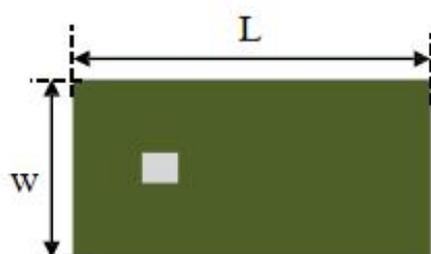


### Features

1. Surface Mounted Devices with a small dimension of 3.6 x 1.6 x 0.6 mm<sup>3</sup> 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



( Top View )

Number	Terminal Name
①	INPUT
②	NC



( Bottom View )



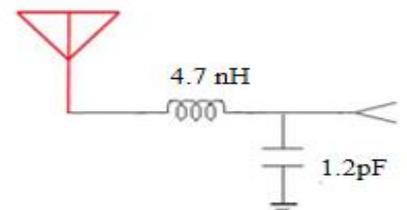
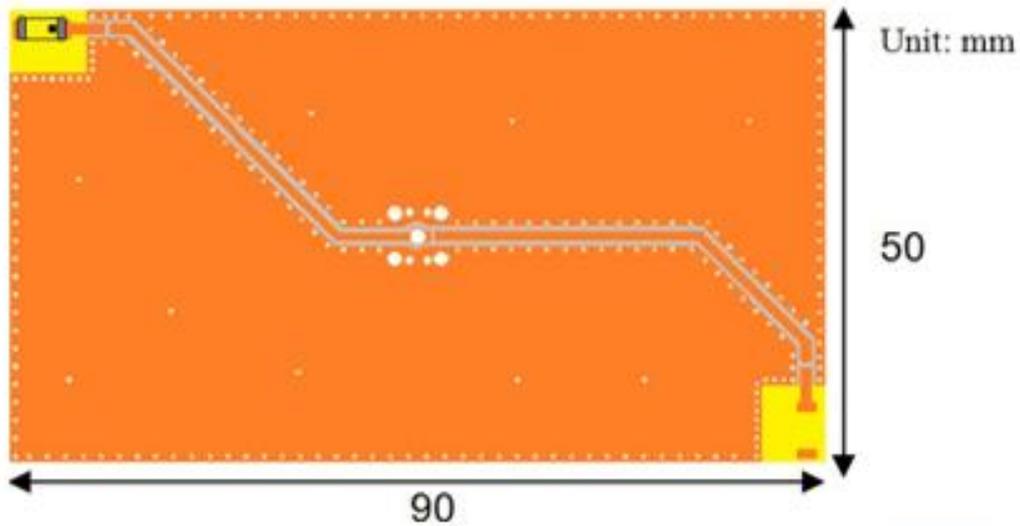
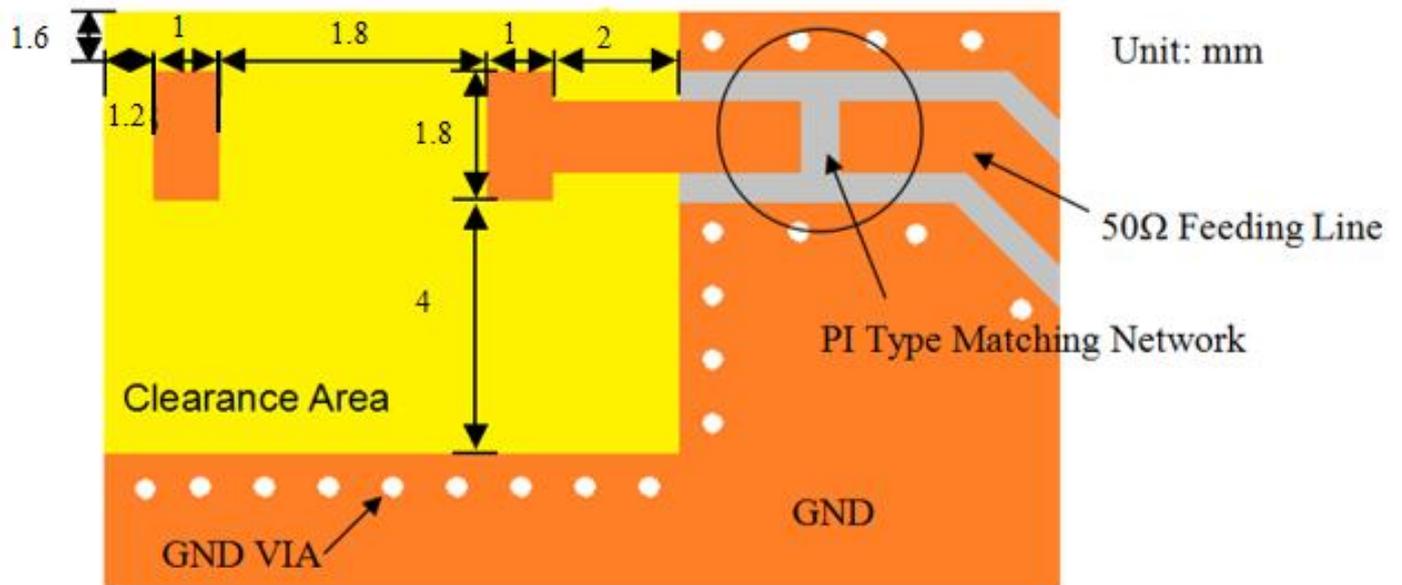
( Side View )



( Side View )

Symbols	L	W	T	A
Dimensions	3.2+/-0.2	1.6+/-0.2	0.6+/-0.1	0.5+/-0.1

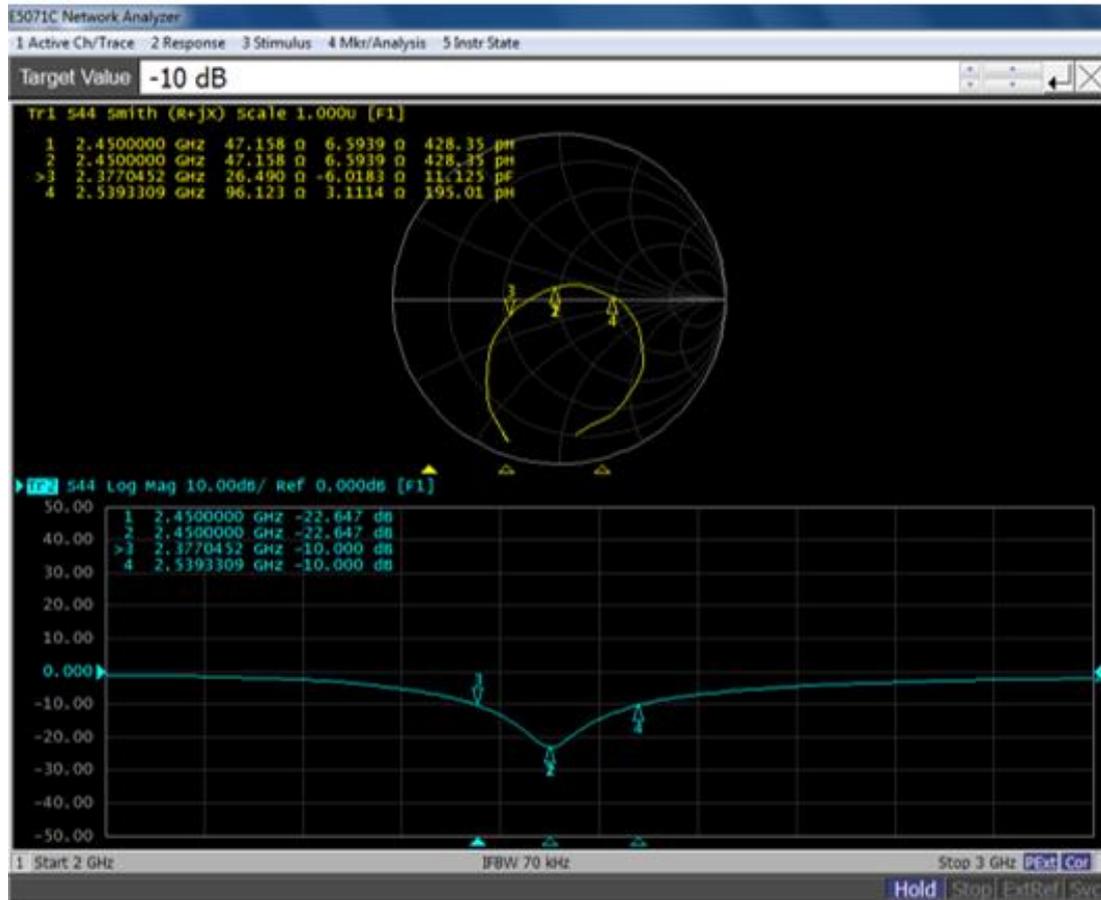
**Evaluation Board and Matching Circuits**



### Electrical Characteristics

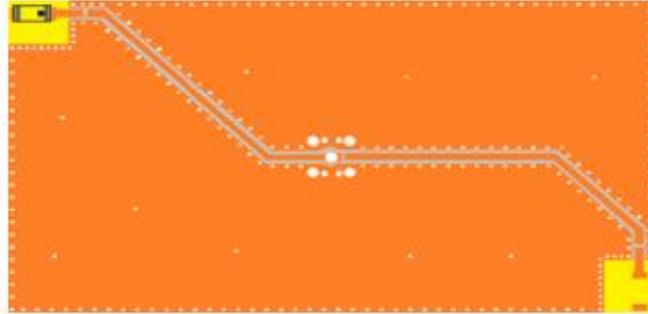
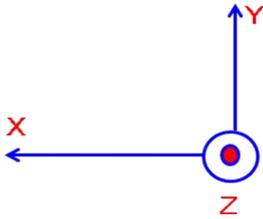
No.	Item	Specifications
1	Central Frequency	2545MHz
2	Band Width	100 MHz typ.
3	Peak Gain	2.01 dBi
4	Return Loss	≤2.0
5	Polarization	Linear
6	Azimuth Beam width	Omni-directional
7	Impedance	50 Ω

### Characteristic curve

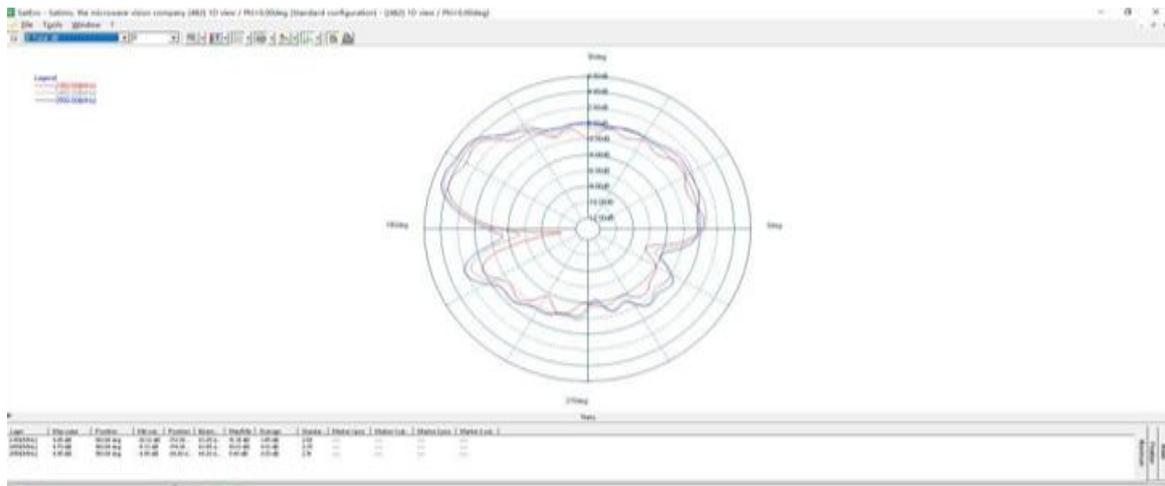


### Radiation Pattern

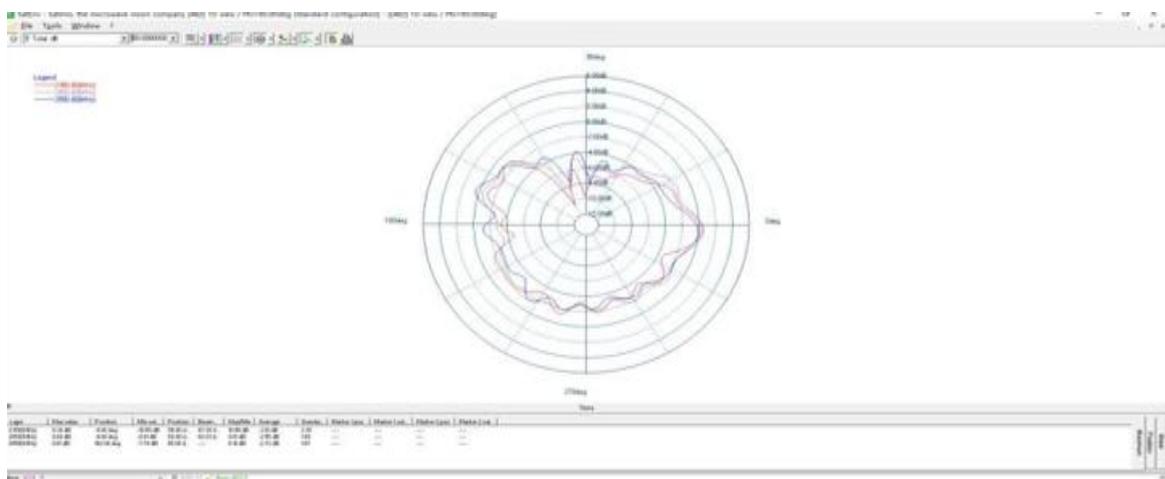
coordinates:



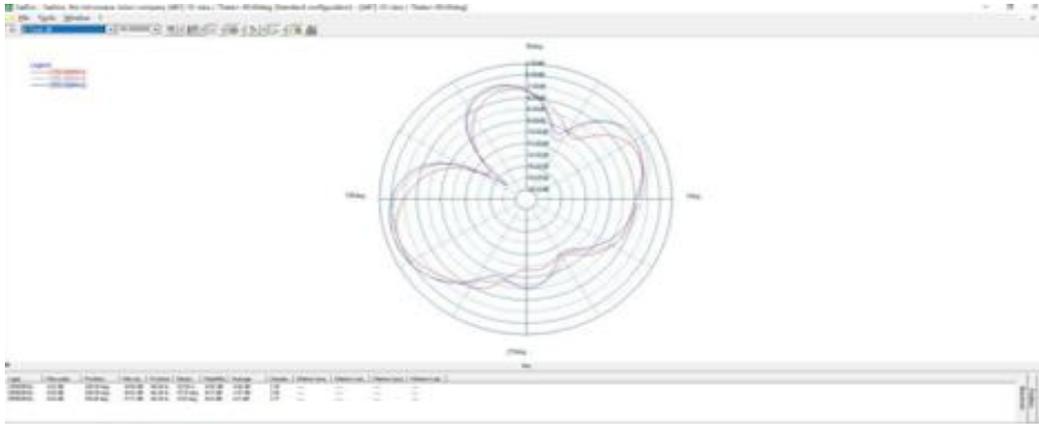
### X-Z Plane



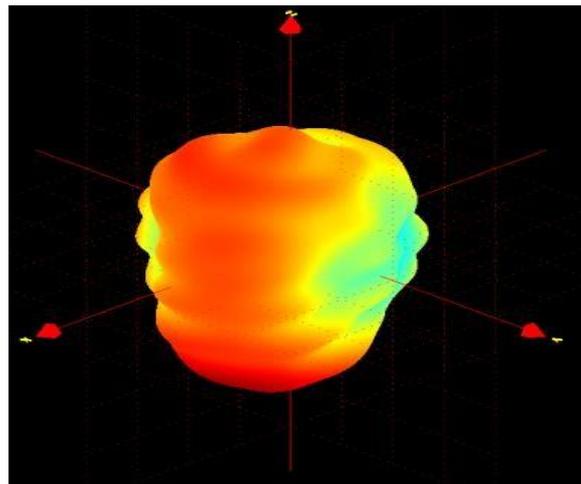
### X-Y Plane



Y-Z Plane



**3D Radiation Pattern**



Frequency (MHz)	2400	2450	2500
Avg. Gain (dBi)	-3.03	-2.01	-2.29
Peck Gain (dBi)	1.48	2.0	2.01
Efficiency (%)	60	72	70

### Dependability Test

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

### 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.

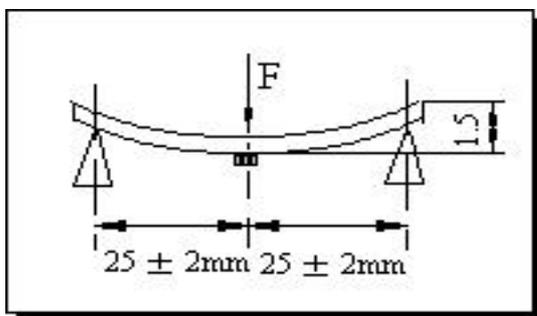
### Solder Heat Proof

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

### 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 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 theproduct metal coating should not be detected .

### Moisture Proof

The device should fulfill the electrical specification after exposed to the temperature  $60\pm 2^{\circ}\text{C}$  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  $85\pm 5^{\circ}\text{C}$  for  $96\pm 2$  hours and 1~2 hours recovery time under normal temperature.

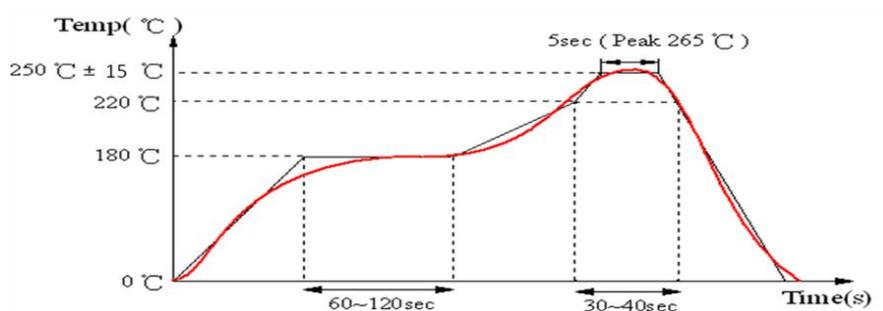
### Low Temperature Endurance

The device should fulfill the electrical specification after exposed to the temperature  $-40^{\circ}\text{C}\pm 5^{\circ}\text{C}$  for  $96\pm 2$  hours and to 2 hours recovery time under normal temperature.

### Temperature Cycle Test

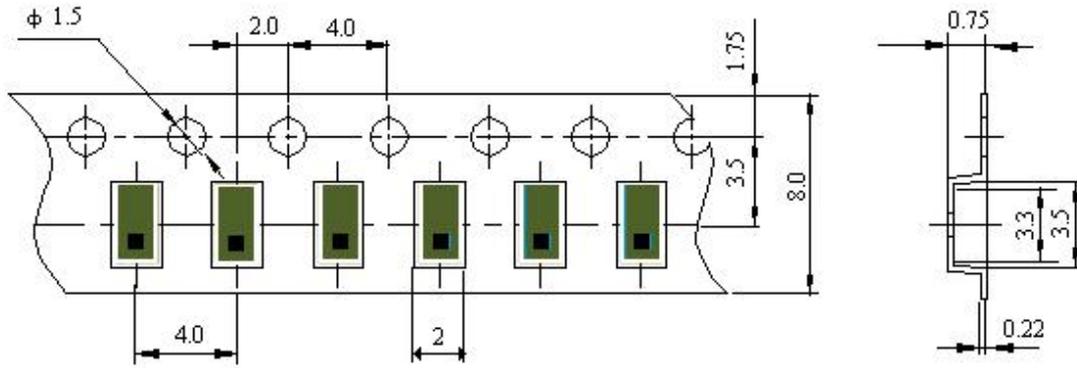
The device should fulfill the electrical specification after exposed to the low temperature  $-40^{\circ}\text{C}$  and high temperature  $+85^{\circ}\text{C}$  for  $30\pm 2$  min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

### Reflow Soldering Standard Condition



**Packaging and Dimensions (3216)**

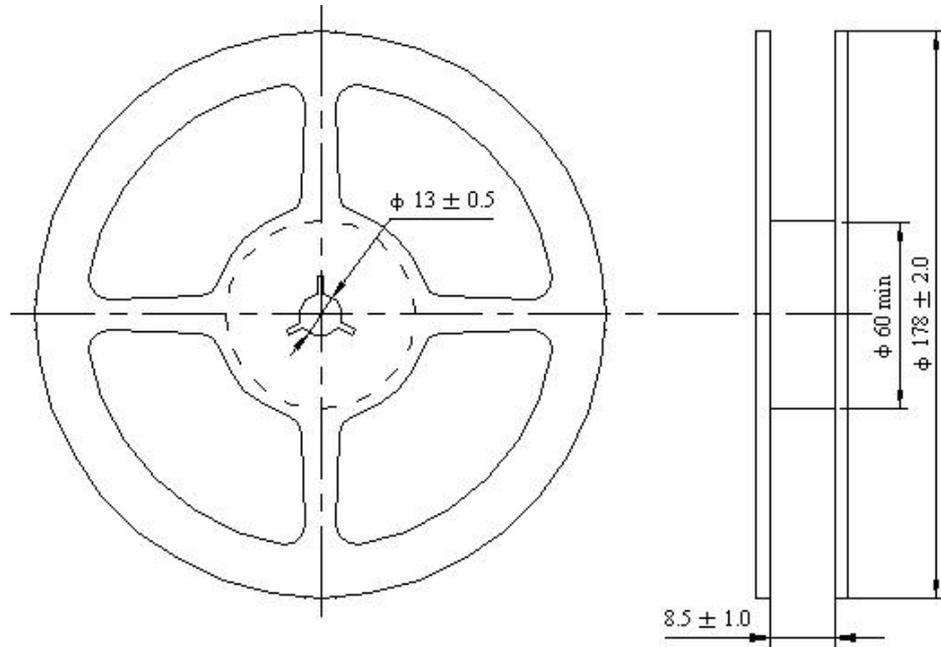
**Plastic Tape**



**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.

10.2 Reel (3000 pcs/Reel)



**Storage Period**

Product should be used within six months of receipt.

MSL 1 / Storage Temperature Range : -40~105 degree C, Humidity : <85%RH