SPECIFICATION

PART NO：	**LA52H2450-A56**
CUSTOMER PART NO：	
CUSTOMER APPROVED BY：	
APPROVED DATE：	

RoHS Compliant Parts

No.66 ZhengyuanRoad, Economic Development Zone,Jiaxing,Zhejiang,China

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Formed On	Document Version (V1.0)	

Manufacturer's Address：
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Version Rejigger Track Record

Version	Rejigger	Prepared	Approve	Date
V1.0	First issue	潘枫	卢冠宇	2019. 03. 06

Notes：

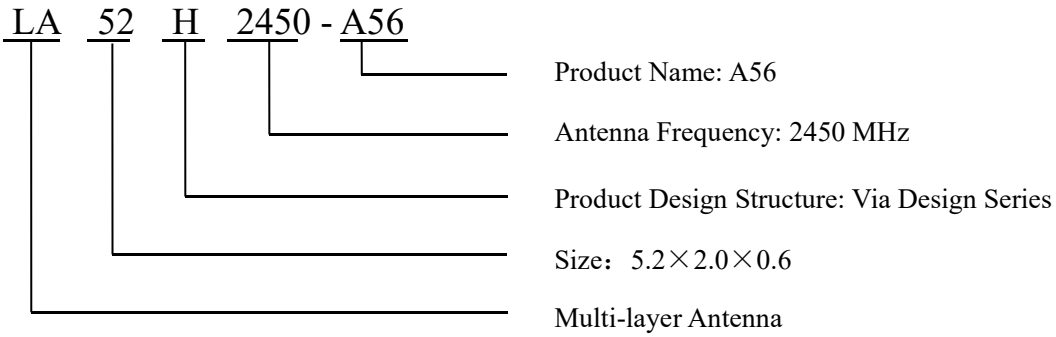
1、When changing the product's electrical performance indicators, the version number needs to be replaced（change V1.0 to V2.0、V3.0……）;

2、When changing product testing method（Including reliability testing conditions）, or changing usage conditions, add a series to the current version number（change V1.0 to V1.1、V1.2……）。

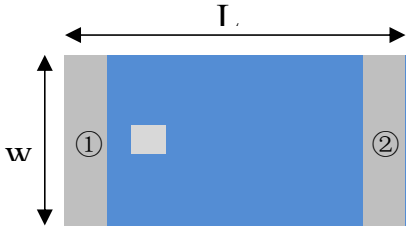
1. Introduction

"GLEAD" Microwave Multi-Layer Ceramic Antenna LA series are designed to be used in WLAN、WiFi、Bluetooth、PHS、 Multiple-band Mobile phone antenna, FM, etc and compact size SMD chip design.

2. Part Number



3. Dimensions（Unit：mm）



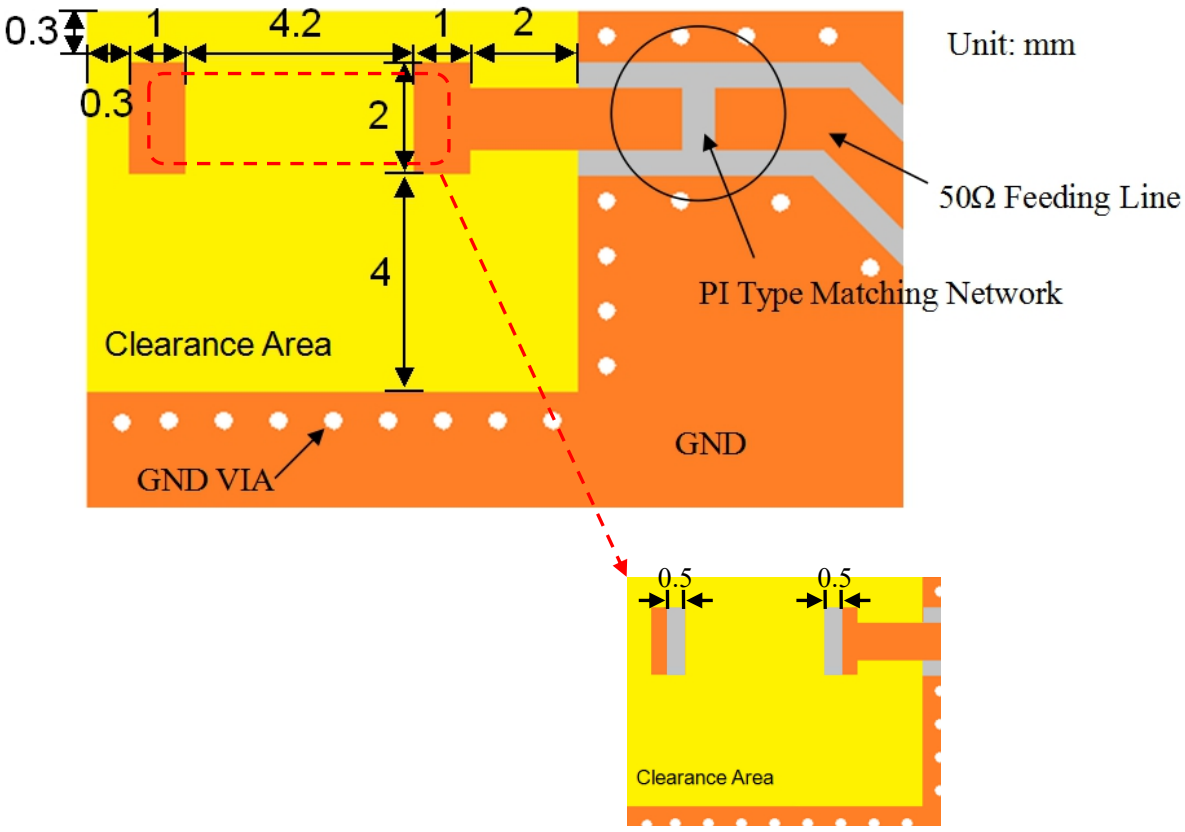
(Top View)

Number	Terminal Name
①	INPUT
②	NC

(Bottom View)

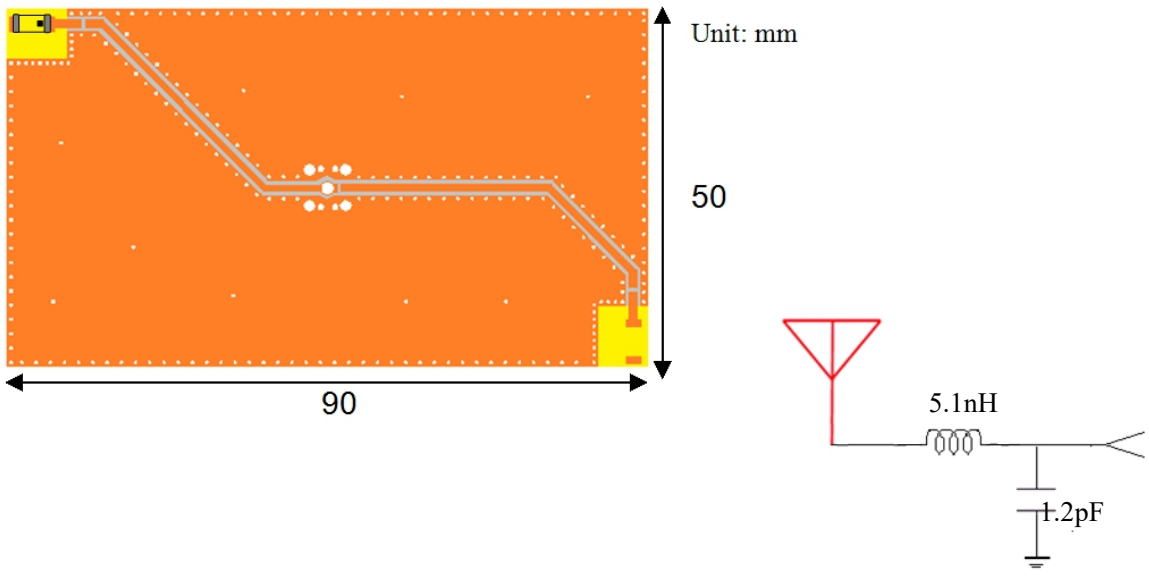
(Side View)

Symbols	L	W	T	A
Dimensions	5.2+/-0.2	2.0+/-0.2	0.6+/-0.1	0.5+/-0.1



Soldering Pad

4. Evaluation Board and Matching Circuits

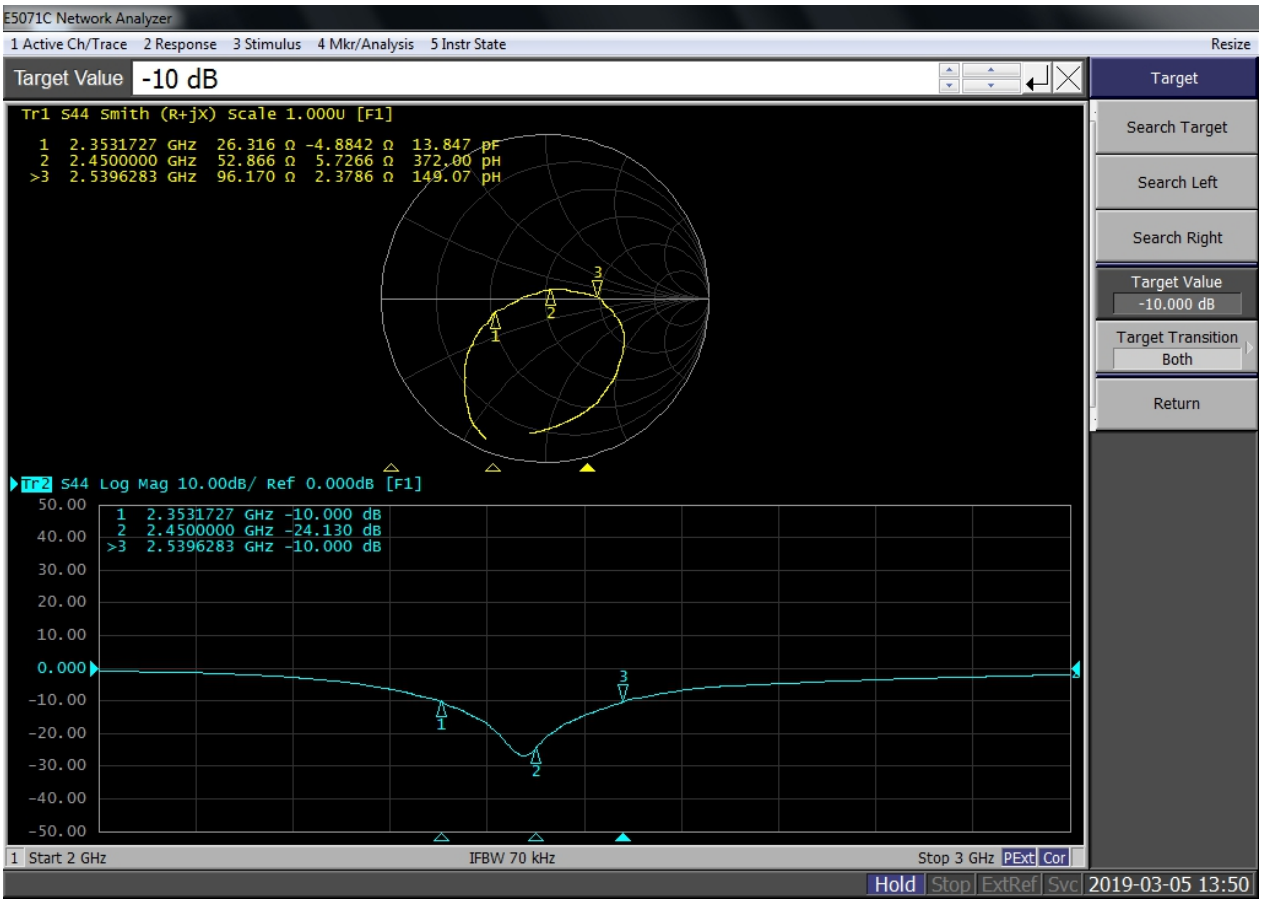


Matching Circuits

5. Electrical Characteristics

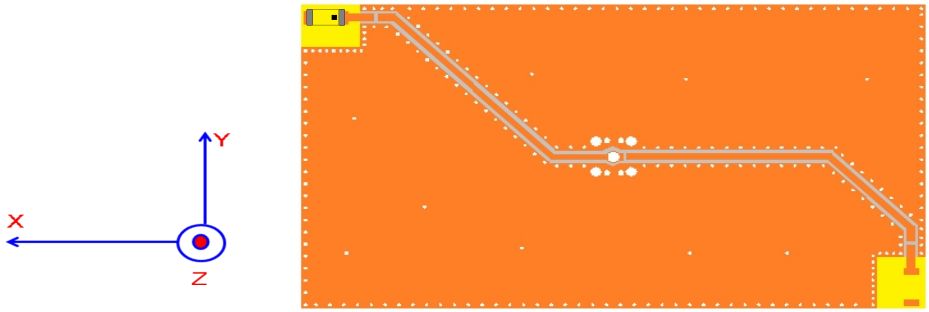
No.	Item	Specifications
5.1	After Matching	2450 MHz
5.2	Band Width	100MHz typ.
5.3	Peak Gain	4.91 dBi
5.4	V.S.W.R	≤2.0
5.5	Polarization	Linear
5.6	Azimuth Beam width	Omni-directional
5.7	Antenna Type	Ceramic Antenna

6. Characteristic curve

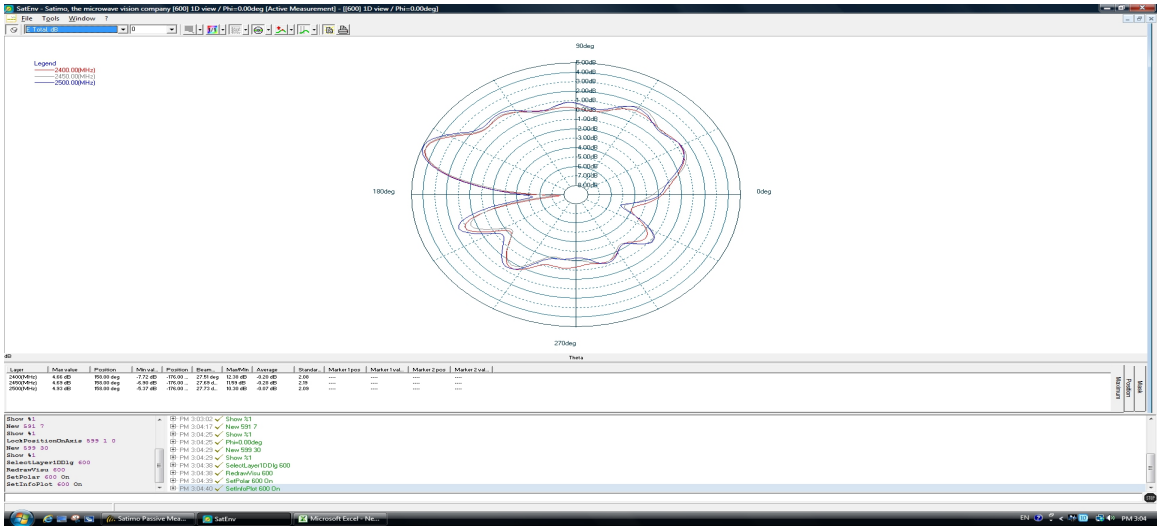


7.Radiation Pattern

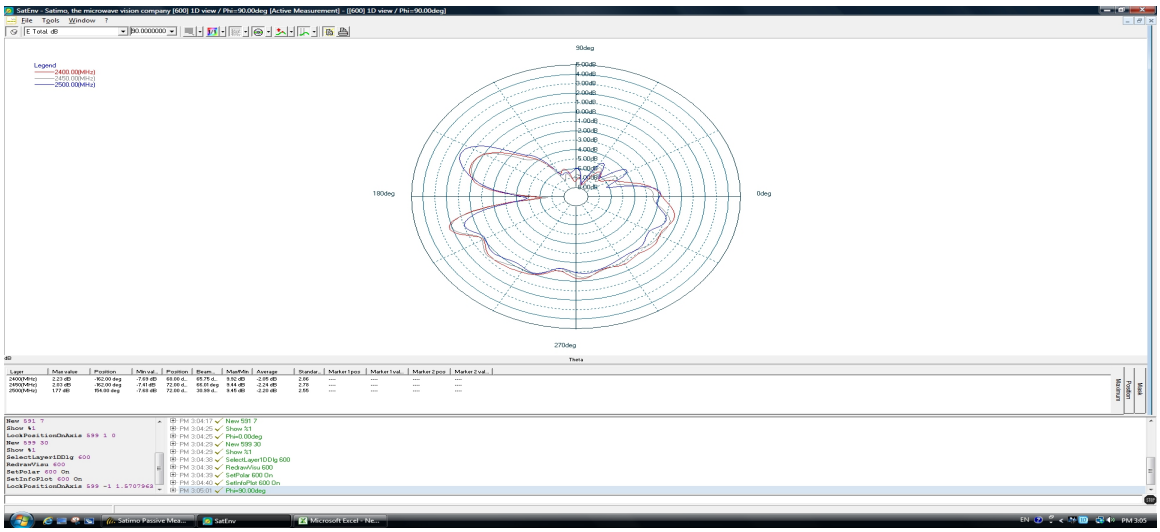
coordinates：



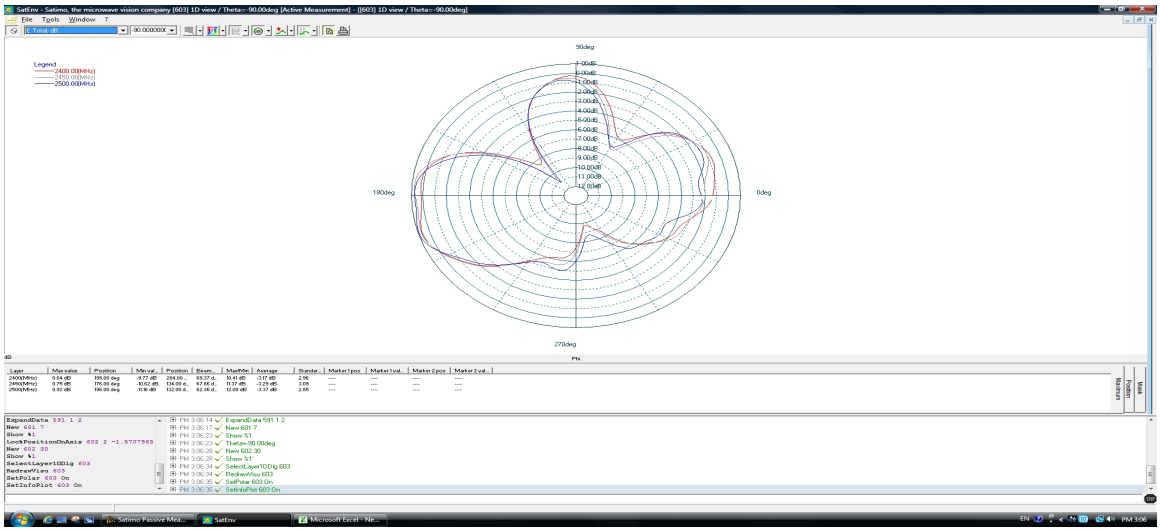
X-Z Plane



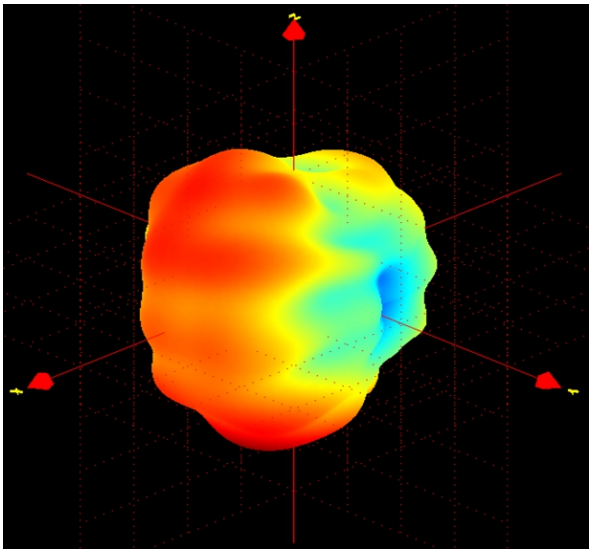
Y-Z Plane



X-Y Plane



3D Radiation Pattern



Frequency (MHz)	2400	2450	2500
Avg. Gain (dBi)	-1.81	**-1.94**	-1.88
Peck Gain (dBi)	2.51	**4.91**	2.54
Efficiency (%)	**71**	**72**	**72**

8.Post Dependability Tolerance

After the reliability test, the allowable deviation from the initial reading is shown in the table below

Post Dependability Tolerance (Refer to the table)

No.	Item	Post Dependability Tolerance
8.1	Central Frequency	±5 MHz
8.2	Band Width	±5 MHz
8.3	Gain	±0.1 dBi
8.4	V.S.W.R (in BW)	±0.1

9.Dependability Test

Benchmark conditions： Temperature range 25±5℃

Relative Humidity range 55~75%RH

Operating Temperature range -40℃~+85℃

9. 1 Vibration Resist

The device should satisfy the electrical characteristics specified in paragraph 8.1~8.4 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

9. 2 Drop Shock

The device should satisfy the electrical characteristics specified in paragraph 8.1~8.4 after dropping onto the hard wooden board from the height of 100cm for 3 times each facet of the 3 dimensions of the device.

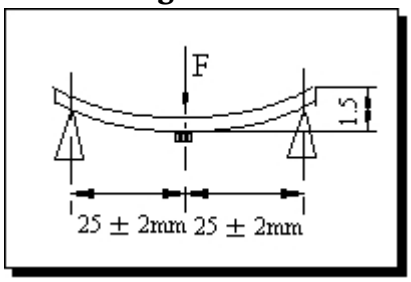
9. 3 Solder Heat Proof

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.

9. 4 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.

9.5 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 the product metal coating should not be detected .

9.6 Moisture Proof

The device should satisfy the electrical characteristics specified in paragraph 8.1~8.4 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.

9.7 High Temperature Endurance

The device should satisfy the electrical characteristics specified in paragraph 8.1~8.4 after exposed to temperature 85±5℃for 96±2 hours and 1~2 hours recovery time under normal temperature.

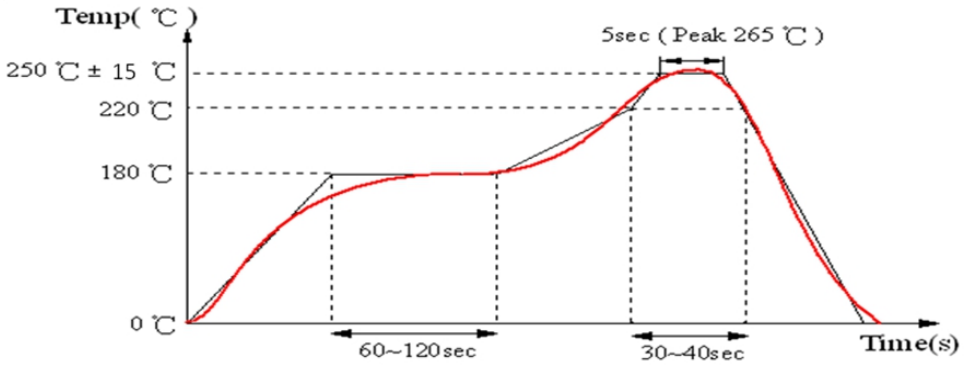
9.8 Low Temperature Endurance

The device should also satisfy the electrical characteristics specified in paragraph 8.1~8.4 after exposed to the temperature -40℃±5℃ for 96±2 hours and to 2 hours recovery time under normal temperature.

9.9 Temperature Cycle Test

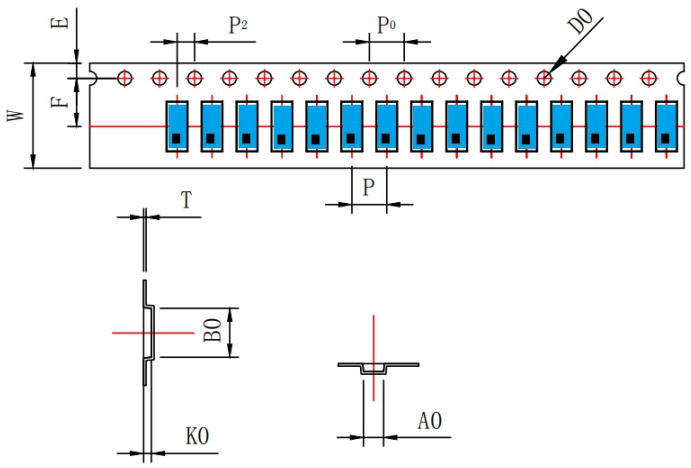
The device should also satisfy the electrical characteristics specified in paragraph 8.1~8.4 after exposed to the low temperature -40℃ and high temperature +85℃ for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

10. Reflow Soldering Standard Condition



11 Packaging and Dimensions

11.1 Plastic Tape



1共同尺寸

外觀	規 格	公 差
W	12.00	±0.30
P	4.00	±0.10
E	1.75	±0.10
F	5.50	±0.10
P2	2.00	±0.10
D	1.50	+0.10 -0.00
D1	----	----
Po	4.00	±0.10
10Po	40.00	±0.20

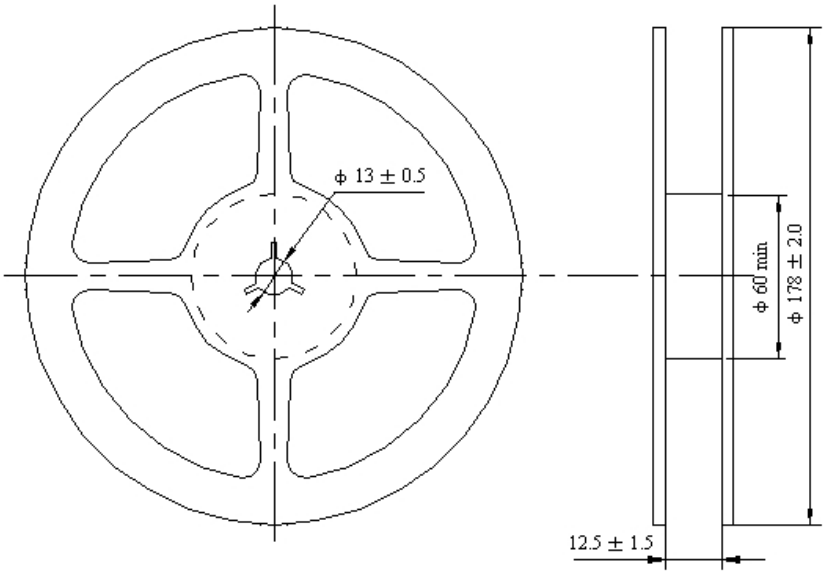
2口袋尺寸

外觀	規 格	公 差
A0	2.30	±0.10
B0	5.60	±0.10
Ko	0.90	±0.10
t	0.30	±0.05

Packaging instructions： 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.

11.2 Reel（3000 pcs/Reel）



11.3 Storage Period

Product should be used within six months of receipt.

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