P/N: HLX321605A6

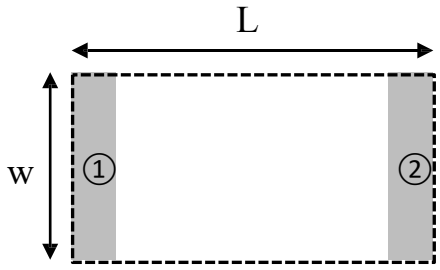
Features

1.Surface Mounted Devices with a small dimension of 2 x 1.2 x 0.1 mm^3 meet future miniaturization trend.
2.Embedded and LTCC (Low Temperature Co-fired Ceramic) technology is able to future integrate with system design as well as beautifying the housing of final product.
3.High Stability in Temperature / Humidity Change

Applications

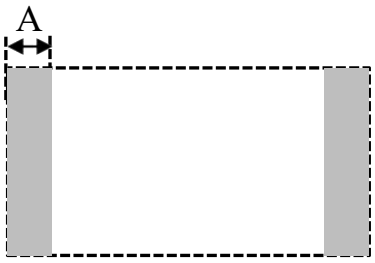
1. Bluetooth
2. Wireless LAN
3. ISM band 2.4GHz wireless applications

Dimensions（Unit：mm）



(Top View)

Number	Terminal Name
①	INPUT
②	NC



(Bottom View)

(Side View)

Symbols	L	W	T	A
Dimensions	2+/-0.2	1.2+/-0.2	0.1+/-0.1	0.2+/-0.1

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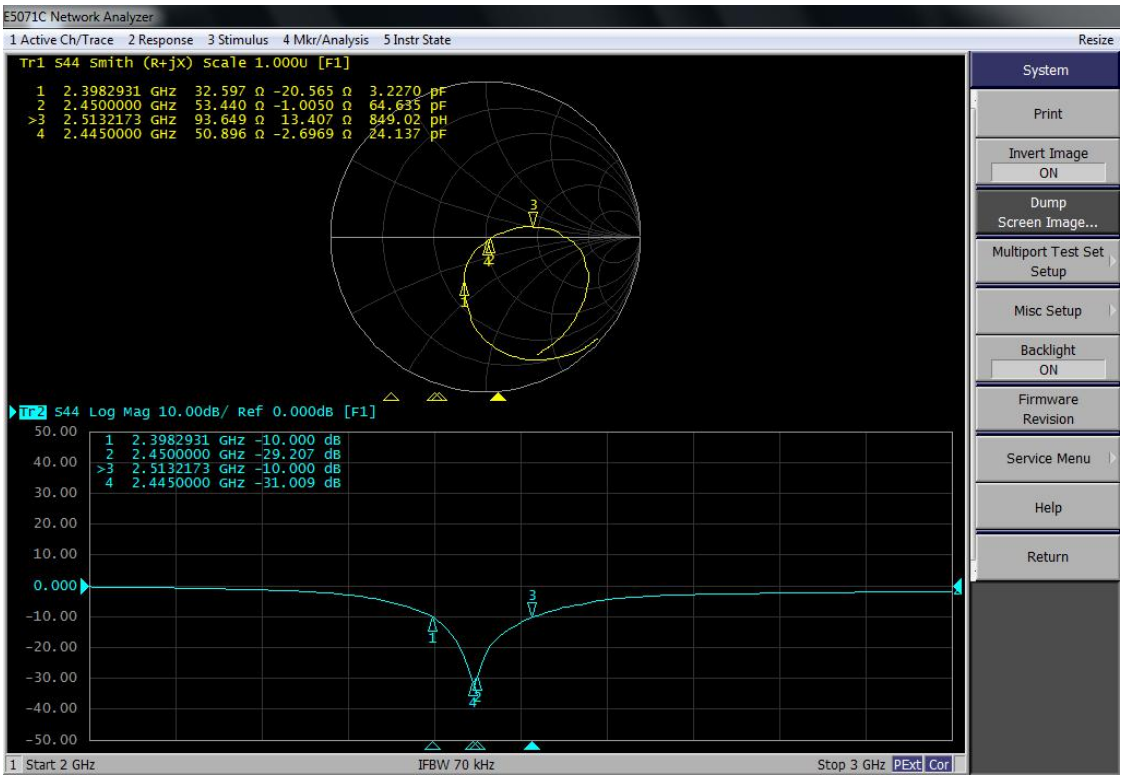
Electrical Characteristics

No.	Item	Specifications
1	Central Frequency	2445MHz
2	Band Width	100 MHz typ.
3	Peak Gain	2.53 dBi
4	Return Loss	≤2.0
5	Polarization	Linear
6	Azimuth Beam width	Omni-directional
7	Impedance	50 Ω

Characteristic curve



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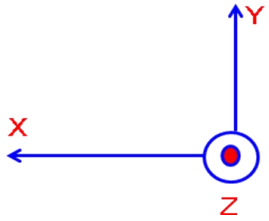
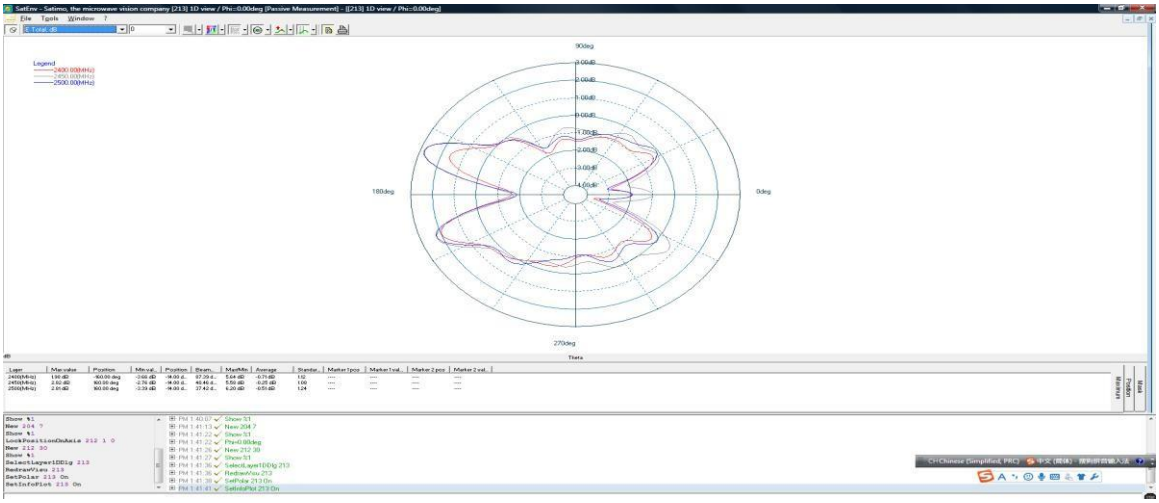
Radiation Pattern

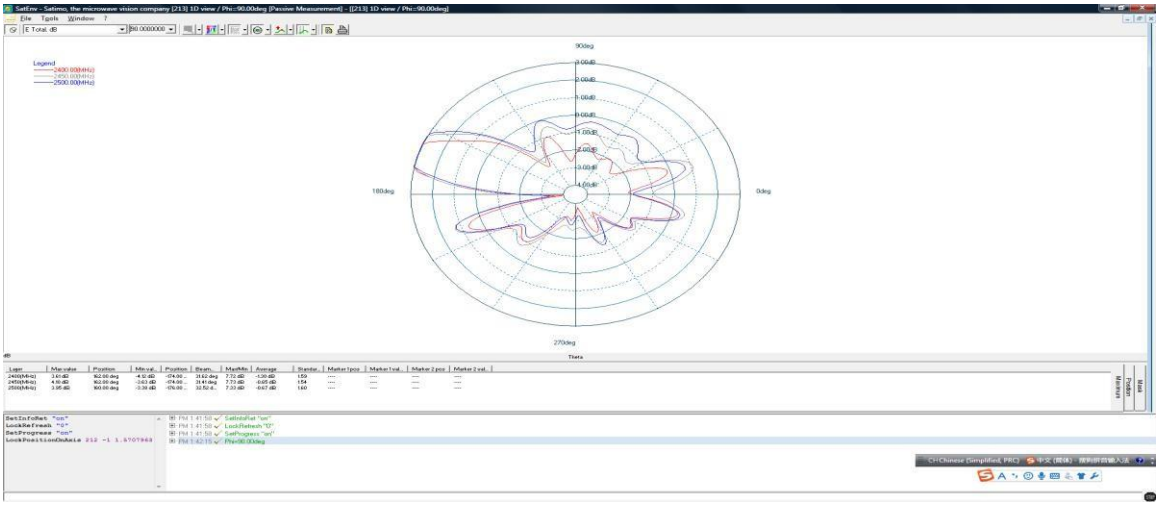
coordinates:



X-Z Plane



X-Y Plane



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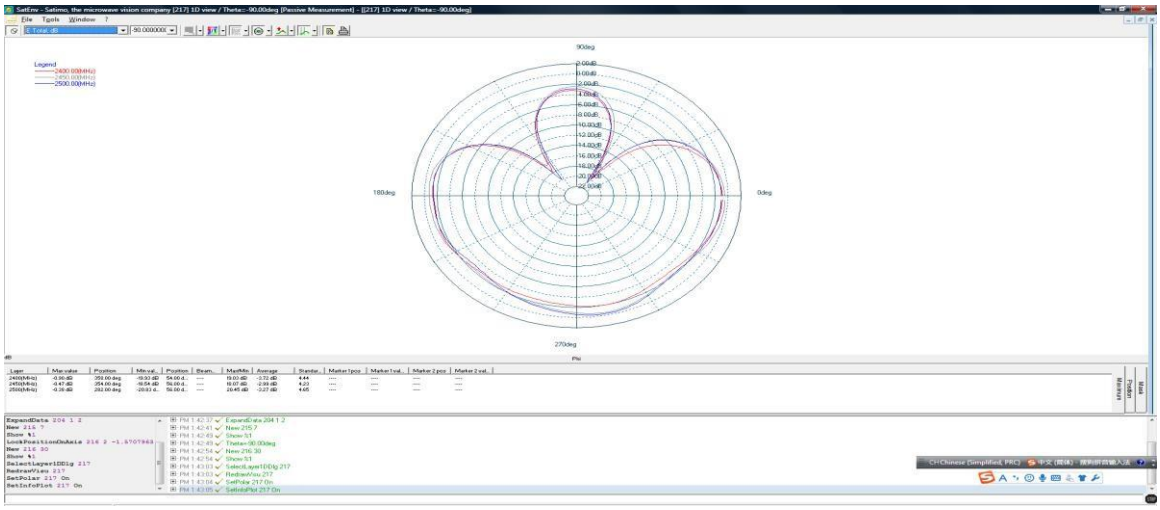
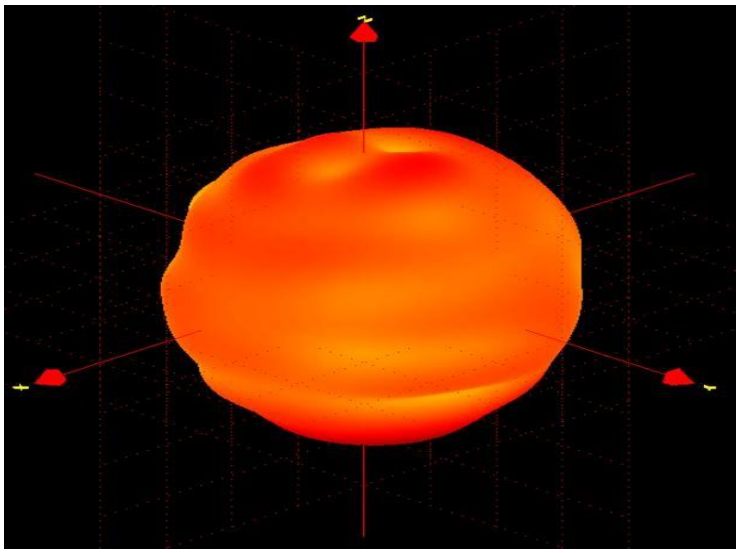
Y-Z Plane



3D **Radiation Pattern**



Frequency (MHz)	2400	2450	2500
Avg. Gain (dBi)	-1.91	-1.30	-1.48
Peck Gain (dBi)	1.76	2.08	2.53
Efficiency (%)	72.1	78.2	71.8

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.

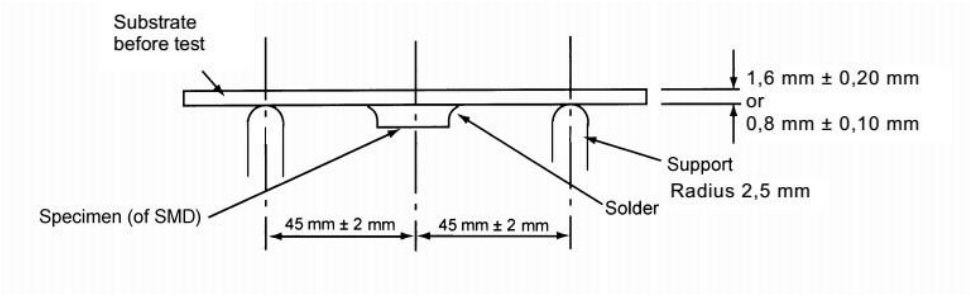
Solder Heat Proof

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.

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 .

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.

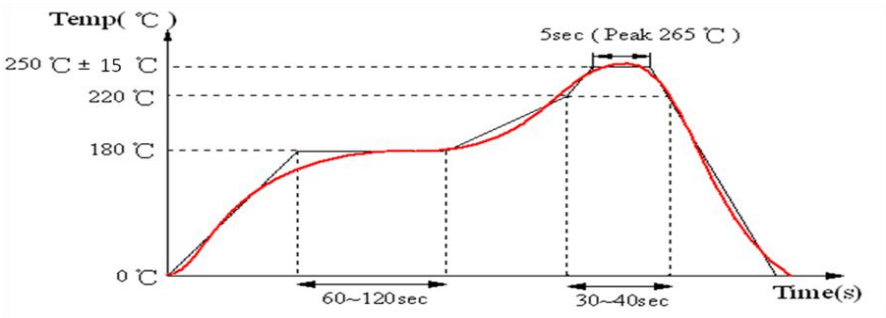
Low Temperature Endurance

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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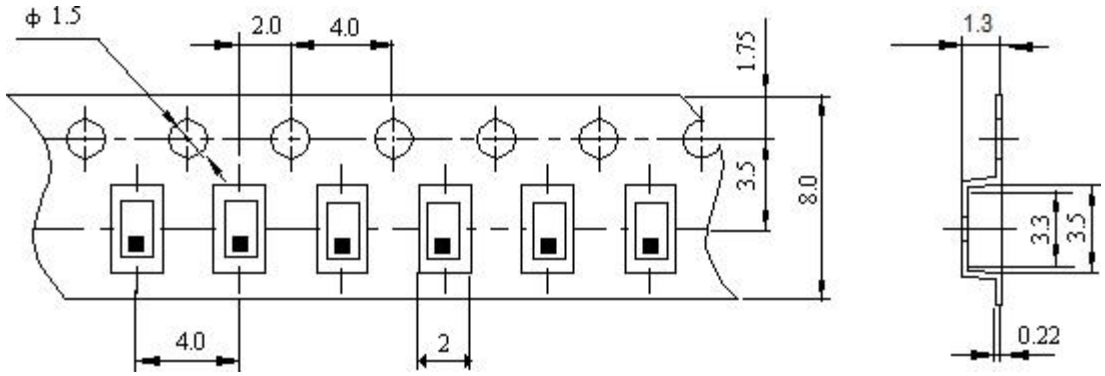
Packaging and Dimensions (3216)

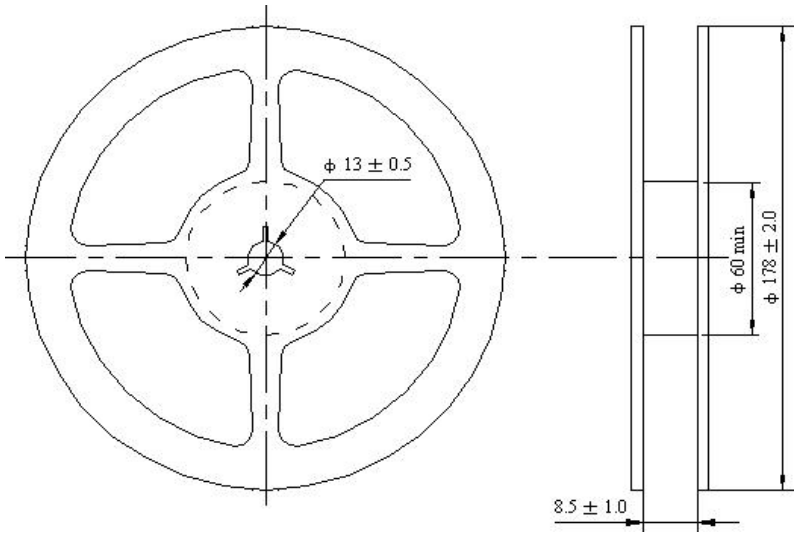
Plastic Tape



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（3000 pcs/Reel）



Storage Period

Product should be used within six months of receipt.

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