



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 Description: Dielectric Filter 3750MHz BW 100MHz Size 15.9x6.3mm
TST Parts No.: TR0120AA0090

Customer Parts No.: _____

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Nina Chen *Nina Chen*

Approved by: _____ Kazuma Lee *Kazuma Lee*

Date: _____ 2023/04/17

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.



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

Dielectric Filter 3750MHz BW 100MHz Size 15.9x6.3mm

MODEL NO.: TR0120AA0090

REV. NO.:1.0

A. Maximum Rating:

1. Input Power:10W
2. Operating Temperature: -40°C to +85°C
3. Storage Temperature: 0°C to +40°C
4. Moisture Sensitivity Level: 2a(MSL 2a)

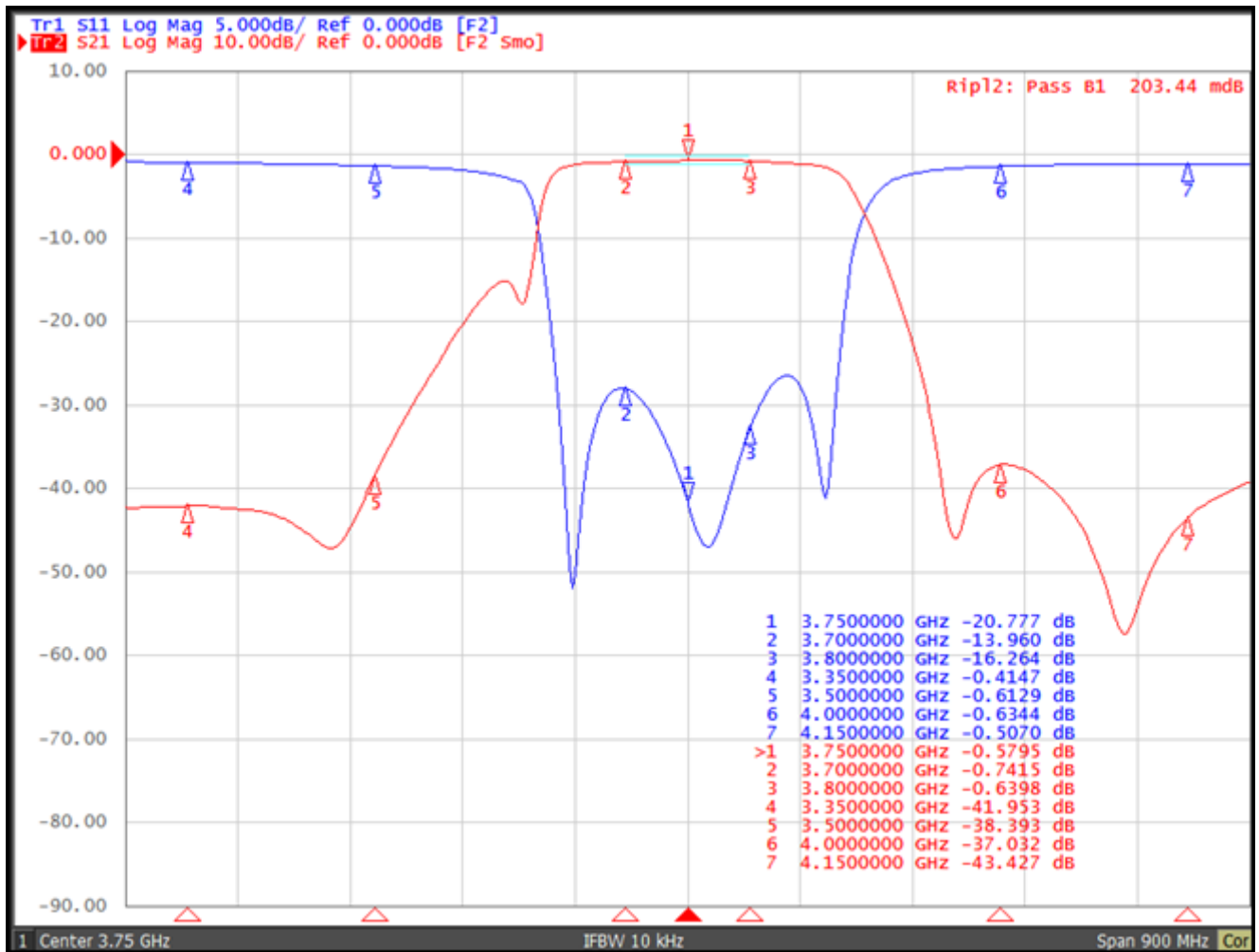
RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

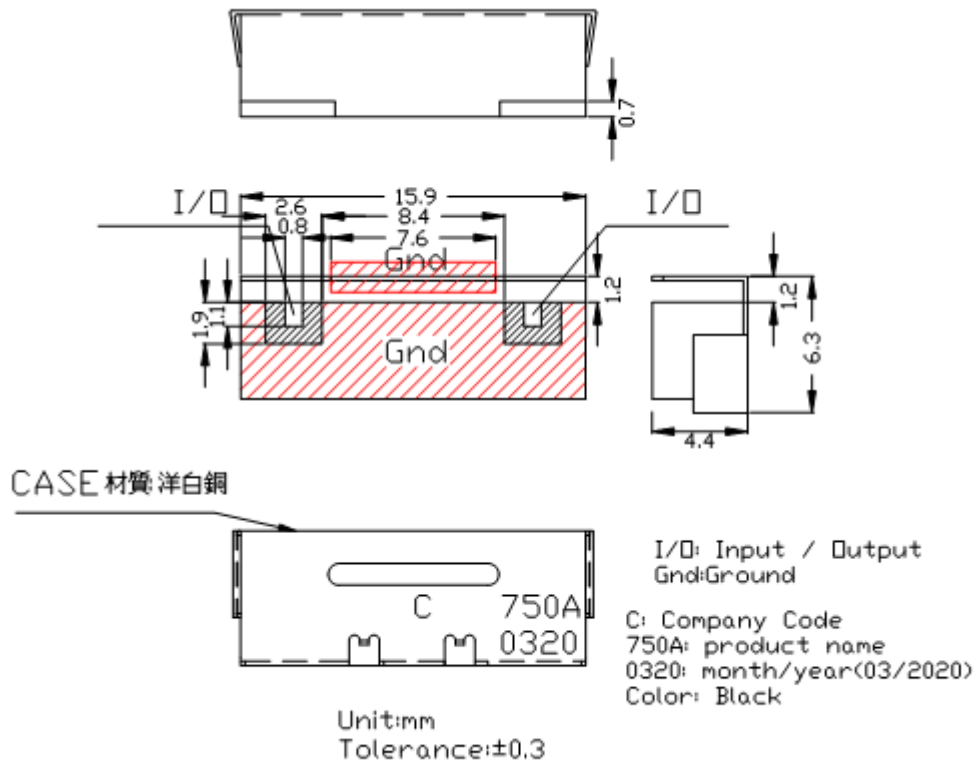
B. Electrical Characteristics:

ITEM		SPECIFICATION	
		Min	Max
INSERTION LOSS	3700~3800 MHz		1.5 dB
RIPPLE	3700~3800 MHz		1.0 dB
RETURN LOSS	3700~3800 MHz	10 dB	
ATTENUATION	at 3350~3500 MHz	30 dB	
	at 4000~4150 MHz	30 dB	
ATTENUATION specifies the absolute value of attenuation.			

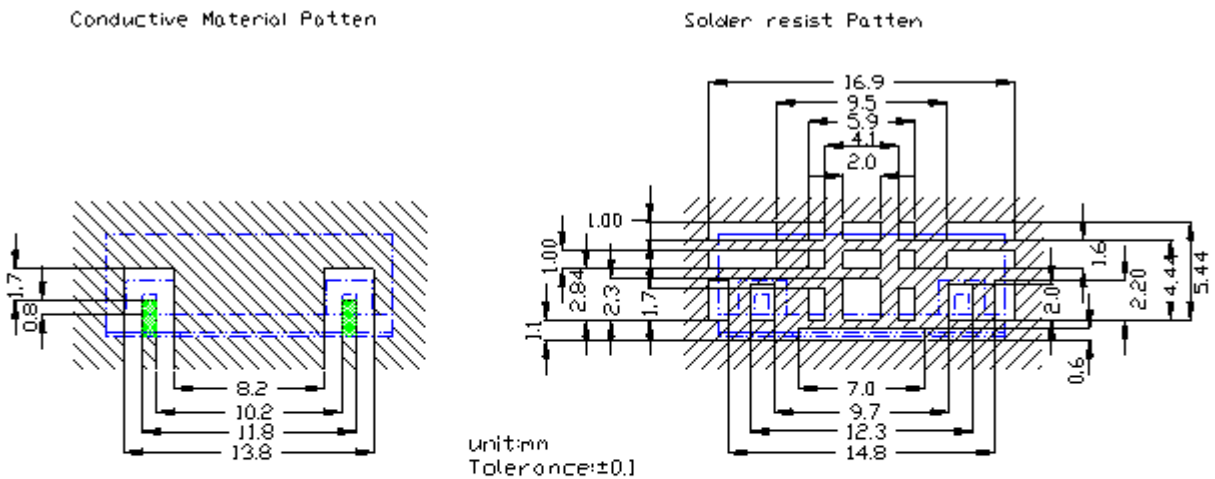
C. Frequency Characteristics:



D. Dimension:



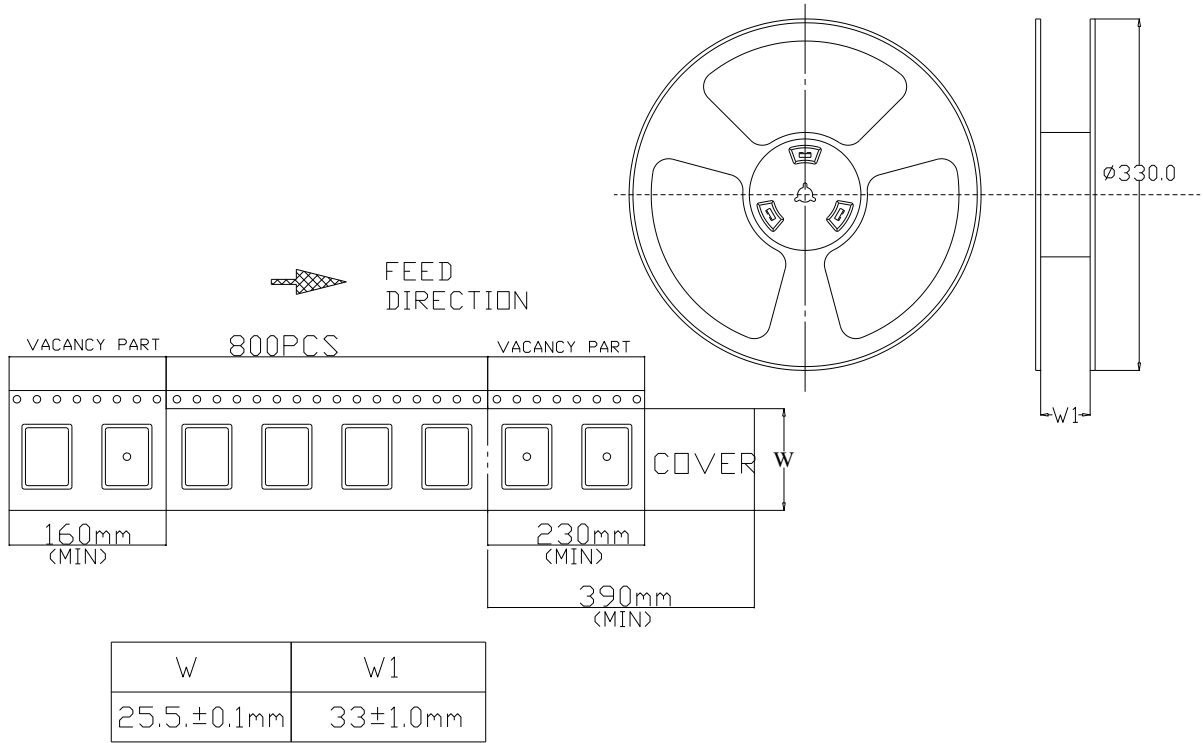
E. PCB Footprint:



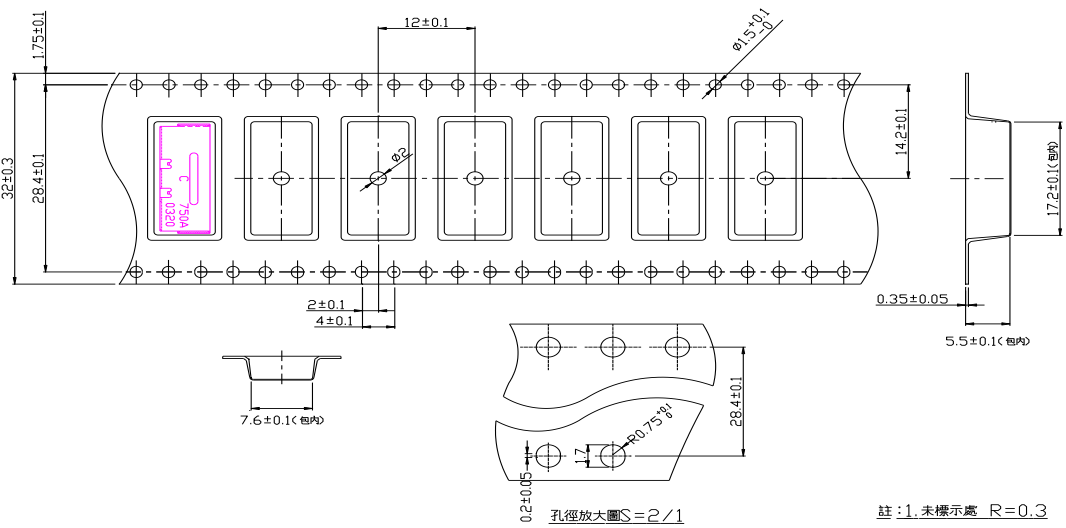
- Conductive Material: Ground, connected to lower ground diameter of 0.3mm and max. distance of 3.0mm.
- I/O Pads must be connected to lines with 50Ω impedance. In the application a termination of 50Ω must be realized.
- covered with solder resist.

F. Packing:

1. Reel Dimension:

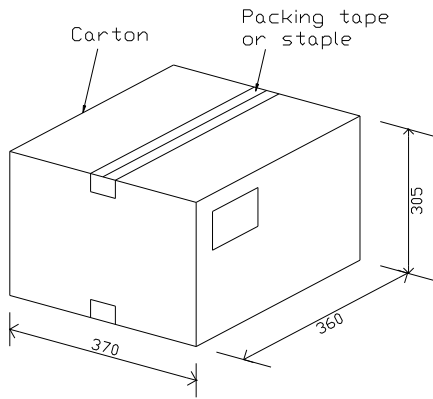


2. Tape Dimension:

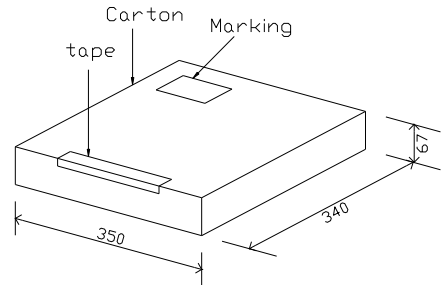


3.Package style:

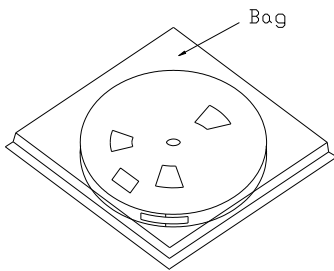
1. Outer Carton
Quanyity:3200PCS



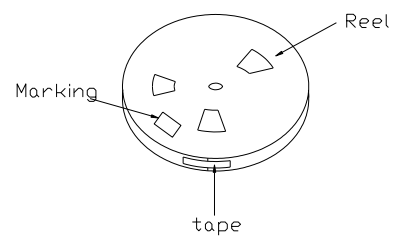
2. Inner Carton
Quanyity:800PCS



3. Bag
Quanyity:800PCS



4. Taping
Quanyity:800PCS



Unit:mm

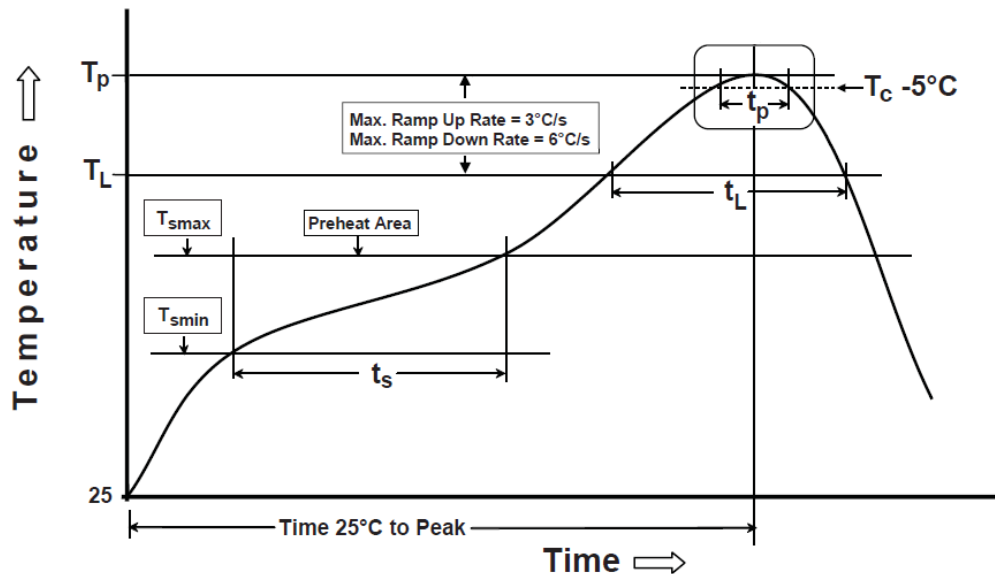
G. Recommended Reflow Profile:

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(T_{smin}) -Temperature Max(T_{smax}) -Time(t_s) form (T_{smin} to T_{smax})	150°C 200°C 60-120 seconds
RAMP-UP	Avg. Ramp-up Rate (T_{smax} to T_P)	3°C/second(max)
REFLOW	-Temperature(T_L) -Total Time above T_L (t_L)	217°C 30-100 seconds
PEAK	-Temperature(T_P) -Time(t_p)	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

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 °C.

Apply preheating at 120°C for 2-3 minutes. Finish soldering for each terminal within 3 seconds, if soldering iron over temperature 270 ± 10 °C or 3 seconds, it will make component surface peeling or damage.

Soldering iron can not leakage of electricity.