

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: SAW Filter 109 MHz SMD 9.1×7.1 mm (BW=35 KHz)

TST Part No.: TB0768C

Customer Part No.:

| Customer signature re | quired | | |
|-----------------------|-------------|---------|---|
| Company: | | | - |
| Division: | | | _ |
| Approved by : | | | - |
| Date: | | | |
| | | Derle | |
| Checked by: | David Chang | Van | |
| Approved by: | Andy Yu | Andy In | |
| Date: | 2018/12/06 | | |

- 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.

TAI-SAW TECHNOLOGY CO., LTD.

TST DCC Release document

TAI-SAW TECHNOLOGY CO., LTD. No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,

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

SAW Filter 109 MHz

MODEL NO.: TB0768C

A. MAXIMUM RATING:

- 1. Input Power Level: 10 dBm
- 2. DC Voltage : 5V
- 3. Operating Temperature: -30 ℃ to 75 ℃
- 4. Storage Temperature: -40 ℃ to 85 ℃
- 5. Moisture Sensitivity Level: Level 1(MSL1)

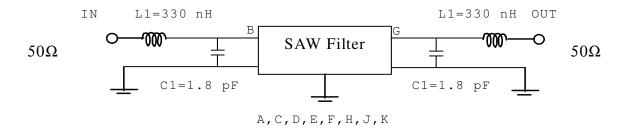
B. ELECTRICAL CHARACTERISTICS:

| Item | | Unit | Min. | Туре. | Max. | | |
|--|------|------|------|----------------|------|--|--|
| Center frequency | Fc | MHz | - | 109 | - | | |
| Minimum Insertion Loss (Fc ±17.5KHz) | IL | dB | - | 2.4 | 6 | | |
| 3 dB bandwidth | BW-3 | KHz | 35 | 72 | - | | |
| Passband Ripple (Fc ±17.5KHz) | | dB | - | 0.7 | 4.2 | | |
| Group delay ripple (Fc ±17.5KHz) | | μs | - | 4 | 12 | | |
| Relative Attenuation | | | | | | | |
| Fc ±200 KHz | | dB | 50 | 64 | - | | |
| Fc ±500 KHz | | dB | 40 | 55 | - | | |
| Temperature coefficient of frequency | TCf | | -0. | -0.036 ppm/K^2 | | | |

C. MEASUREMENT CIRCUIT:

50 Ohm Test circuit (single-ended / single-ended)

HP Network analyzer



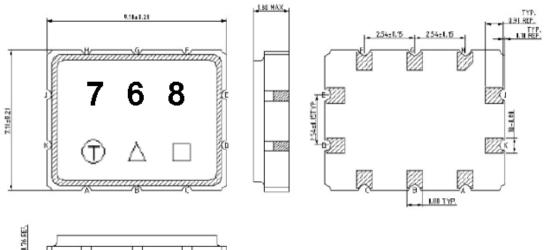
TST DCC Release document

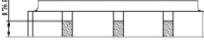
REV. NO.:1

RoHS Compliant Lead free Lead-free soldering

Electrostatic Sensitive Device (ESD)

D. OUTLINE DRAWING:





Pin configuration

#B Input / Output

#G Output / Input

#A,C,D,E,F,H,J,K To be grounded

Unit : mm

□ : Week Code (Follow the table from planner each year)

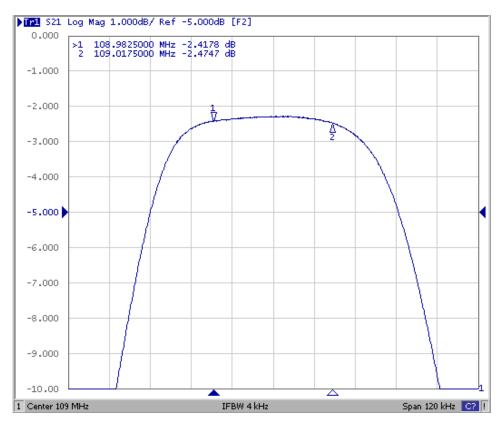
riangle : Product / Year Code

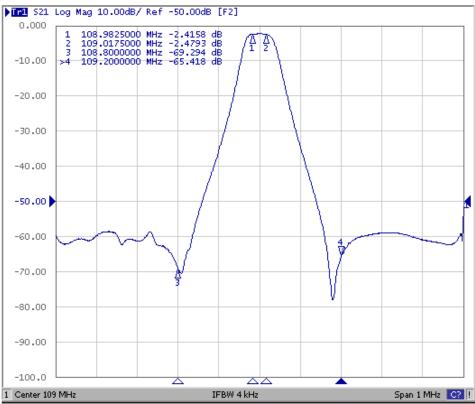
| Year | 2013 | 2014 | 2015 | 2016 |
|--------------|------|------|------|----------|
| | 2017 | 2018 | 2019 | 2020 |
| Product Code | В | b | В | <u>b</u> |

Date Code Table:

| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| A | В | С | D | E | F | G | Н | I | J | K | L | М |
| WK14 | WK15 | WK16 | WK17 | WK18 | WK19 | WK20 | WK21 | WK22 | WK23 | WK24 | WK25 | WK26 |
| N | 0 | Ρ | Q | R | S | Т | U | V | W | Х | Y | Z |
| WK27 | WK28 | WK29 | WK30 | WK31 | WK32 | WK33 | WK34 | WK35 | WK36 | WK37 | WK38 | WK39 |
| а | b | С | d | e | f | g | h | i | j | k | - I | m |
| WK40 | WK41 | WK42 | WK43 | WK44 | WK45 | WK46 | WK47 | WK48 | WK49 | WK50 | WK51 | WK52 |
| n | 0 | р | q | r | S | t | ŭ | V | W | Х | У | Z |

E. Frequency Characteristics:

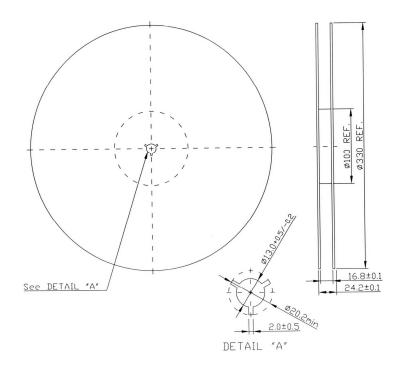




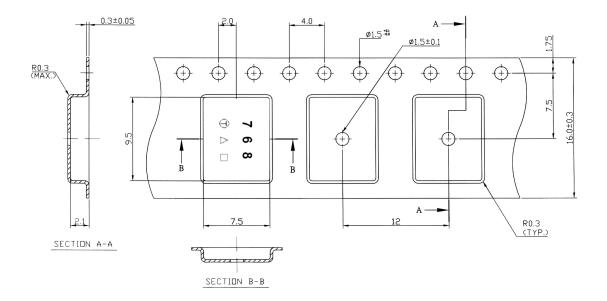
F. PACKING: (Ref. WI-75M03)

1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



G. Recommended Reflow Profile:

- 1. Preheating shall be fixed at $150 \sim 180^{\circ}$ C for $60 \sim 90$ seconds.
- 2. Ascending time to preheating temperature 150° C shall be 30 seconds min.
- 3. Heating shall be fixed at 220 $^\circ\!\mathrm{C}$ for 50~80 seconds and at 260 $^\circ\!\mathrm{C}$ +0/-5 $^\circ\!\mathrm{C}$ peak (20~40sec).
- 4. Time: 2 times.

