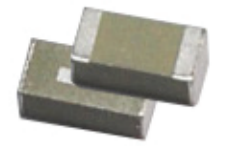


# 5.5 GHz Ceramic Chip Antenna



ACAG0301-5500-T



3.2 x 1.6 x 1.2mm  
RoHS/RoHS II Compliant  
MSL = 1

## FEATURES

- Gain of 4.5dBi
- VSWR  $\leq$  2.0
- Made using LTCC (low temperature co-fired ceramic) technology
- Small form factor 3.2 x 1.6 x 1.2mm
- Omni-directional

## APPLICATIONS

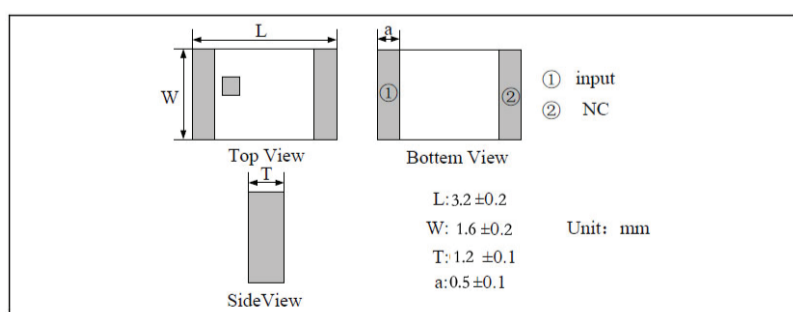
- IoT and wearables
- WiFi/WLAN
- ISM band

## ELECTRICAL CHARACTERISTICS

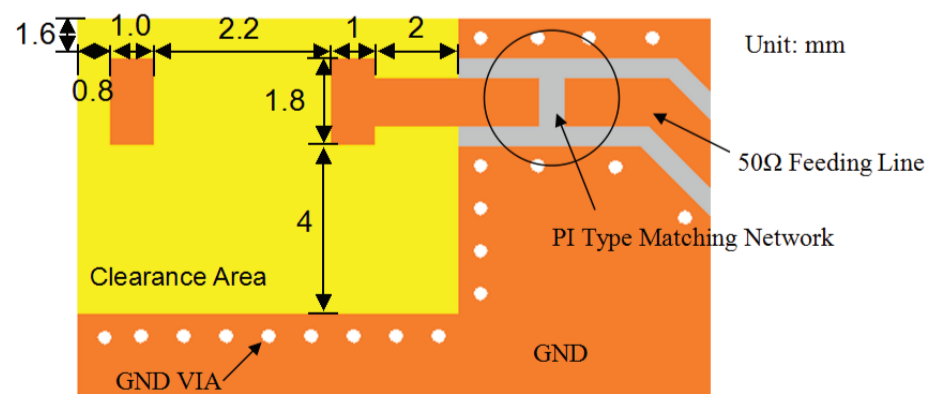
Item	Minimum
Frequency (No matching)	5785 MHz
Frequency (after matching)	5500 MHz
Bandwidth	800 MHz typ
VSWR	$\leq$ 2.0
Impedance	50 $\Omega$
Peak Gain	4.5 dBi
Azimuth	Omni-directional
Polarization	Linear
Operating Temperature Range	-40°C ~+ 85°C

## MECHANICAL DIMENSIONS (mm)

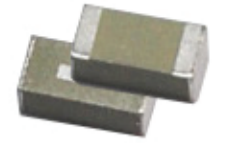
Antenna Dimensions



Layout Dimensions



# 5.5 GHz Ceramic Chip Antenna

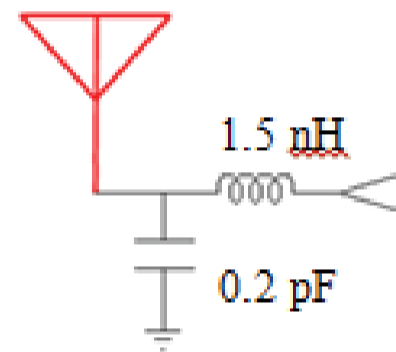
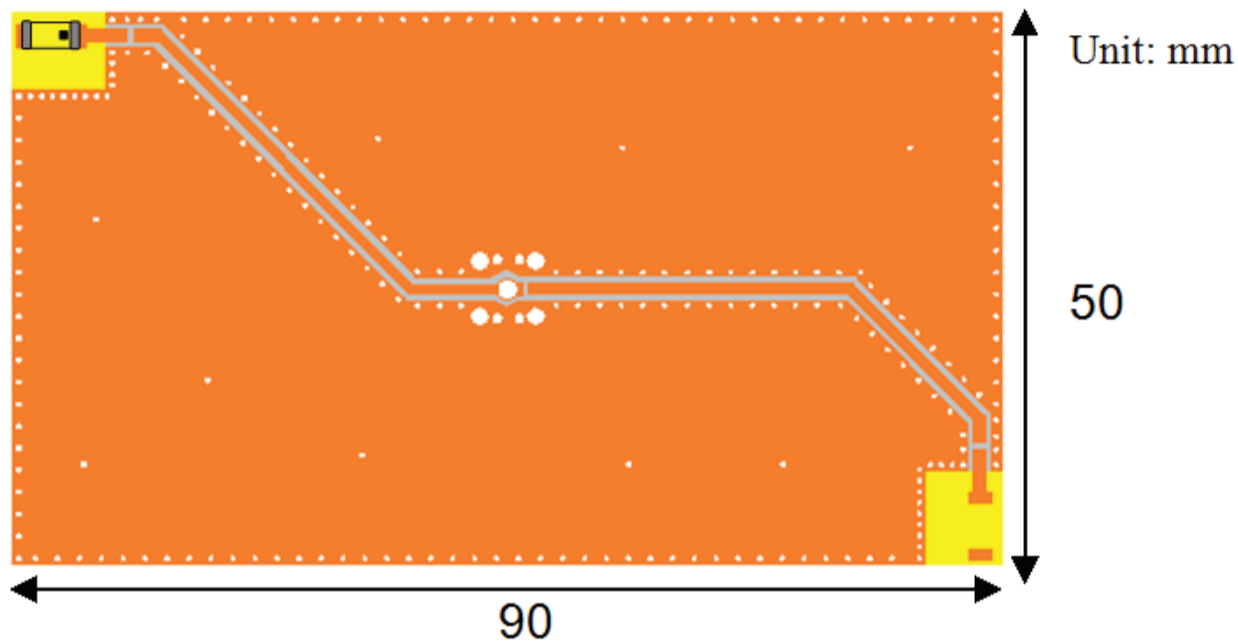


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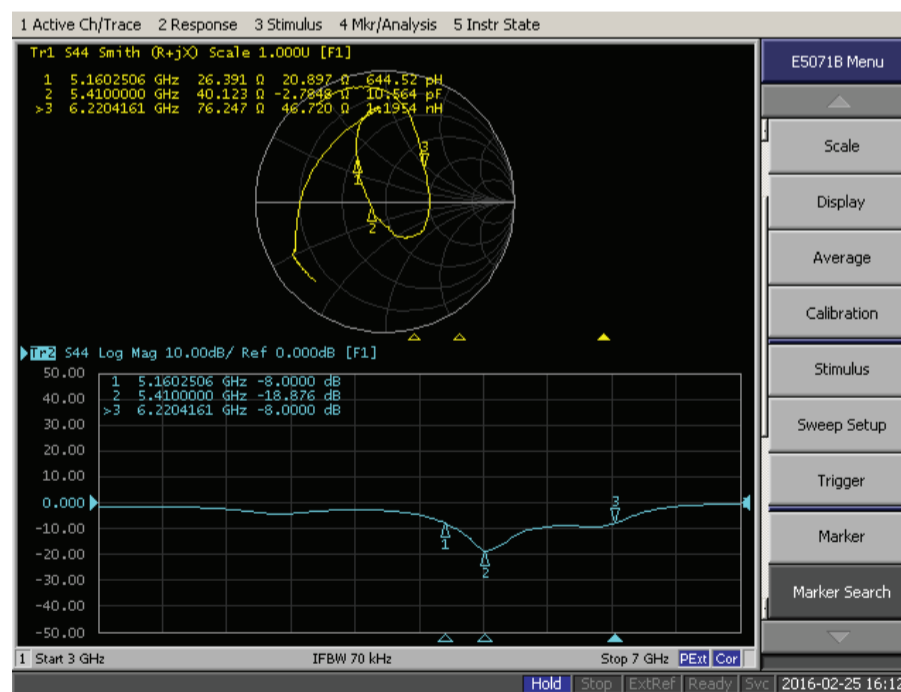


3.2 x 1.6 x 1.2mm  
RoHS/RoHS II Compliant  
MSL = 1

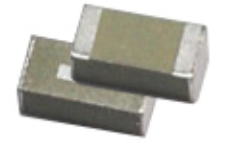
## EVALUATION BOARD AND MATCHING CIRCUITS



## ANTENNA RESPONSE – SMITH CHART AND RETURN LOSS S11



# 5.5 GHz Ceramic Chip Antenna



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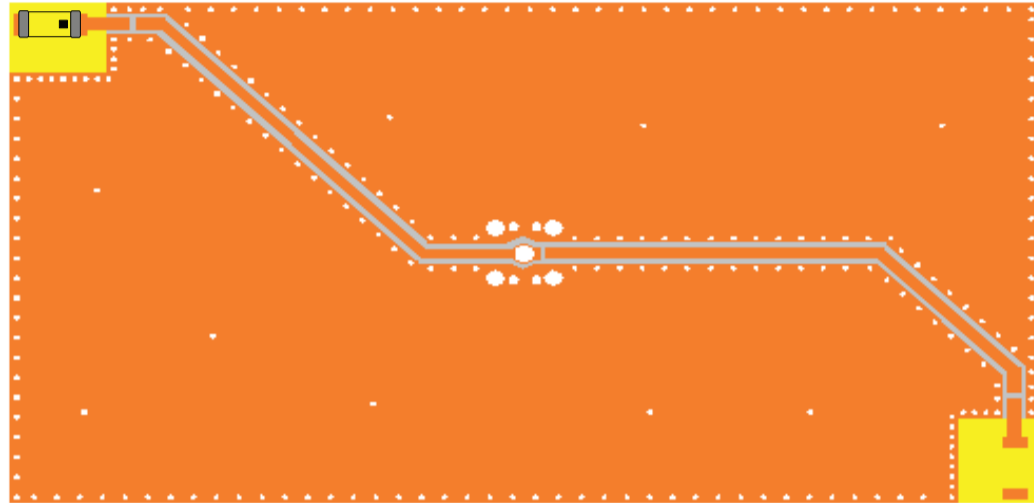
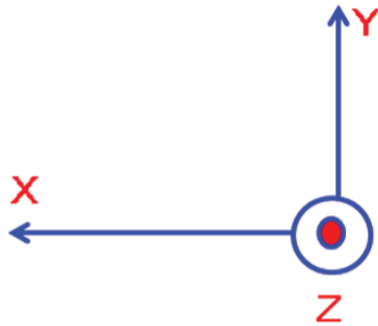


RoHS/RoHS II Compliant

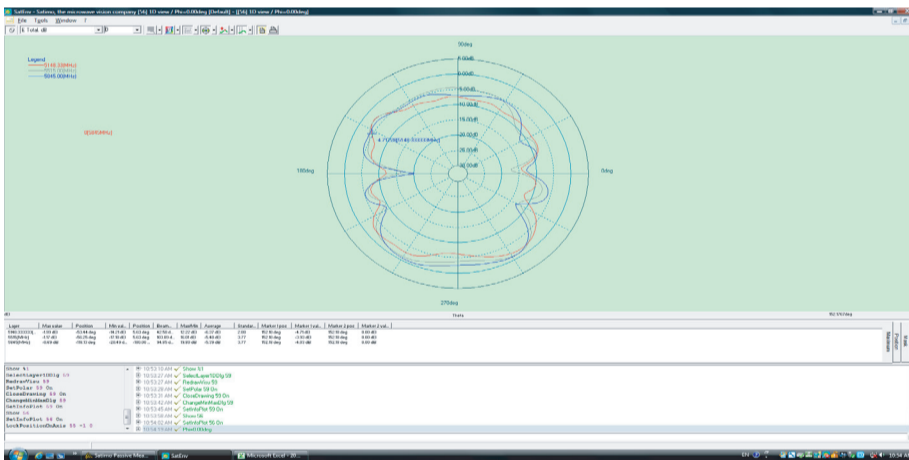
MSL = 1

## RADIATION PATTERNS

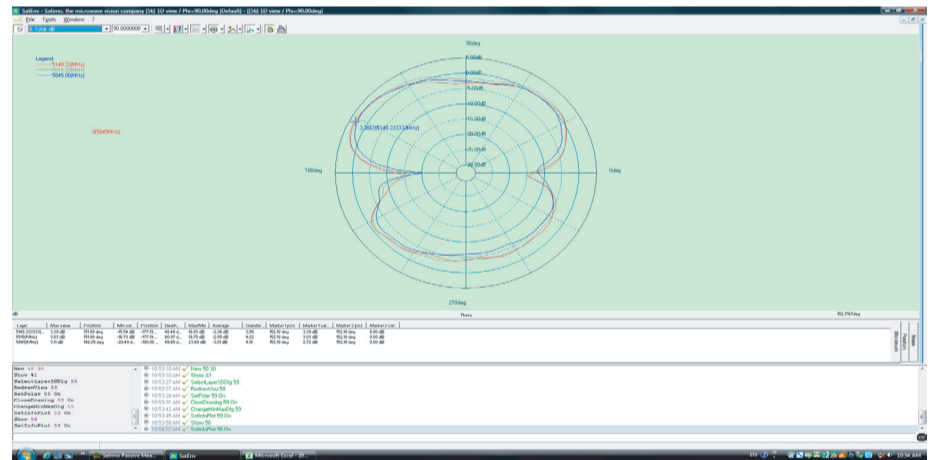
### Coordinates



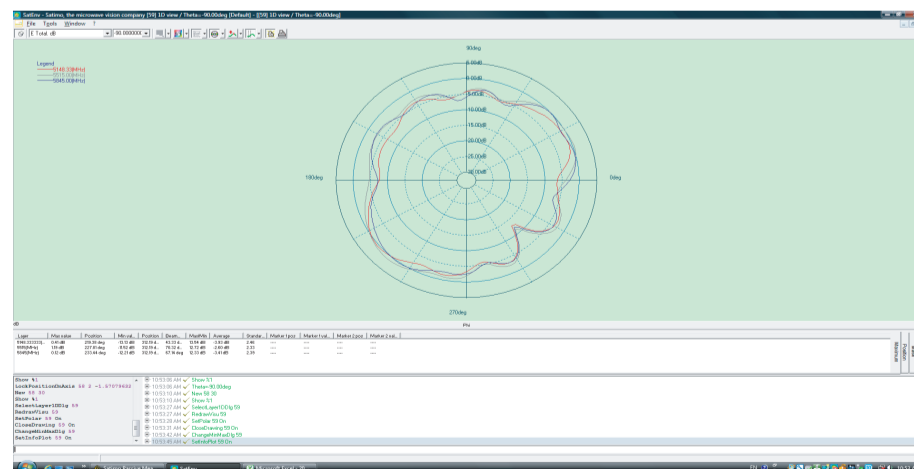
### X-Z Plane



### Y-Z Plane

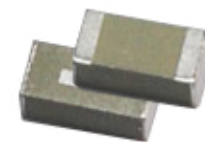


### X-Y Plane



REVISED: 06.21.2018

# 5.5 GHz Ceramic Chip Antenna

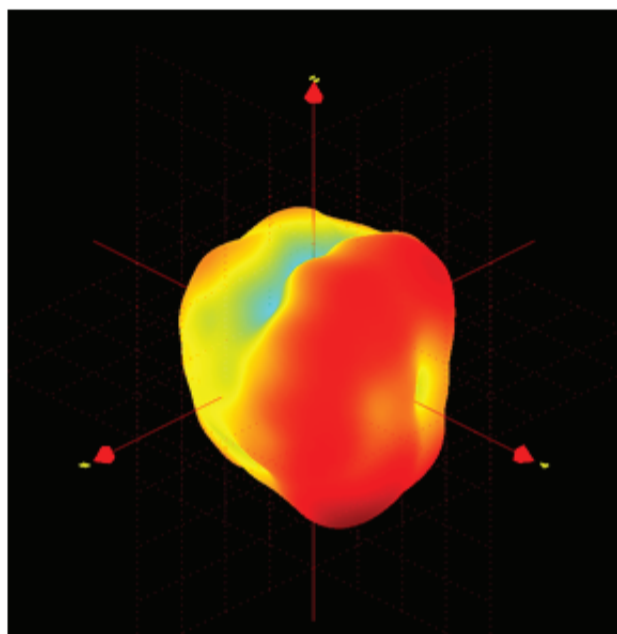


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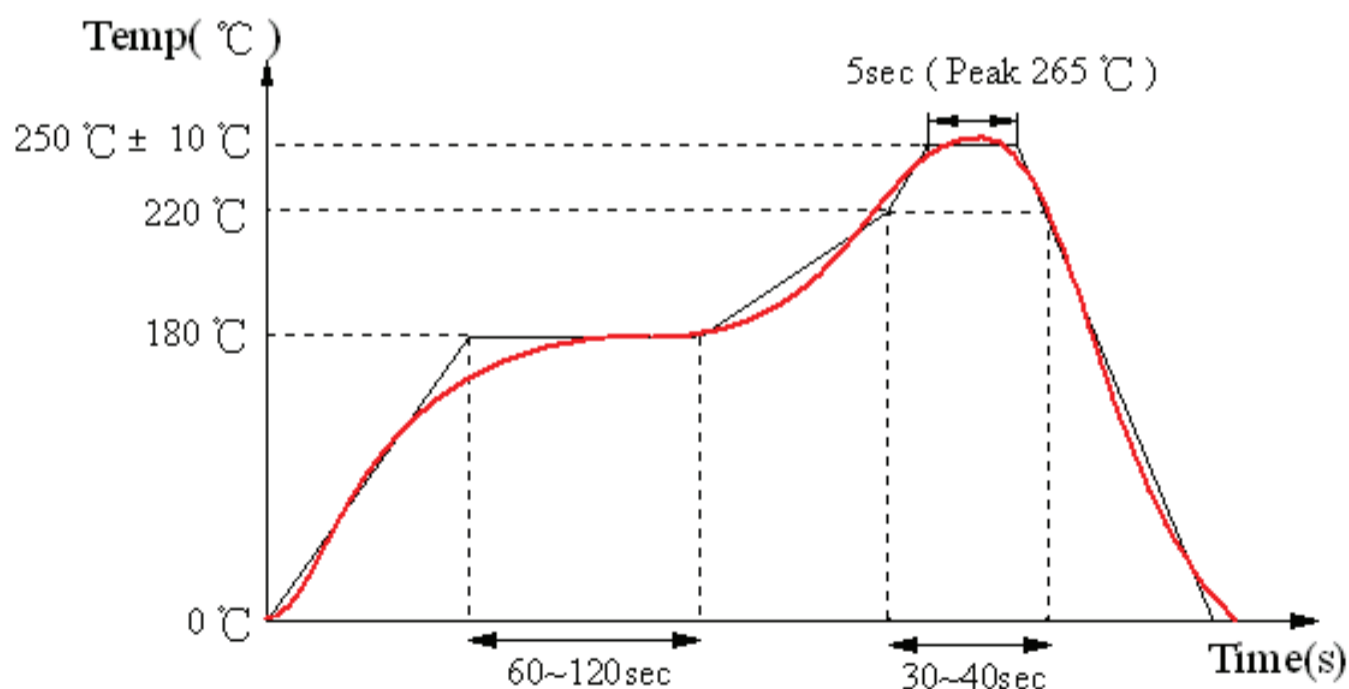
3.2 x 1.6 x 1.2mm  
RoHS/RoHS II Compliant  
MSL = 1

## 3D PATTERNS

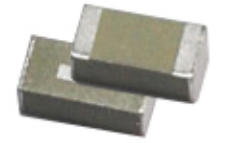


Frequency (MHz)	5150	5500	5850
Avg. Gain (dBi)	-2.36	-2.05	-3.01
Peak Gain (dBi)	3.98	4.5	4.06
Efficiency (%)	60	72	63

## REFLOW SOLDERING STANDARD CONDITION



# 5.5 GHz Ceramic Chip Antenna



ACAG0301-5500-T



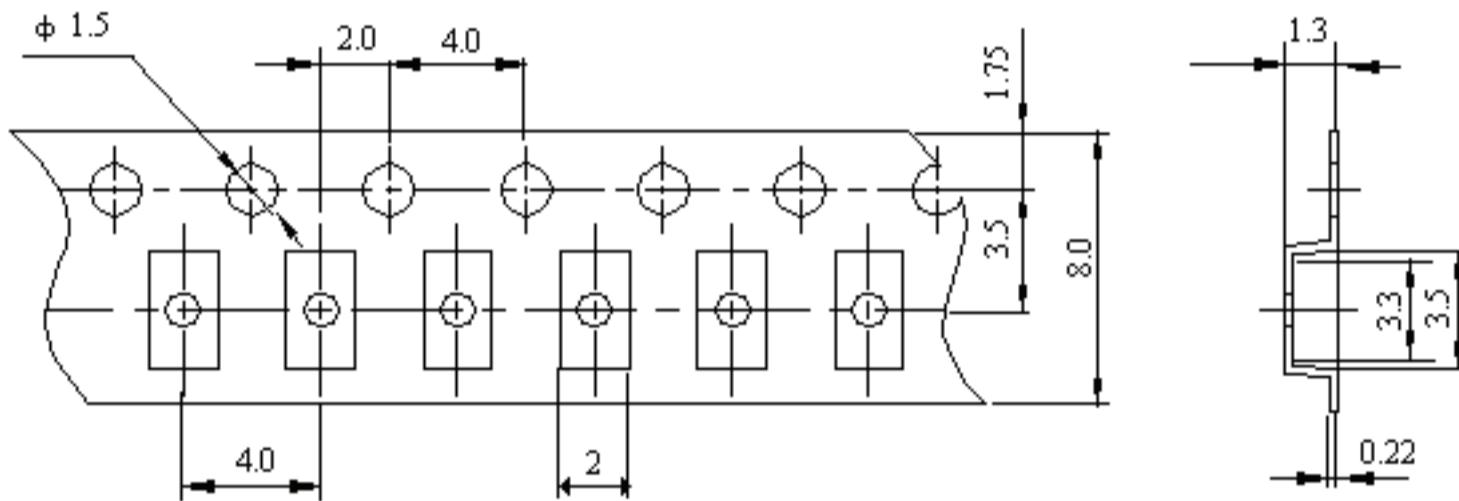
3.2 x 1.6 x 1.2mm  
RoHS/RoHS II Compliant  
MSL = 1

## PACKAGING

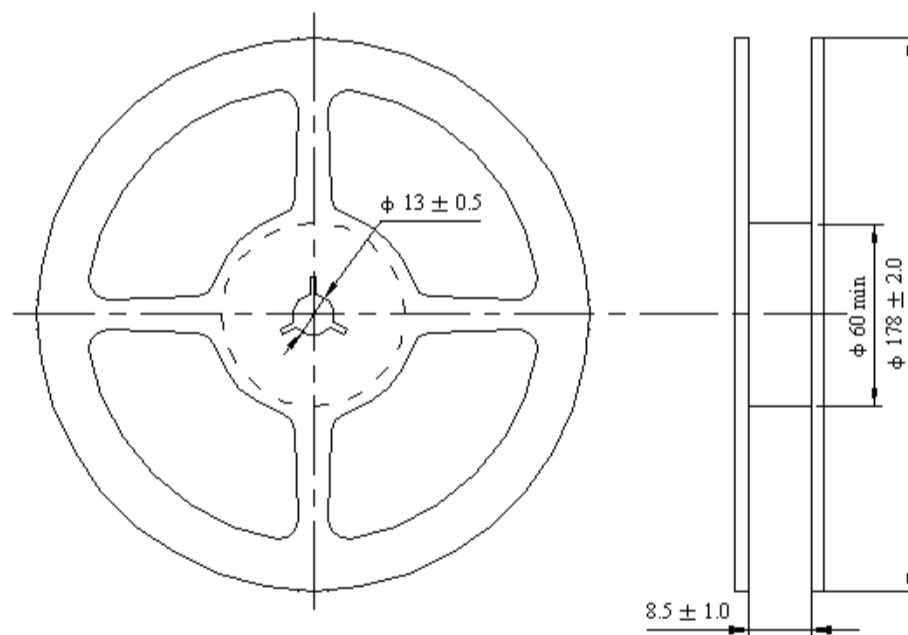
Reel (3000 pcs/Reel)

Size of the carton: 330 x 210 x 210 mm

### Tape Dimensions: mm



### Reel Dimensions: mm



Storage Temperature Range : <30 degree C, Humidity : <60%RH

MSL - 1

Oxidizable, 12 months in a vacuum sealed bag.

Once opened, please repack the unused items within 168 hours by re-seal package treatment.