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Features

1.Surface Mounted Devices with a small dimension of 2.0 x 1.25 x 0.25 mm^3 meet future miniaturization trend.

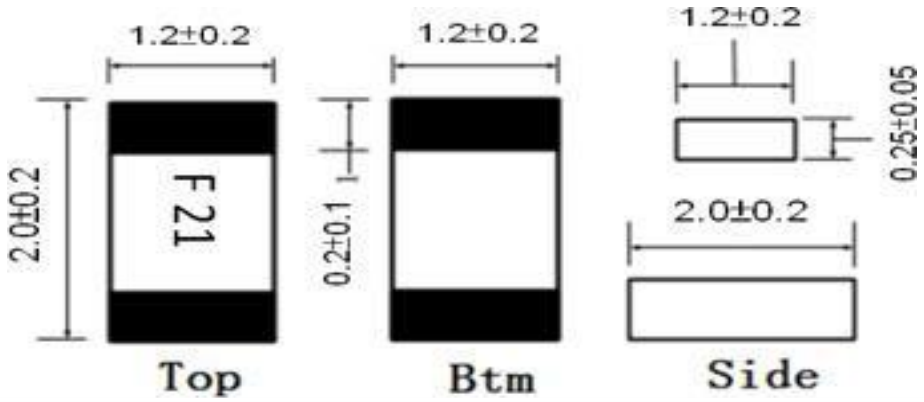
2.Embedded and (Low Temperature Co-fired Ceramic) technology is able to future integratewith system design as well as beautifying the housing of final product.

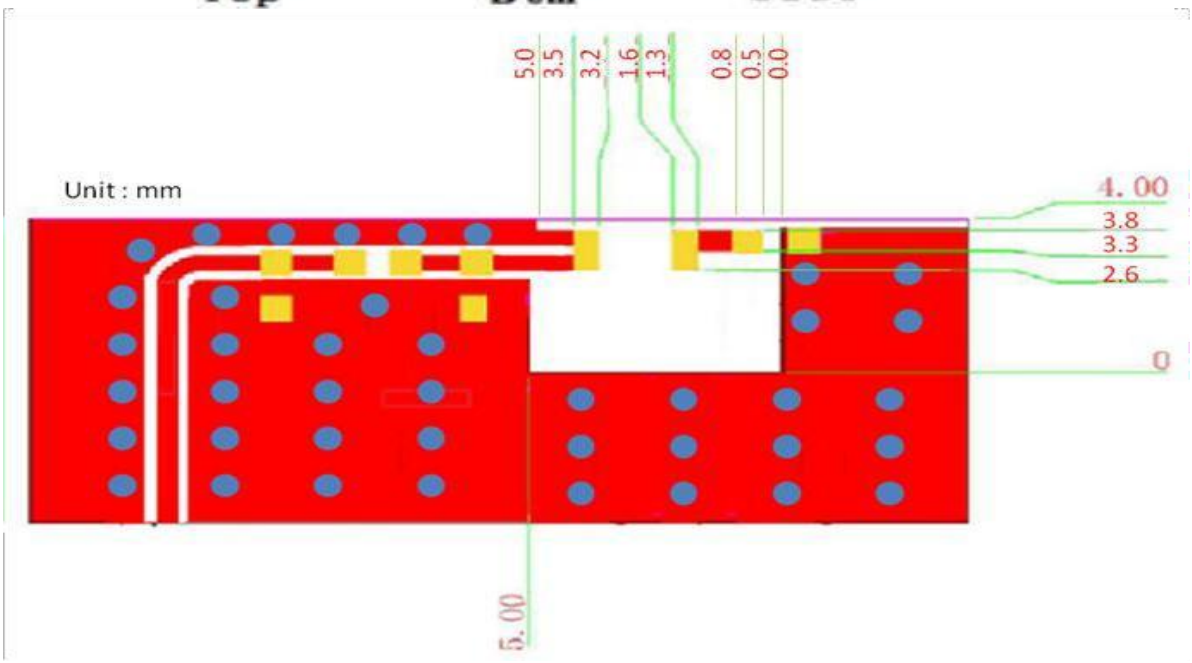
3. High Stability in Temperature / Humidity Change

Applications

1. Bluetooth
2. Wireless LAN
3. HormRF
4. ISM band 2.4GHz wireless applications

Dimensions（Unit：mm）





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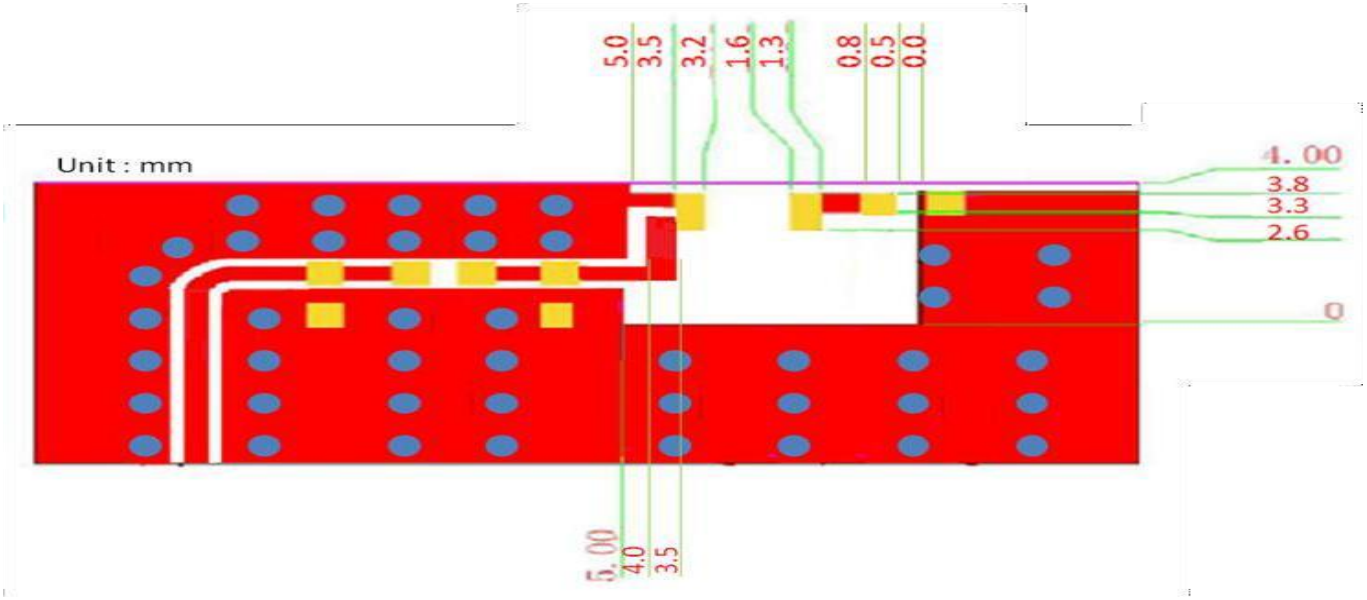
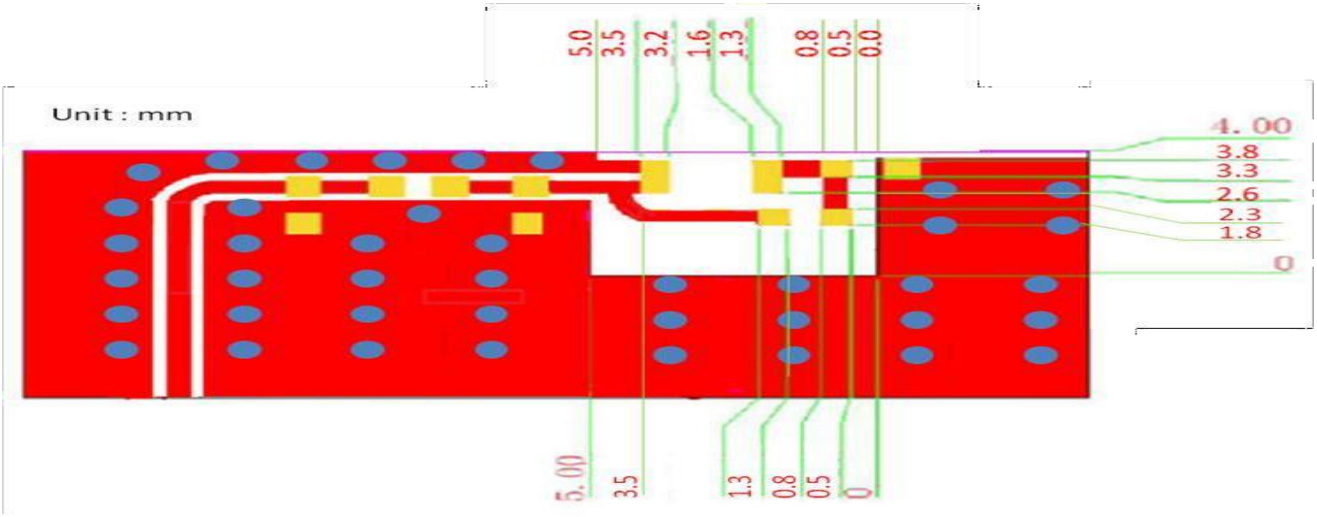
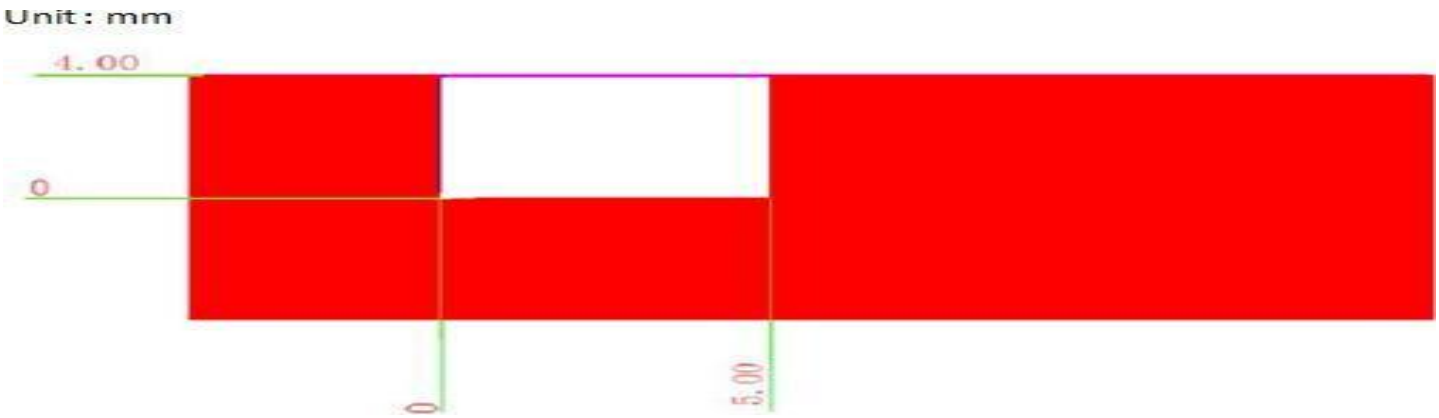
Type2 :



Type3 :



PCB Bottom View :



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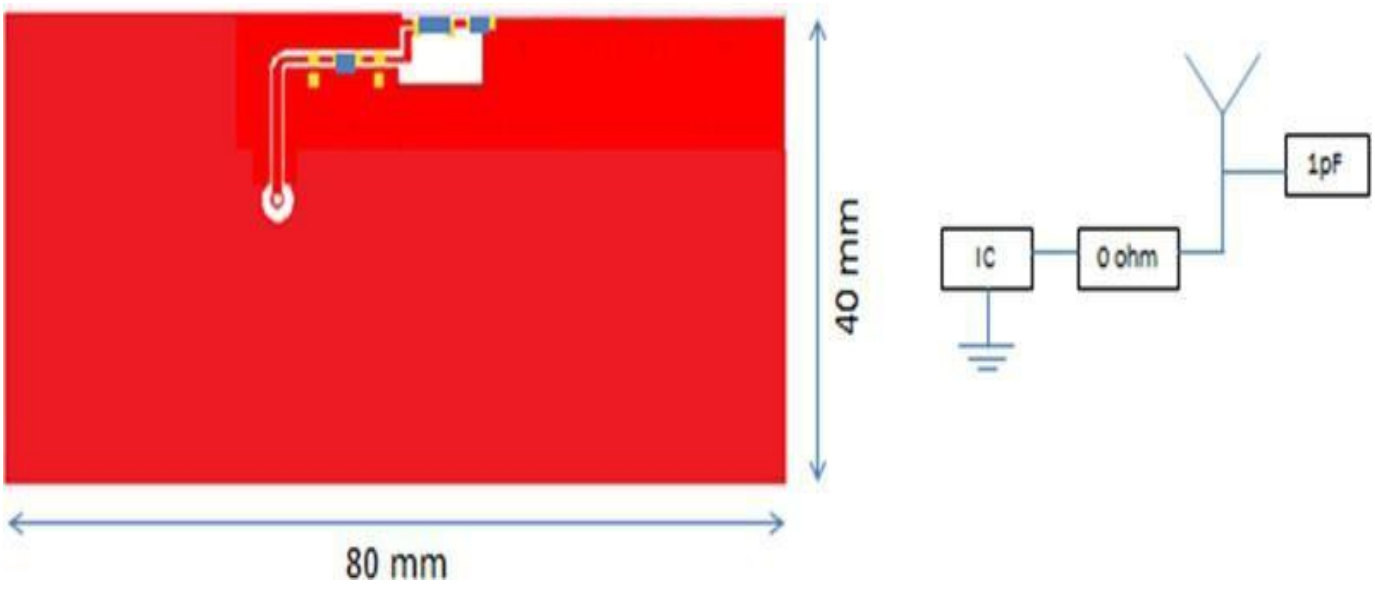
Evaluation Board and Matching Circuits



Electrical Characteristics

No.	Item	Specifications
5.1	Working Central Frequency (After matching)	2450 MHz
5.2	Band Width	86MHz typ.
5.3	Peak Gain	1.24dBi
5.4	R.L.	≥7
5.5	Polarization	Linear
5.6	Azimuth Beam width	Omni-directional
5.7	Impedance	50 Ω

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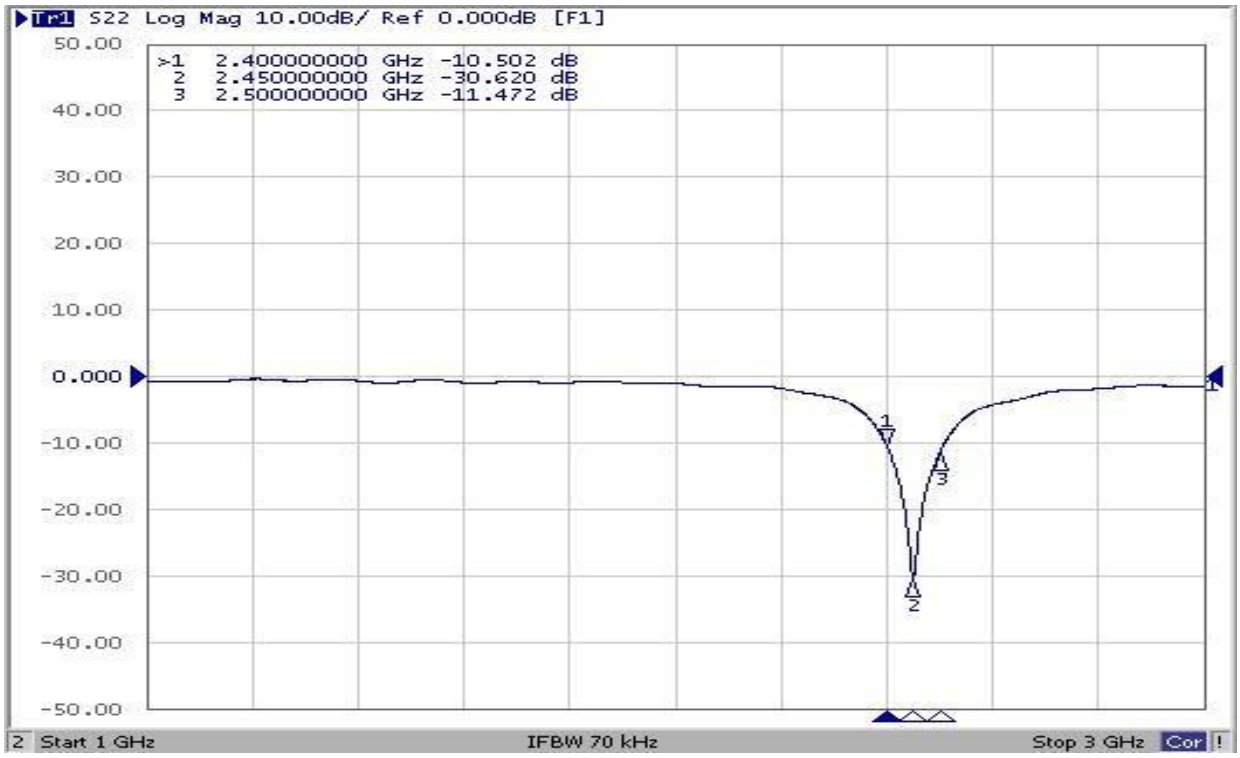
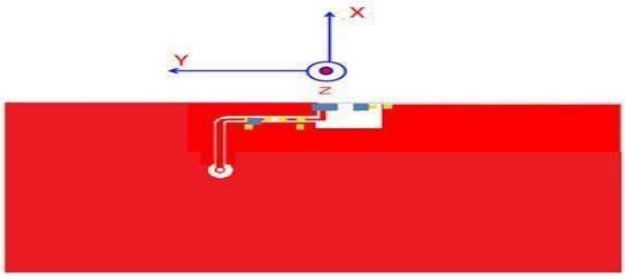
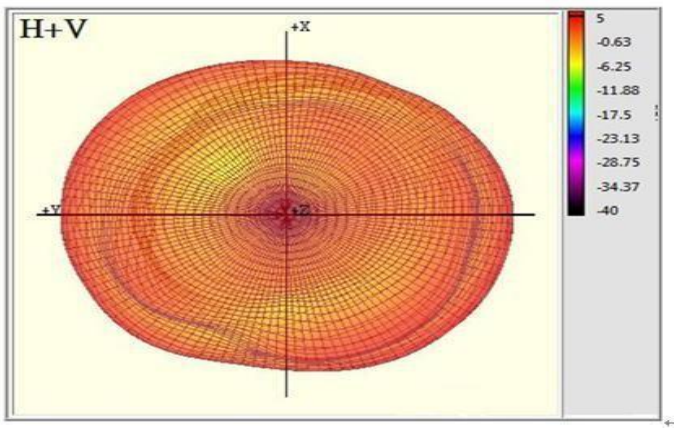
Characteristic curve



Radiation Pattern

Frequency(MHz)	2400	2450	2500
Efficiency (dB)	-2.82	-2.04	-2.41
Efficiency (%)	52.19	62.42	58,21
Gain (dBi)	1.24	0.41	0.63





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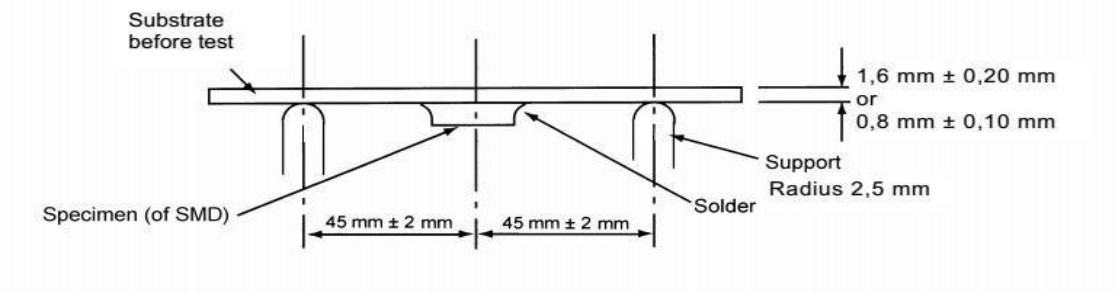
Bending Resist Test



Weld the product to the center part of the PCB with the thickness 1.6±0.2mm or 0.8±0.1mm as the illustration shows, and keep exerting force arrow-ward on it at speed of :1mm/S , and hold for 5±1S at the position of 1.5mm bending distance , so far , any peeling off of the product metal coating should not be detected .

Dependability Test

Temperature range	25±5℃
Relative Humidity range	55~75%RH
Operating Temperature range	-40℃~+85℃
Storage Temperature range	-40℃~+85℃

Vibration Resist

The device should fulfill the electrical specification after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

Drop Shock

The device should have no mechanical damage after dropping onto the hard wooden board from the height of 100cm for 3 times each facet of the 3 dimensions of the device.

Solder Heat Proof

The device should be satisfied after preheating at 120℃~150℃ for 120 seconds and dipping in soldering Sn at 255℃+10℃ for 5±0.5 seconds，or electric iron 300℃-10℃ for 3±0.5 seconds， without damnify.

Adhesive Strength of Termination

The device have no remarkable damage or removal of the termination after horizontal force of 5N(≦0603)； 10N(>0603)with 10±1 seconds.

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Moisture Proof

The device should fulfill the electrical specification after exposed to the temperature 60±2℃and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

High Temperature Endurance

The device should fulfill the electrical specification after exposed to temperature 85±5℃for 96±2 hours and 1~2 hours recovery time under normal temperature.

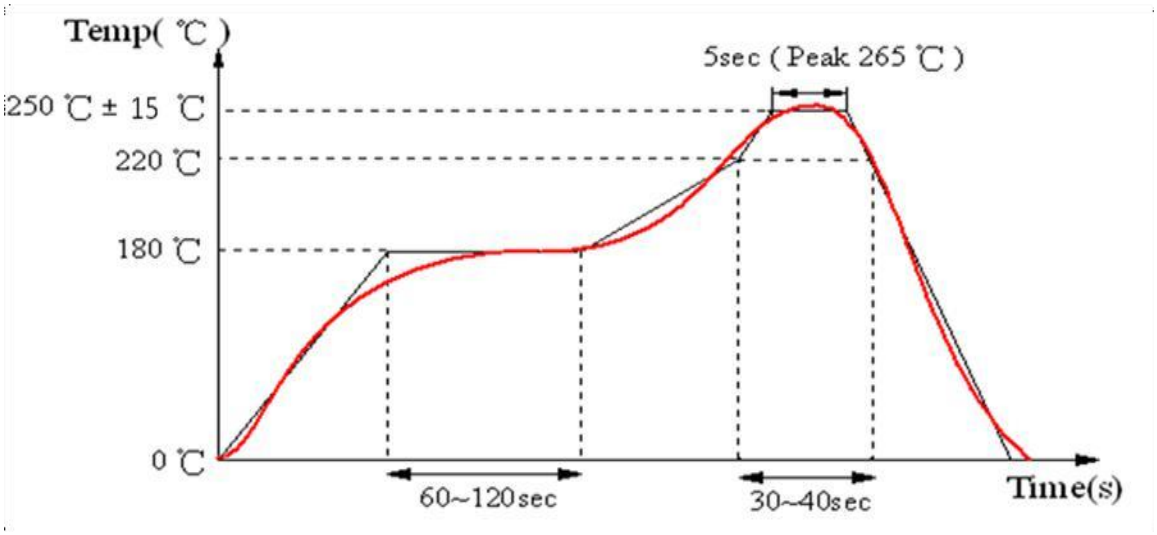
Low Temperature Endurance

The device should fulfill the electrical specification after exposed to the temperature -40℃±5℃ for 96±2 hours and to 2 hours recovery time under normal temperature.

Temperature Cycle Test

The device should fulfill the electrical specification after exposed to the low temperature -40℃ and high temperature +85℃ for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

Reflow Soldering Standard Condition



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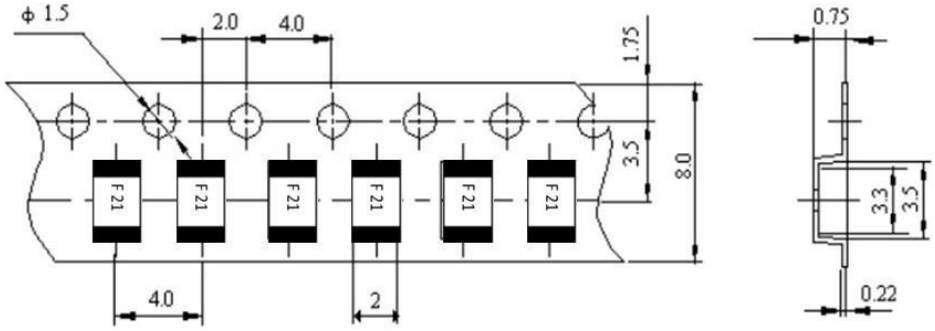
Packaging and Dimensions（2012）

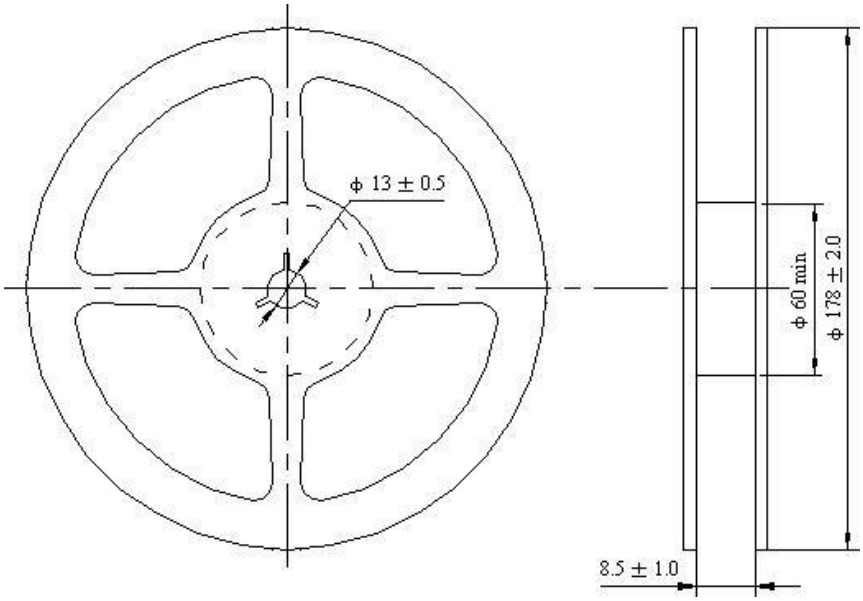
Plastic Tape



Remarks for Package

Reserve a length of 150~200mm for the trailer of the carrier and 250~300 mm for the leader of the carrier and further 250mm of cover tape at the leading part of the carrier.

Reel（6000 pcs/Reel）



Storage Period

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Product should be used within six months of receipt.

MSL 1 / Storage Temperature Range : <30 degree C, Humidity : <85%RH