



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Description: Dielectric Filter 3450MHz BW 300MHz Size 15.9x5.1 mm
TST Parts No.: TR0117AA0090

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.



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Dielectric Filter 3450MHz BW 300MHz Size 15.9x5.1mm

MODEL NO.: TR0117AA0090

REV. NO.:1.0

A. Maximum Rating:

1. Input Power:10W
2. Operating Temperature: -40°C to +105°C
3. Storage Temperature: 0°C to +40°C
4. Moisture Sensitivity Level: 2a(MSL 2a)

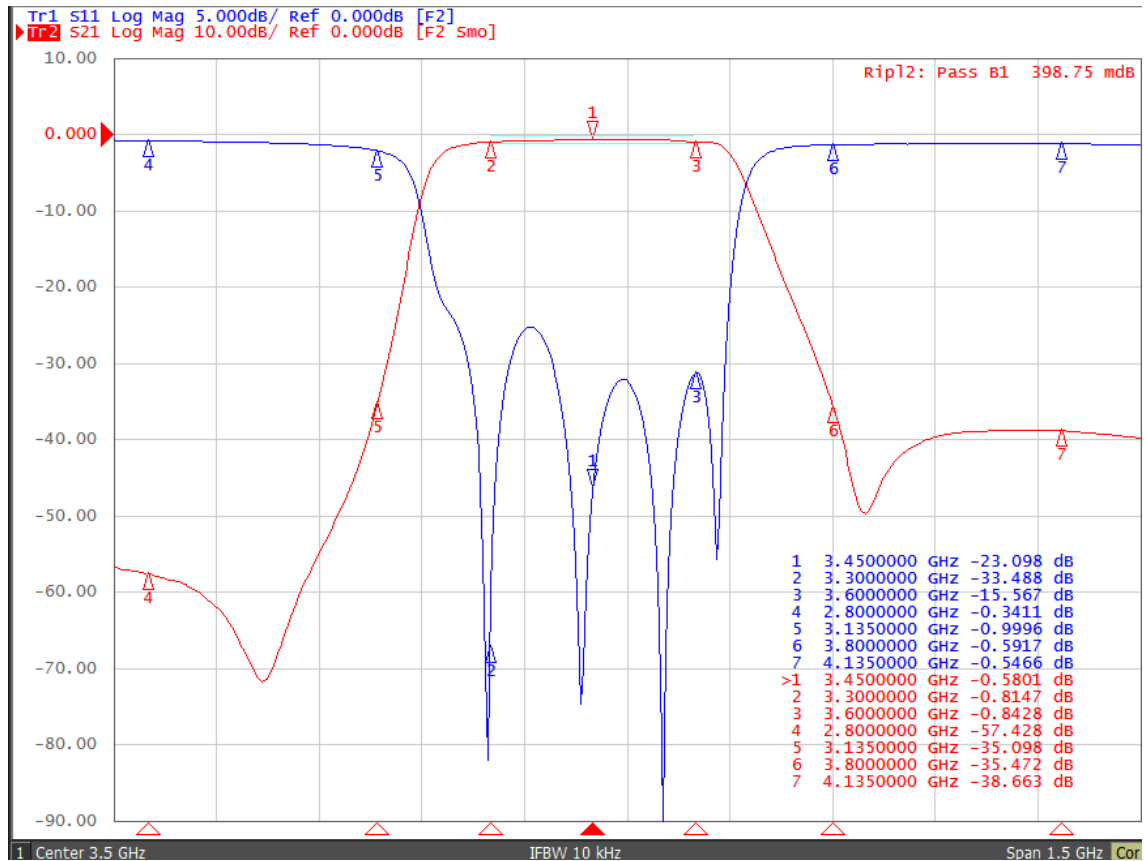
RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

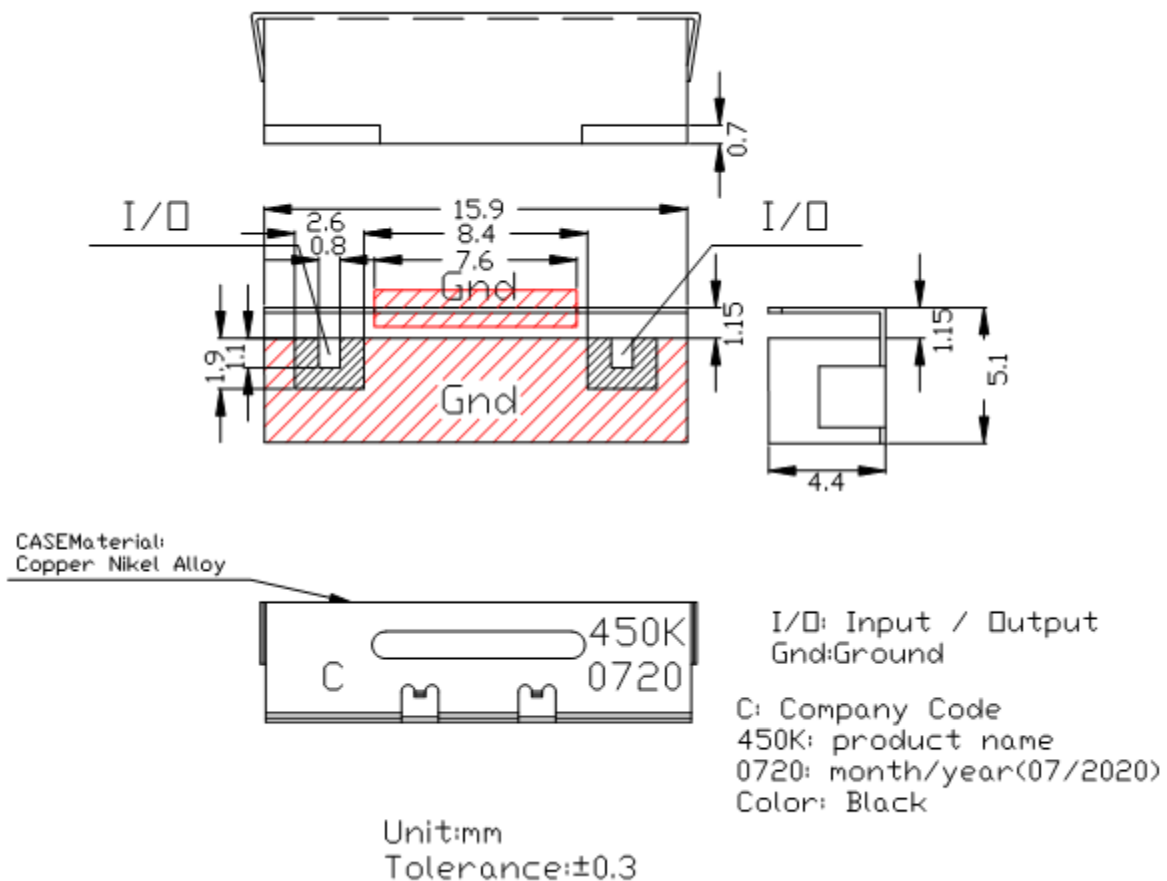
B. Electrical Characteristics:

| ITEM | | SPECIFICATION | | |
|--|-----------------|---------------|--------|--------|
| | | Min | Typ | Max |
| INSERTION LOSS | 3300~3600 MHz | | 1.5 dB | 2.0 dB |
| RIPPLE | 3300~3600 MHz | | 0.6 dB | 1.0 dB |
| RETURN LOSS | 3300~3600 MHz | 10 dB | | |
| ATTENUATION | 2800 ~ 3135 MHz | 30 dB | | |
| | 3800 ~ 4135 MHz | 30 dB | | |
| ATTENUATION specifies the absolute value of attenuation. | | | | |

C. Frequency Characteristics:

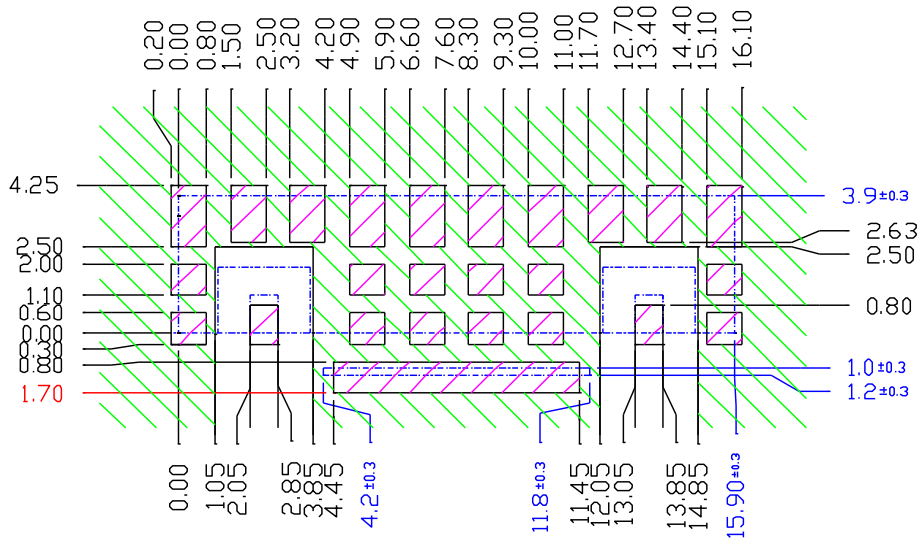


D. Dimension:



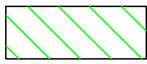
E. PCB Footprint:

PCB Layout



unit:mm

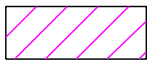
Tolerance:±0.1



Solder Resist
Over Conductor



Solder Resist
Over Dielectric

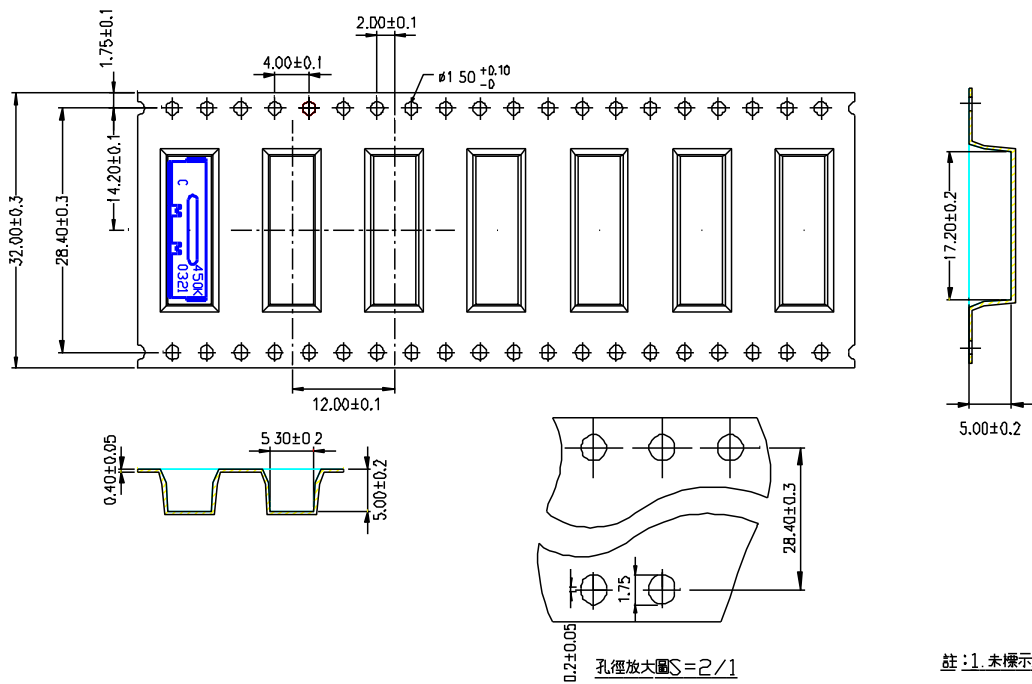
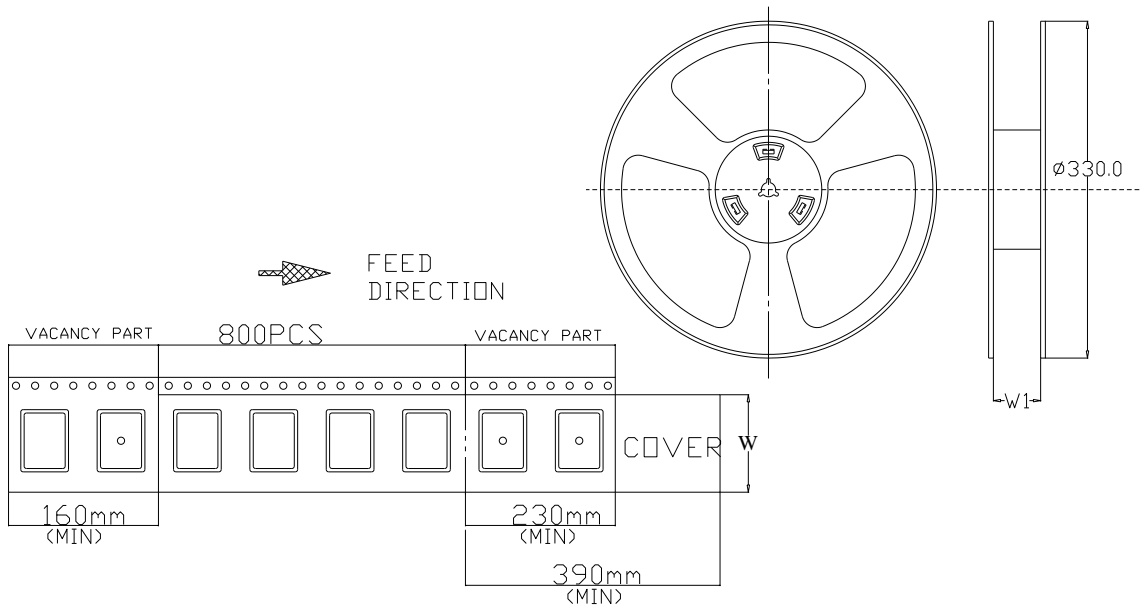


Exposed
Conductor

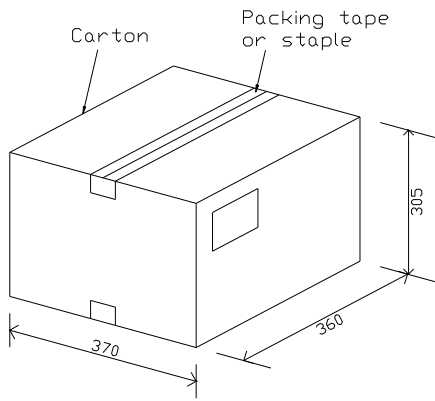


filter outline

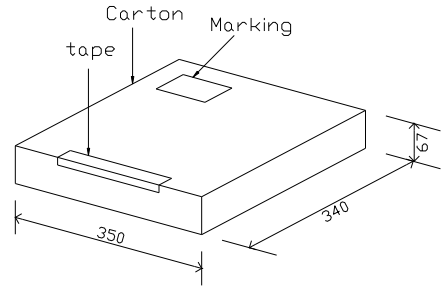
F.Packing:



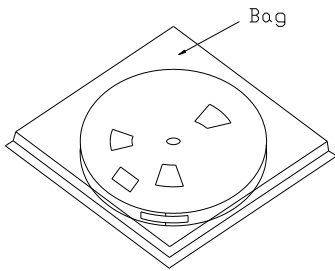
1. Outer Carton
Quanyity:3200PCS



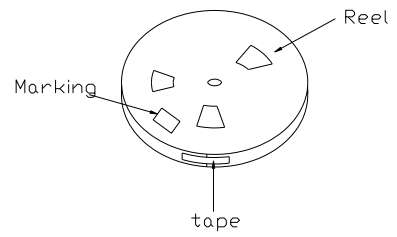
2. Inner Carton
Quanyity:800PCS



3. Bag
Quanyity:800PCS



4. Taping
Quanyity:800PCS



Unit:mm

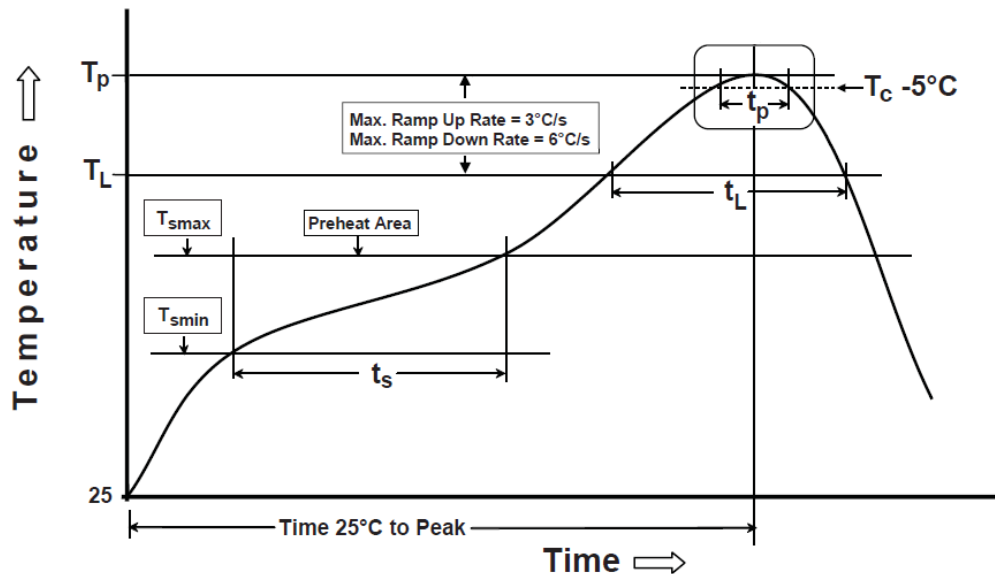
G. Recommended Reflow Profile:

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.