



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 5235 MHz SMD 8.7X4.27 mm (BW=180MHz)

TST Parts No.: TR0025A

Customer Parts No.: _____

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Hong Pu Lin *Hong Pu Lin*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2019/11/06

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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TST DCC
Release document

FR-71S03-02



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Dielectric filter 5235 MHz SMD 8.7X4.27 mm (BW=180MHz)

MODEL NO.:TR0025A

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 30dBm (1W)
2. Operating Temperature: -40°C to +105°C
3. Storage Temperature: -40°C to +105°C
4. Moisture Sensitivity Level: Level 2a(MSL2a)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

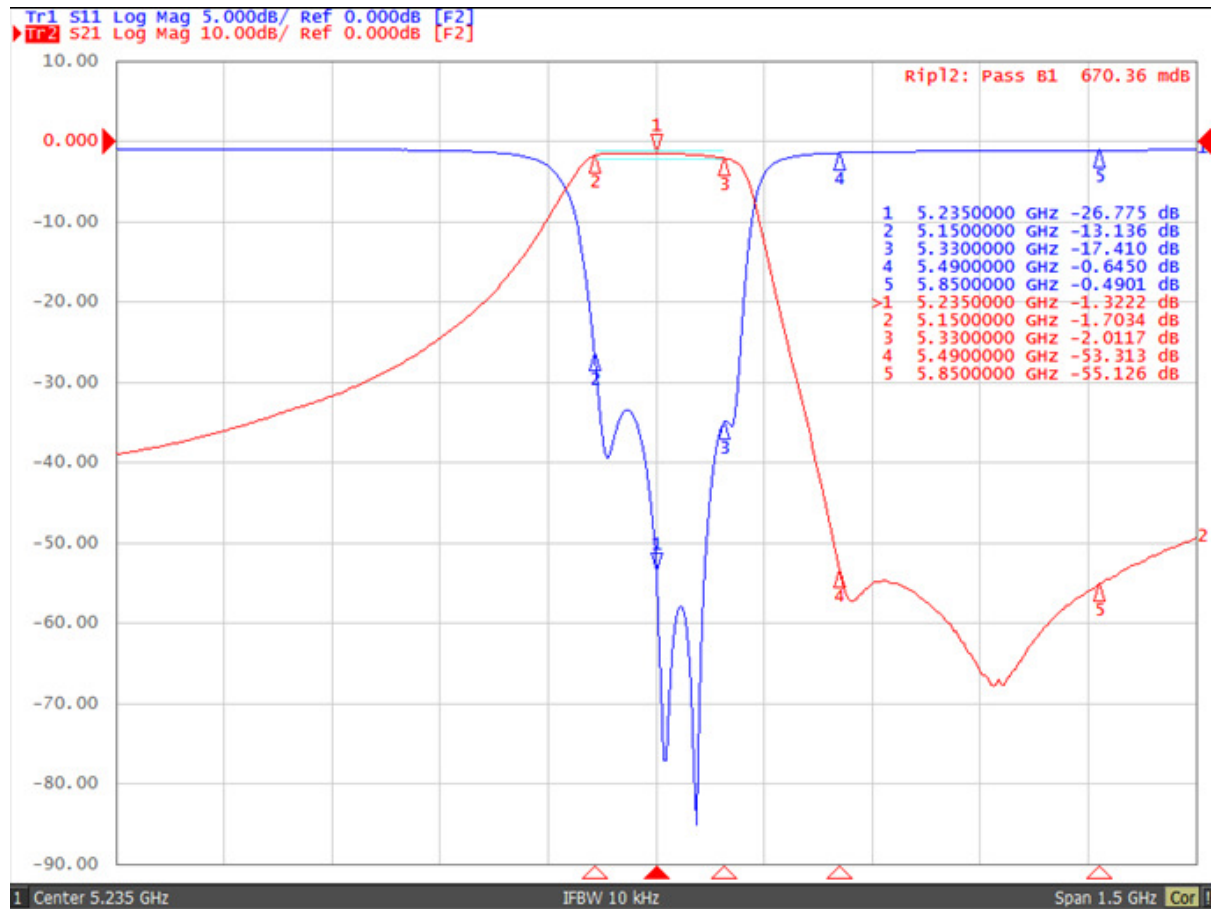
Terminating source impedance : $Z_s = 50 \Omega$

Terminating load impedance : $Z_L = 50 \Omega$

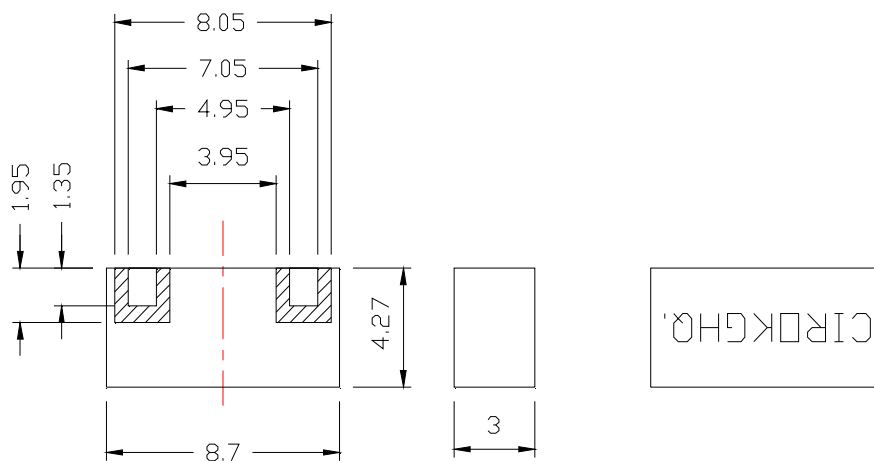
Item	Unit	Min	Typ.	Max
Center Frequency F_o	MHz	-	5235	-
Insertion Loss in BW (5150~5330MHz) 25°C	dB	-	2.0	2.5
Insertion Loss in BW (5150~5330MHz) 105°C	dB	-	2.2	2.6
Ripple (5150~5330MHz)	dB		0.7	1.8
Return Loss (5150~5330MHz)	dB	10	13	-
Attenuation (Reference level from 0 dB)				
5490 ~ 5850MHz	dB	50	53	

Data is measured on TST EVB board

C. FREQUENCY CHARACTERISTICS :

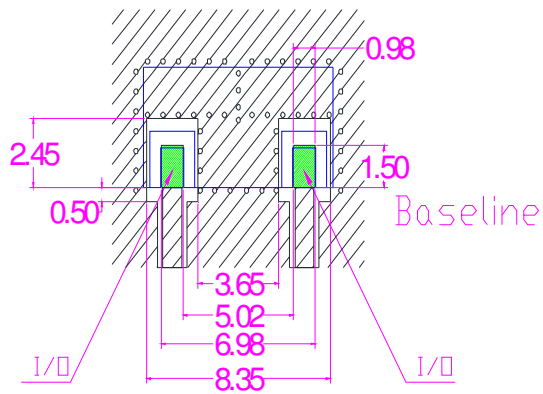


D. DIMENSION AND PCB LAYOUT:

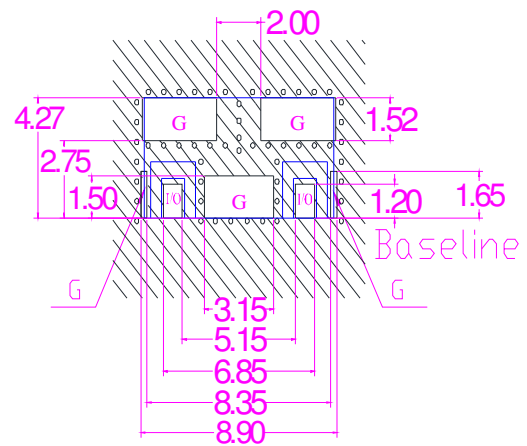


Dimensions in mm
Tolerance : $\pm 0,25$

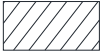
3-2-1
Conductive Material
Pattern



3-2-2
Solder resist
Pattern



 Filter outline
 Via hole

 Electrode



Tolerance: ± 0.2
I/O: Input/Output
G: Ground

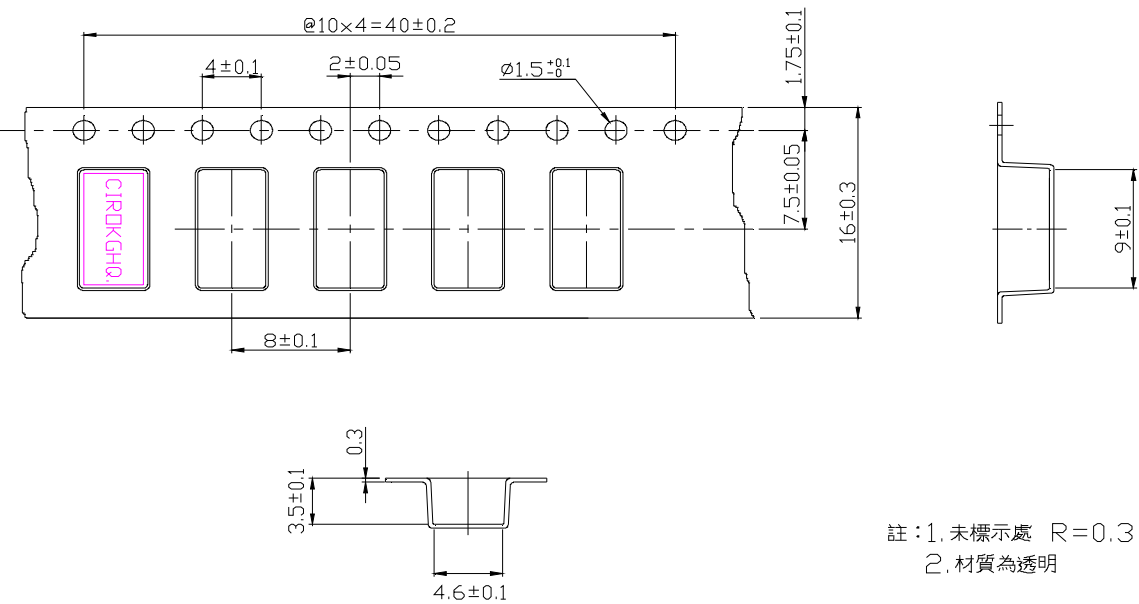
 Solder Resist

 Solder LAND

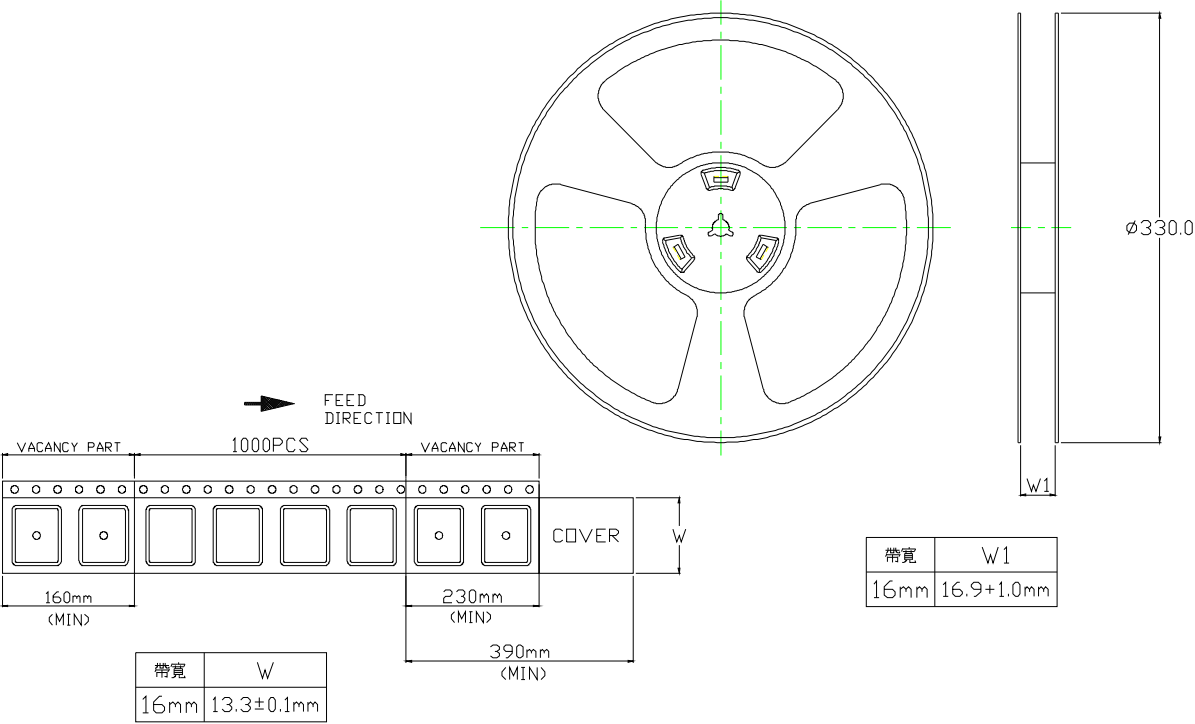
I/O Pads must be connected to lines with $50\ \Omega$ impedance. in the application a termination of $50\ \Omega$ must be realized.

E. **PACKING:**

1. **Carrier tape**



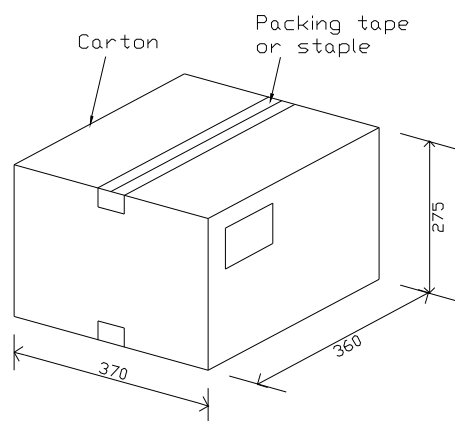
2 **Reel**



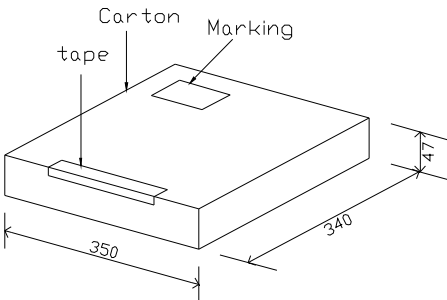
3.Package style

Moisture Sensitivity Level: Level 2a(MSL2a)

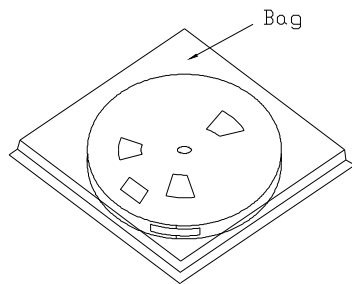
1. Outer Carton
Quanyity:5000PCS



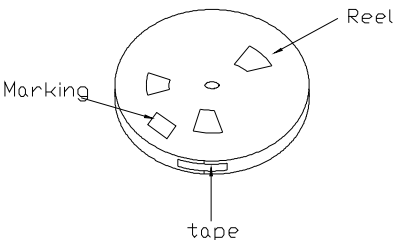
2. Inner Carton
Quanyity:1000PCS



3. Bag
Quanyity:1000PCS



4. Taping
Quanyity:1000PCS



Unit:mm

F. RECOMMENDED REFLOW PROFILE :

Products can be assembled following Pb-free assembly. According to the Standard **IPC/JEDEC J-STD-020C**, the temperature profile suggested is as follow:

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

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

