

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

Product Specifications Approval Sheet

| Product Description | n: SAW Filter 2593 M | 1Hz SMD 3.0×3 | .0 mm (BV | V=194 MHz |
|---------------------|----------------------|---------------|-----------|-----------|
| TST Part No.: TA18 | 333A | | | |
| Customer Part No. | : | | | |
| Customer signature | e required | | | |
| Company: | | | _ | |
| Division: | | | _ | |
| Approved by : | | | _ | |
| Date: | | | - | |
| | | 0 | | |
| Checked by: | David Chang | Darb | | |
| Approved by: | Bob Chau | John | | |
| Date: | 2015/04/22 | | | |

- 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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SAW Filter 2593 MHz

MODEL NO.:TA1833A REV. NO.:1

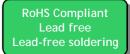
A. MAXIMUM RATING:

1. Input Power Level: 16 dBm

2. DC Voltage: 3 V

3. Operating Temperature: -30°C to +100°C

4. Storage Temperature: -40°C to +120°C



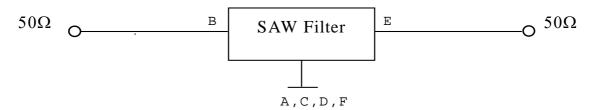
Electrostatic Sensitive Device (ESD)

B. <u>ELECTRICAL CHARACTERISTICS</u>:

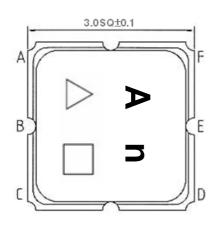
| Item | Unit | Min. | Тур. | Max. | | | | |
|---|-------|------|------|------|-----|--|--|--|
| Center frequency | Fc | MHz | - | 2593 | - | | | |
| Insertion loss (2496~2690 MHz) | IL | dB | - | 4 | 4.8 | | | |
| Amplitude ripple (2496~2690 MHz) | | dB | - | 1.1 | 2.0 | | | |
| VSWR (2496~2690 MHz) | | - | - | 2.3 | 2.7 | | | |
| Group delay ripple (2496~2690 MHz) | | ns | - | 3 | 15 | | | |
| Attenuation (Reference level from 0 dB) | | | | | | | | |
| 10~2025 MHz | | dB | 18 | 23 | • | | | |
| 2131~2170 MHz | | dB | 21 | 26 | • | | | |
| 2170~2300 MHz | | dB | 22 | 27 | - | | | |
| 2300~2400 MHz | | dB | 7 | 13 | - | | | |
| 2800~3000 MHz | | dB | 7 | 12 | - | | | |
| 3000~3800 MHz | | dB | 20 | 25 | - | | | |
| 3800~5850 MHz | | dB | 20 | 25 | - | | | |
| Temperature coefficient of frequency | ppm/k | - | -80 | - | | | | |

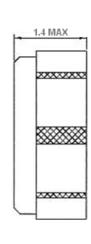
C. MEASUREMENT CIRCUIT:

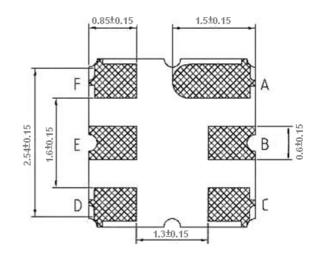
HP Network analyzer



D. OUTLINE DRAWING:







B: Input E: Output

A, C, D, F: Ground

Unit: mm

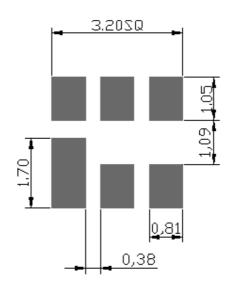
 \triangle : Year Code (2011->1, 2012->2, ..., 2019->9, 2020->0)

☐: Date Code

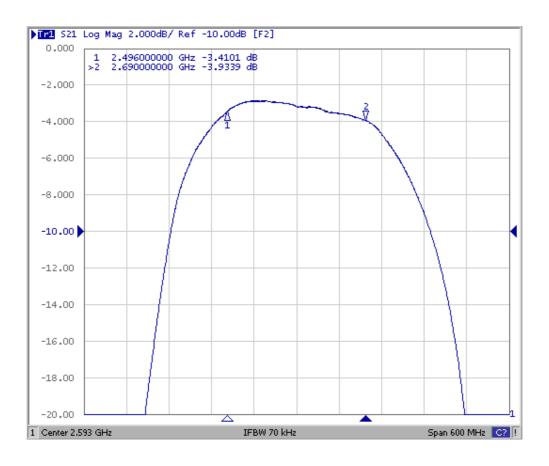
Date Code Table:

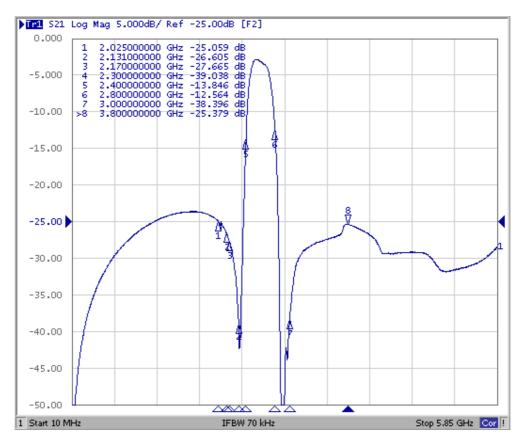
| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| А | В | С | D | E | F | G | Н | | J | K | L | М |
| WK14 | WK15 | WK16 | WK17 | WK18 | WK19 | WK20 | WK21 | WK22 | WK23 | WK24 | WK25 | WK26 |
| N | 0 | Р | Q | R | S | Т | U | V | W | Х | Υ | Z |
| WK27 | WK28 | WK29 | WK30 | WK31 | WK32 | WK33 | WK34 | WK35 | WK36 | WK37 | WK38 | WK39 |
| а | b | С | d | е | 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 | u | ٧ | W | Х | У | Z |

E. PCB Footprint:



F. Frequency Characteristics:



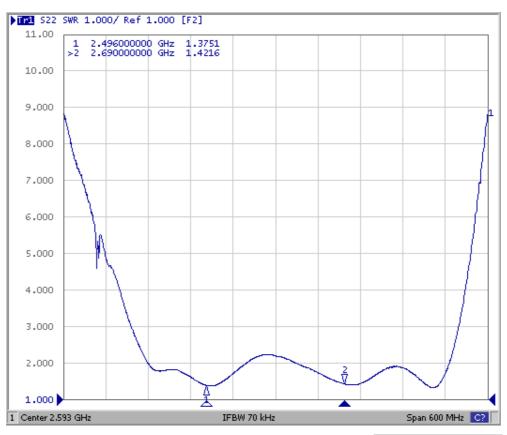


Reflection Functions:

S11



S22



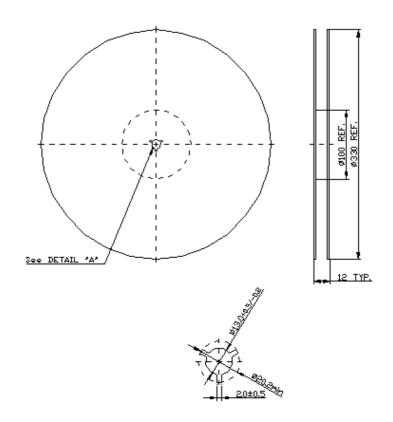
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TST DCC Release document

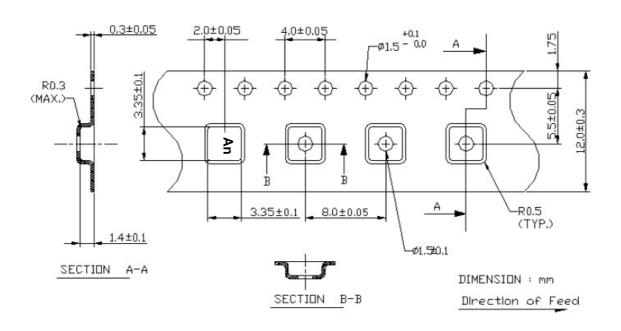
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

- 1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
- 2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
- 3. Heating shall be fixed at 220°C for 50~80 seconds and at 245~260°C peak (min. 10sec).
- 4. Time: 2 times.

