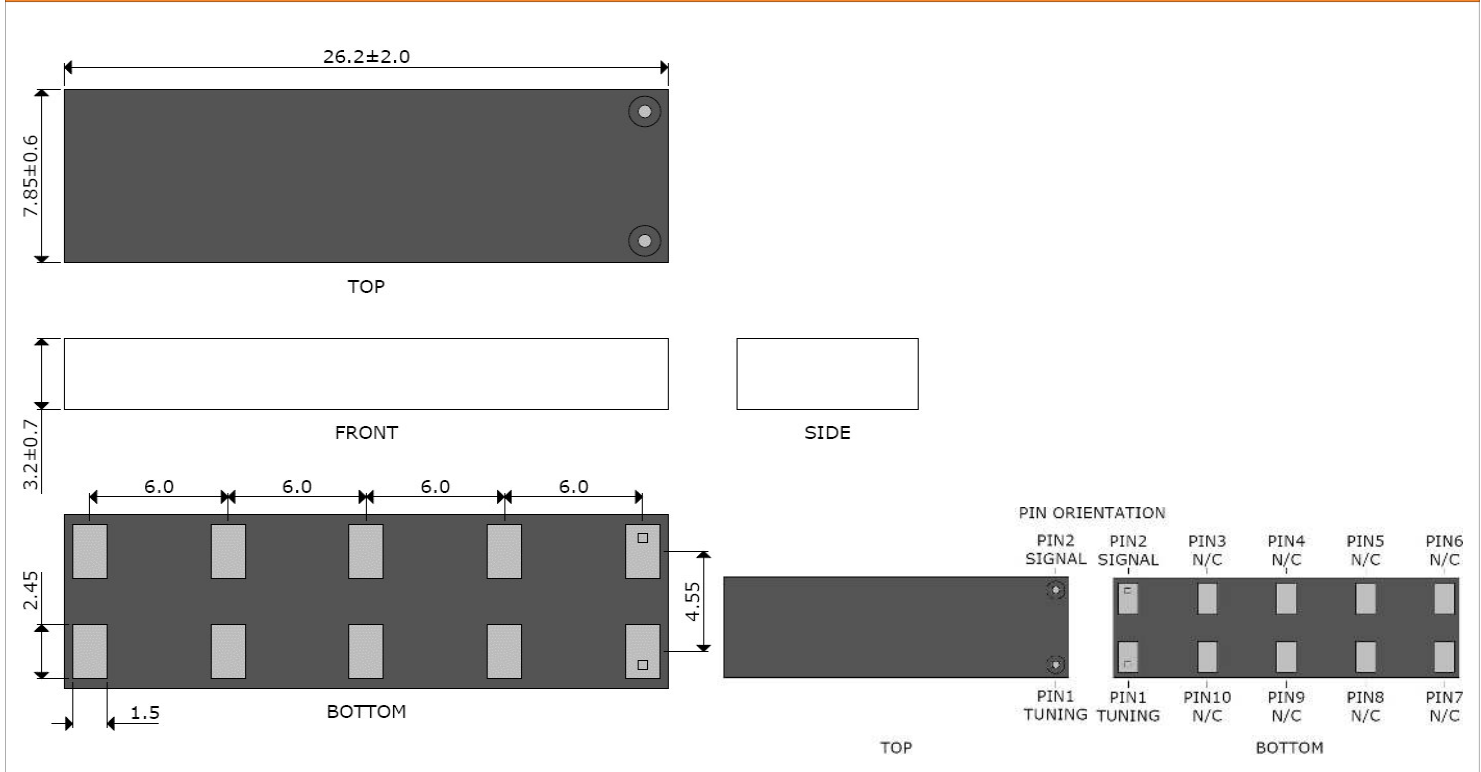
PART NUMBERING GUIDE



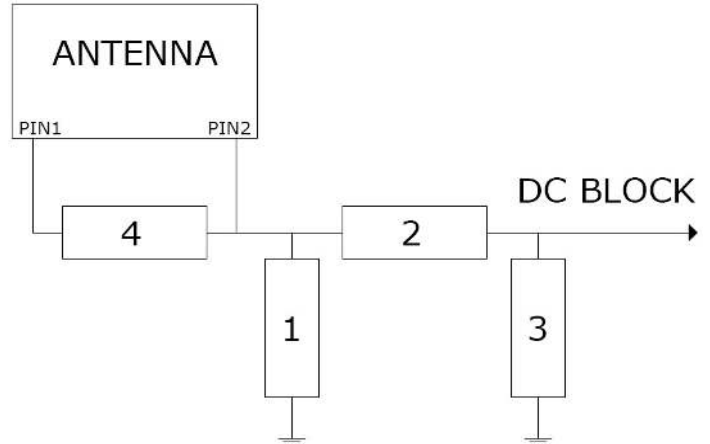
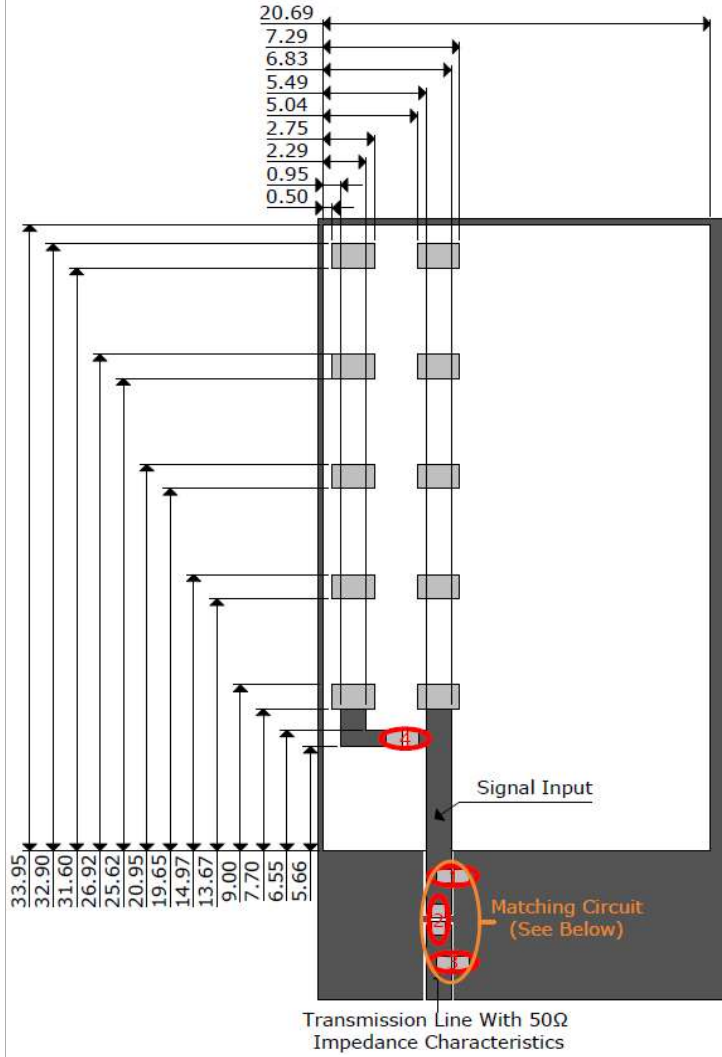
* Where letters denote decimal location A=.0, B=.1, C=.2, etc. Ex: B5=0.15, 3A5=3.05, 9A=9.0
To customize your parameters, contact a Suntsu representative.

ELECTRICAL PARAMETERS (At 25°C)	UNITS	MIN.	TYP.	MAX	REMARKS
Frequency Band	MHz	824		960	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		1.0		At 895MHz
Efficiency	%		75		At 895MHz
VSWR				3	At Center Frequency
Operating Temperature	°C	-40		85	
Frequency Band	MHz	1710		2170	
Impedance	Ω		50		
Polarization			Linear		
Peak Gain	dBi		2.2		At 1950MHz
Efficiency	%		73		At 1950MHz
VSWR				3	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	5.6nH (0402)	DARFON	±0.1nH
2	5pF (0402)	DARFON	±0.1pF
3	N/A	-	-
4	6.8nH (0402)	DARFON	±2%

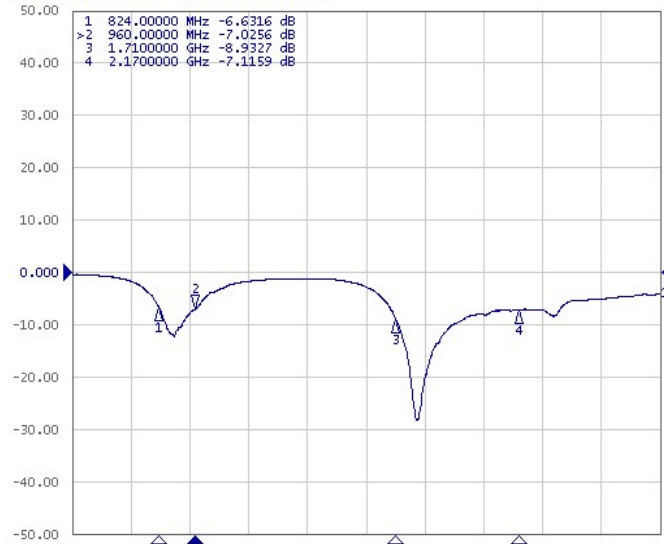
For these suggested values for the matching and tuning of components, the average frequency will be 824-960MHz & 1710-2170MHz on a standard 110.5 x 51mm² Evaluation board.

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

ELECTRICAL TEST

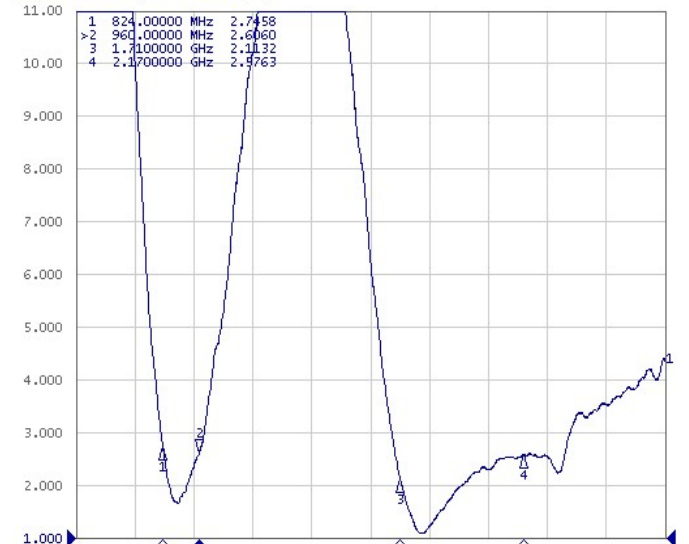
Return Loss

[F1] S22 Log Mag 10.00dB/ Ref 0.000dB [F1]



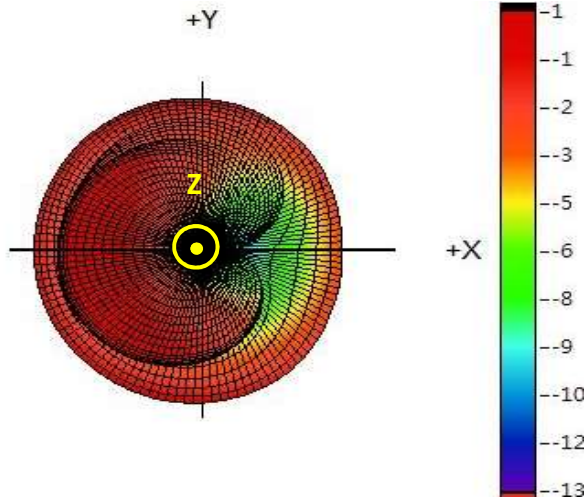
VSWR

[F1] S22 SWR 1.000/ Ref 1.000 [F1]

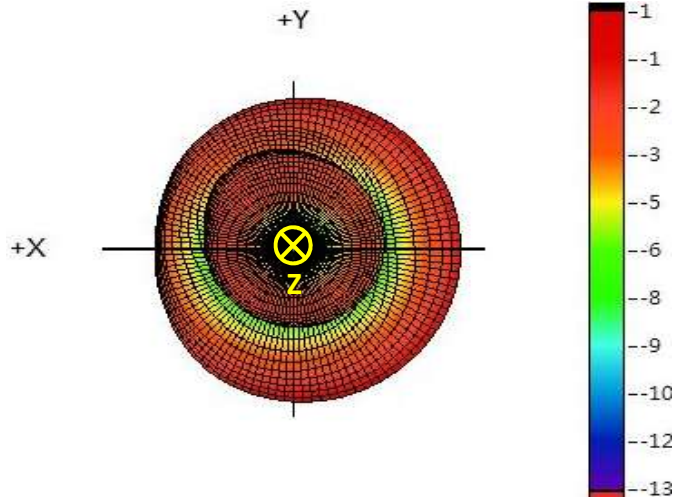


3D RADIATION PATTERN (UNIT: dBi) AND EFFICIENCY vs FREQUENCY

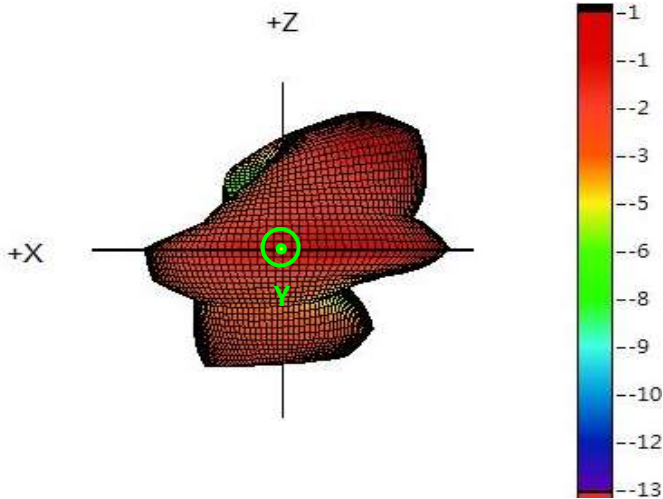
895MHz



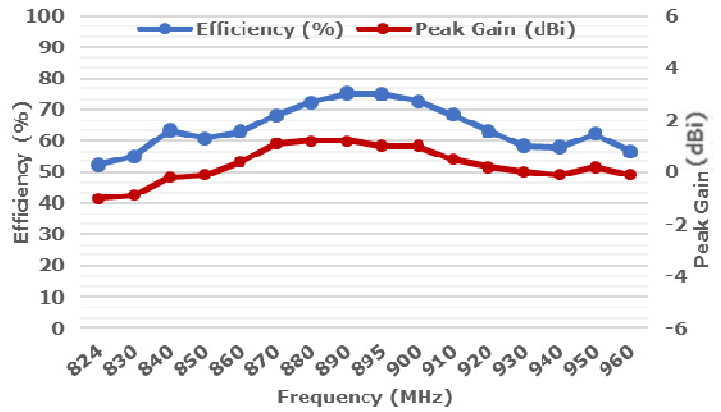
895MHz



895MHz

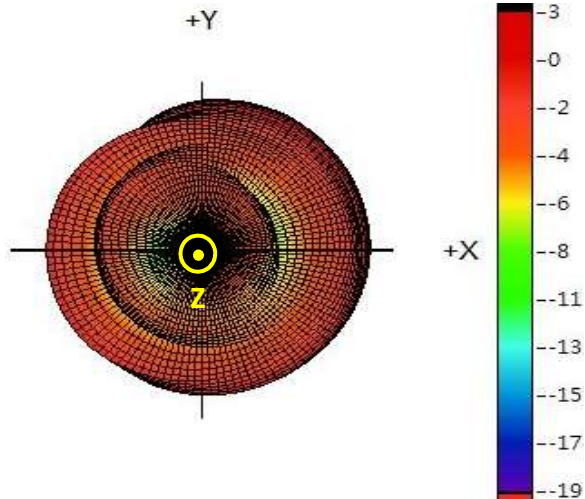


895MHz

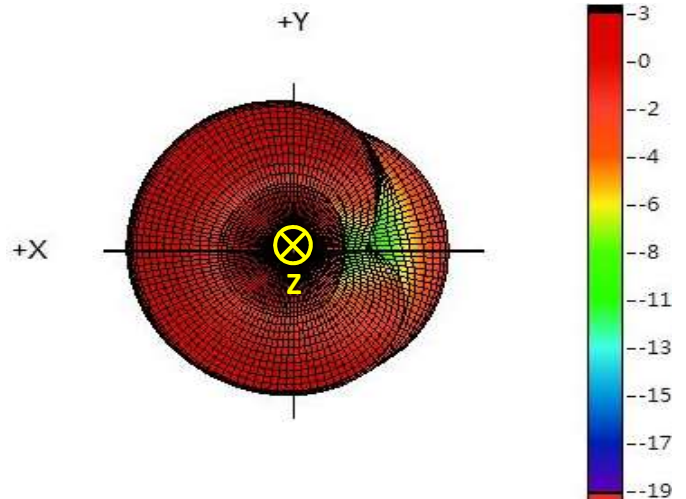


Freq.	824	830	840	850	860	870	880	890	895	900	910	920	930	940	950	960
Eff. (%)	52.4	55	63.4	60.9	63	68.1	72.30	75.30	75	72.8	68.4	63.1	58.4	57.9	62.2	56.7
P.G.	-1	-0.9	-0.2	-0.1	0.4	1.1	1.2	1.2	1	1	0.5	0.2	0	-0.1	0.2	-0.1

1950MHz

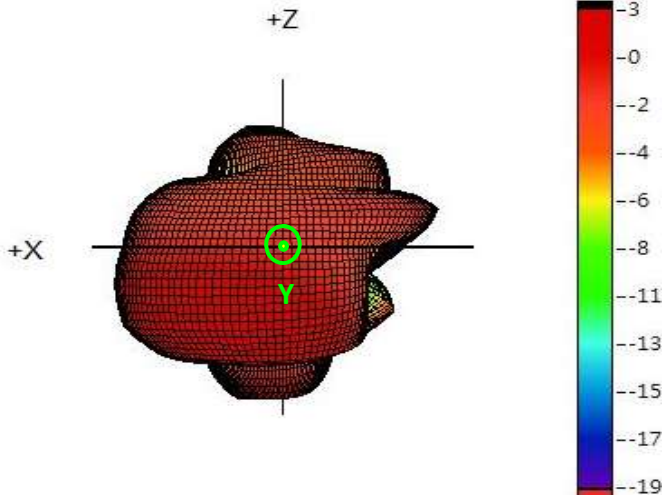


1950MHz

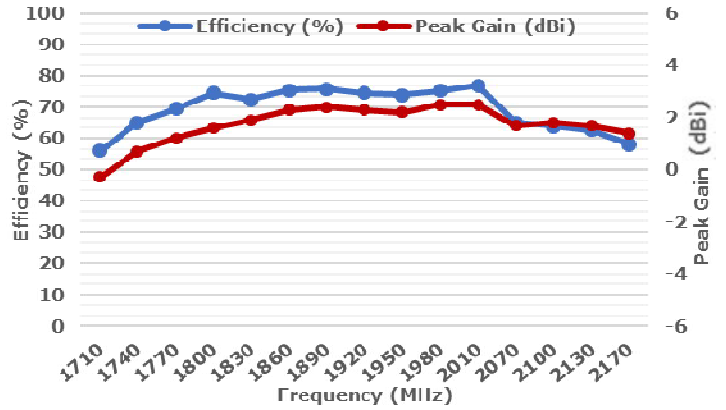


3D RADIATION PATTERN (UNIT: dBi) AND EFFICIENCY vs FREQUENCY (CONT.)

1950MHz



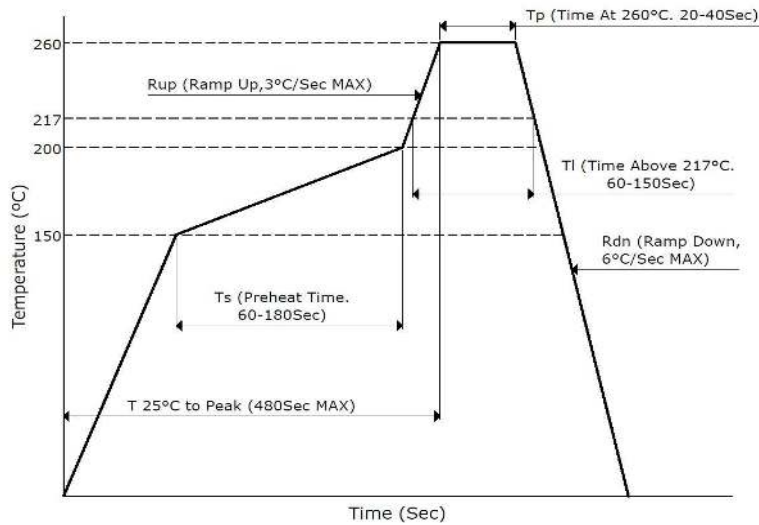
1950MHz



Freq.	1710	1740	1770	1800	1830	1860	1890	1920	1950	1980	2010	2070	2100	2130	2170
Eff. (%)	56.1	65	69.5	74.5	72.4	75.4	75.80	74.50	73.8	75.3	76.9	65	63.9	62.5	58.1
P.G.	-0.3	0.7	1.2	1.6	1.9	2.3	2.4	2.3	2.2	2.5	2.5	1.7	1.8	1.7	1.4

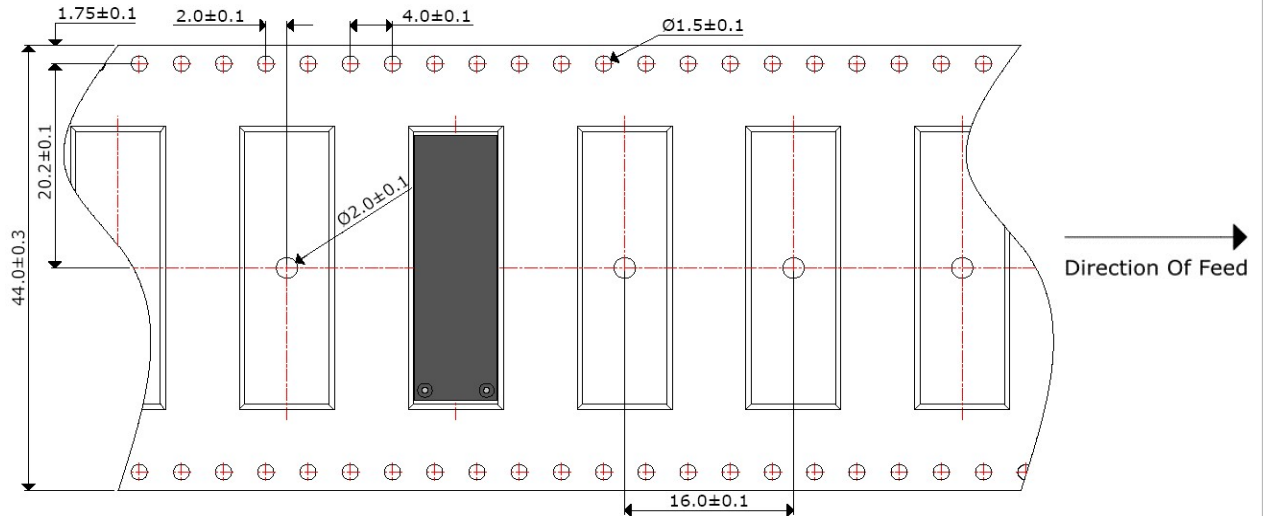
SOLDERING CONDITIONS

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.)

1,000pcs / 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.