TAI-SAW TECHNOLOGY CO., LTD.
No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Product Name: Dielectric Filter 1581MHz SMD 6.55x4.64 mm (BW=80 MHz)

TST Parts No.: TR0021A

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Hongpu Lin Hong Pu Lin

Approved by: Andy Yu Andy Yu

Date: 2019/01/23

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.

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Dielectric filter 1581 MHz

MODEL NO.: TR0021A REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 1 W
2. DC Voltage : 0 V
3. Operating Temperature: -40℃ to +85℃
4. Storage Temperature:-40℃ to +85℃
5. Moisture Sensitivity Level: Level 2a (MSL 2a)
6.

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

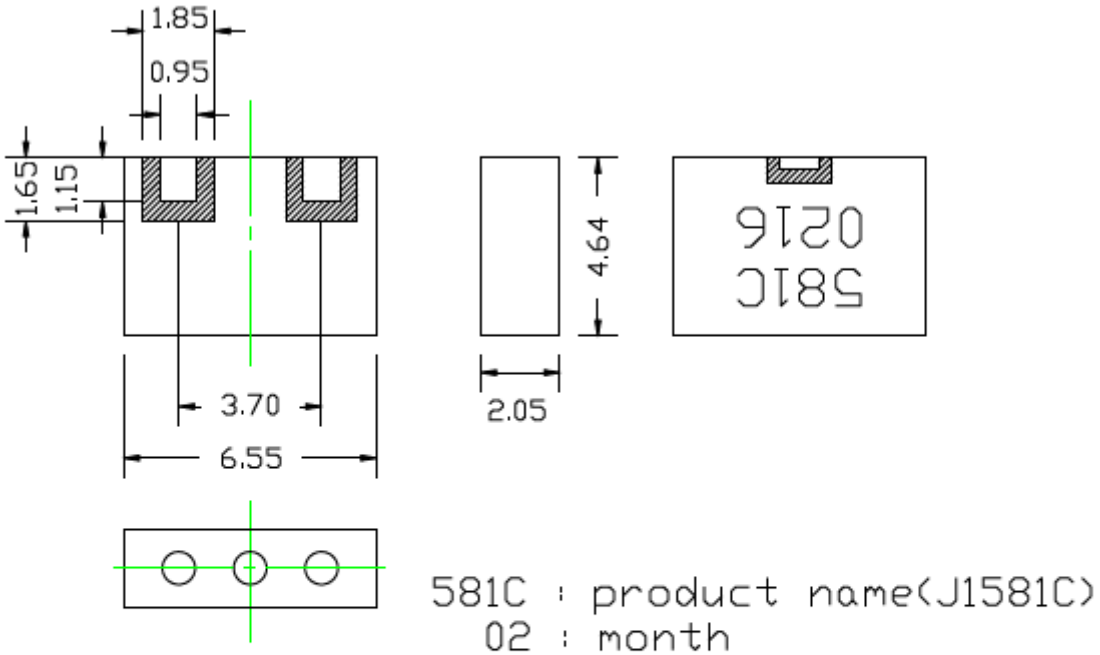
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single ended) : Zs = 50 Ω

Terminating load impedance (single ended) : Z_L = 50 Ω

NO.	Item	Unit	Spec		
			min.	typ.	max.
1	Central Frequency	MHz		1581	
2	Band Width	MHz		80	
3	Pass Band Insertion Loss	dB		0.9dB	1.0dB
4	Pass Band Ripple	dB		0.5dB	0.8dB
5	Pass Band Return Loss	dB	12dB		
6	Stop-Band Attenuation at 1400 MHz	dB	30dB	40dB	
Item NO.6 specifies the absolute value of attenuation.					

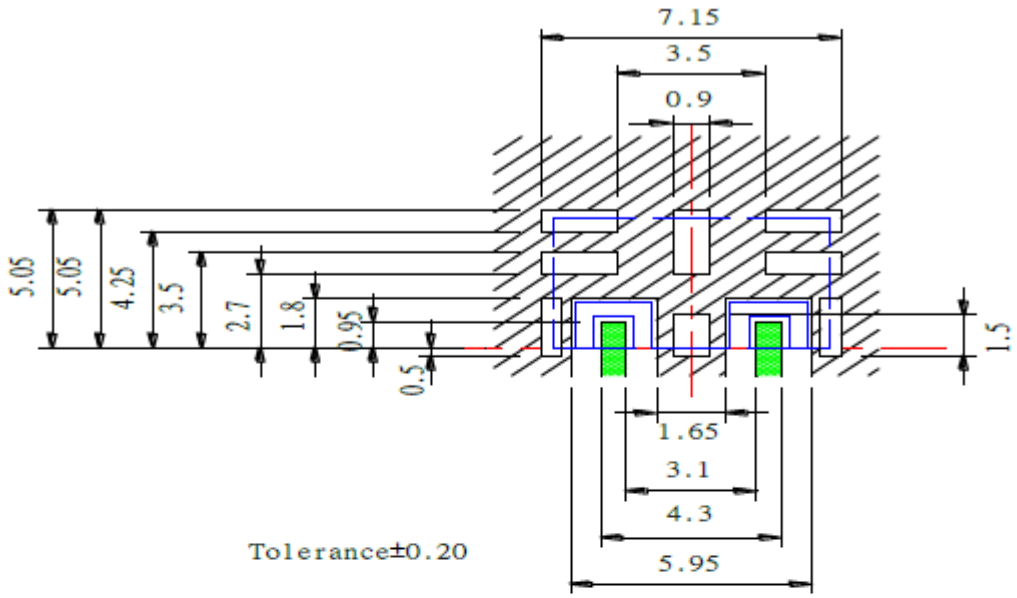
C. OUTLINE DRAWING:



581C : product name(J1581C)
02 : month
16 : year (2016)

Unit:mm
Tolerance:±0.3

D. PCB Footprint



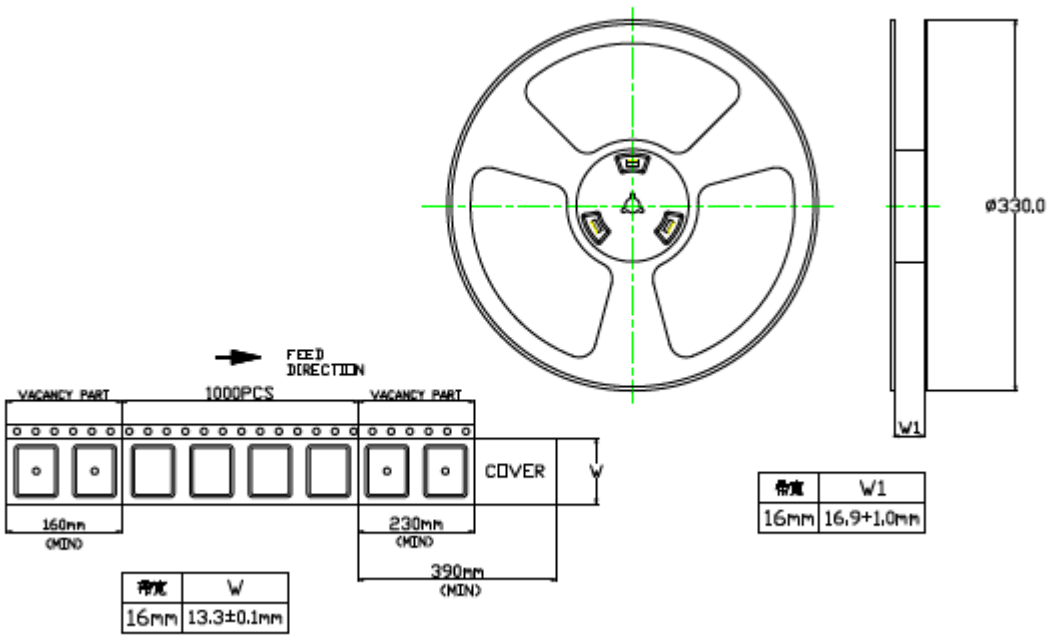
Conductive Material:
Ground, connected to lower ground diameter of 0.3mm and max.distance of 1.0mm.

I/O Pads and LAND,
I/O must be connected to lineswith 50Ω impedance.
in the application a termination of 50Ω must be realized.

Solder Resist Without Pattern

E. DELIVERY MODE:

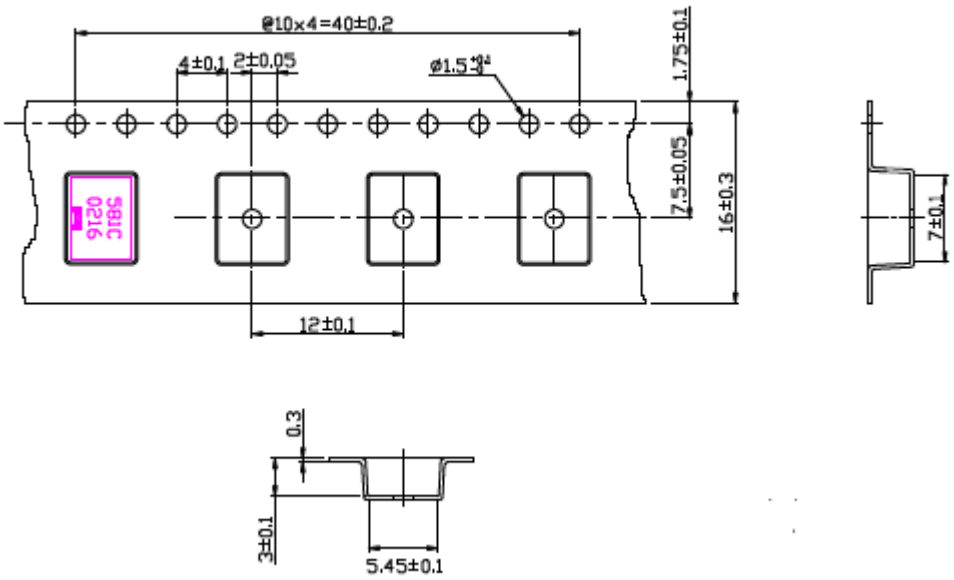
1. REEL



符號	W
16mm	13.3±0.1mm

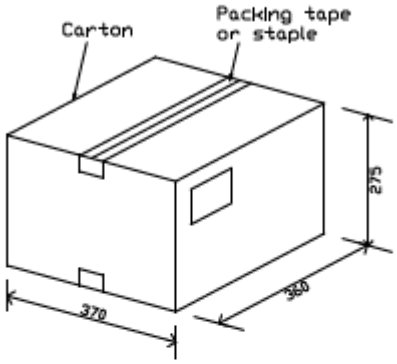
符號	W1
16mm	16.9+1.0mm

2. TAPE

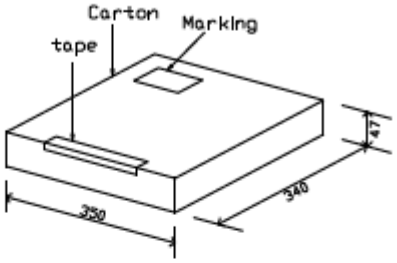


3. **PACKAGE STYLE**

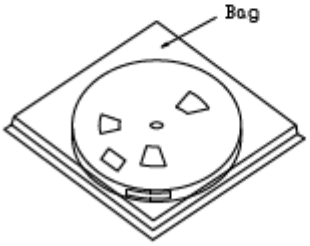
1. Outer Carton
   Quanyity:5000PCS



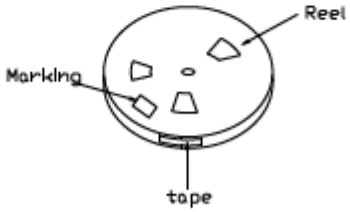
2. Inner Carton
   Quanyity:1000PCS



3. Bag
   Quanyity:1000PCS

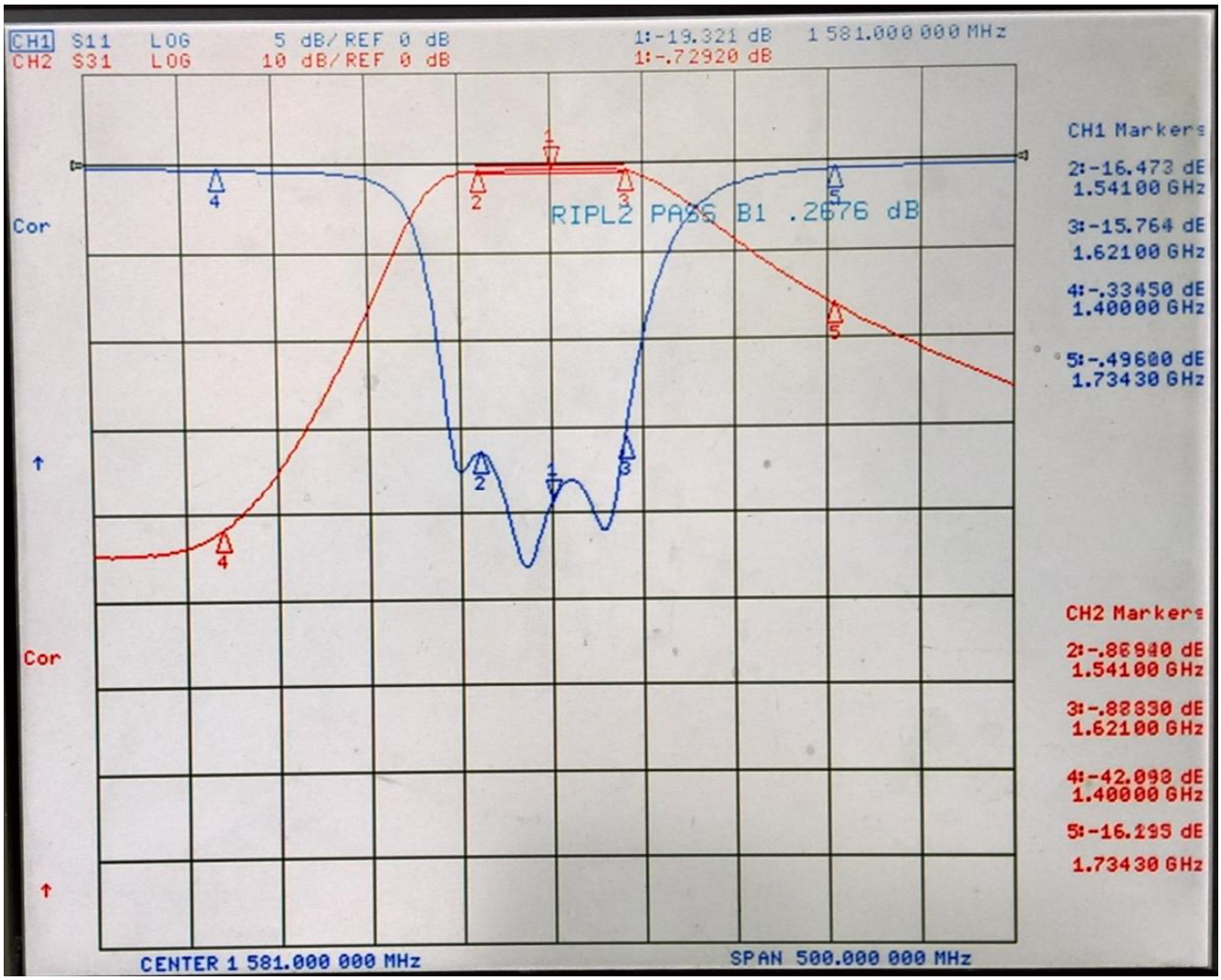


4. Taping
   Quanyity:1000PCS



Unit:mm

F. Frequency Characteristics :

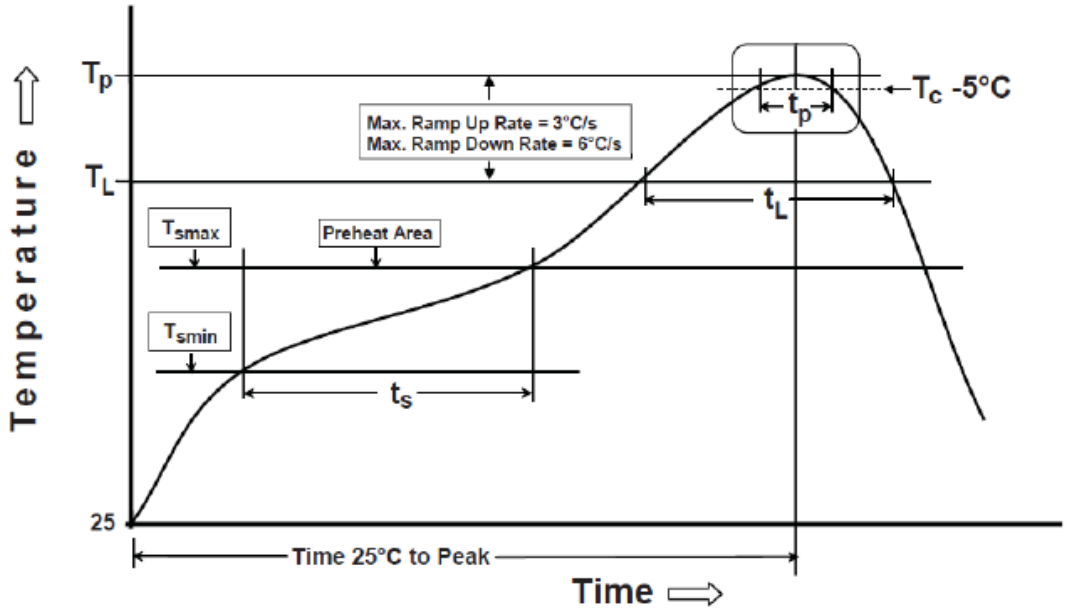


G. Recommended Reflow Profile:

Phase	Profile features	Pb-Free Assembly (SnAgCu)
PREHEAT	-Temperature Min(Tsmin) -Temperature Max(Tsmax) -Time(ts) form (Tsmin to Tsmax)	150℃ 200℃ 60-120 seconds
RAMP-UP	Avg. Ramp-up Rate (Tsmax to TP)	3℃/second(max)
REFLOW	-Temperature(TL) -Total Time above TL (t L)	217℃ 30-100 seconds
PEAK	-Temperature(TP) -Time(tp)	260℃ 3 second
RAMP-DOWN	Rate	6℃ / second max.
Time from 25℃ to Peak Temperature		8 minutes max.
Composition of solder paste		96.5Sn/3Ag/0.5Cu
Solder Paste Model		SHENMAO PF606-P26

Note：All the temperature measure point is on top surface of the component, if temperature over recommend, it will make component surface peeling or damage.

The graphic shows temperature profile for component assembly process in reflow ovens



Soldering With Iron:

Soldering condition : Soldering iron temperature 270±10 ℃.
Apply preheating at 120℃ for 2-3 minutes. Finish soldering for each terminal within 3 seconds, if soldering iron over temperature 270±10 ℃ or 3 seconds, it will make component surface peeling or damage.
Soldering iron can not leakage of electricity.