

# 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 725.5 MHz SMD 3.8×3.8 mm (BW=6 MHz) |
|---|
| TST Part No.: TA2316A   |
| Customer Part No.:  |
|   |
| Customer signature required   |
| Company:  |
| Division:   |
| Approved by :   |
| Date:   |
|   |
| Checked by: David Chang   |
| Checked by: David Chang Daw  Approved by: Andy Yu  Andy Yu          |
| Date: 11/10/2017  |

- 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 725.5 MHz

MODEL NO.:TA2316A REV. NO.:1

#### A. MAXIMUM RATING:

1. Input Power Level:15 dBm

2. DC Voltage: 3 V

3. Operating Temperature: -40 °C to +85 °C

4. Storage Temperature: -40 °C to +85 °C

5. Moisture Sensitivity Level: Level 1(MSL1)

**RoHS Compliant** Lead free Lead-free soldering

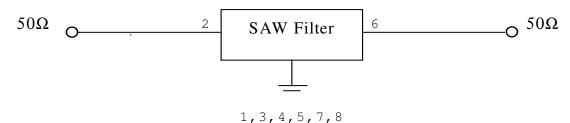
Electrostatic Sensitive Device (ESD)

#### **B. ELECTRICAL CHARACTERISTICS:**

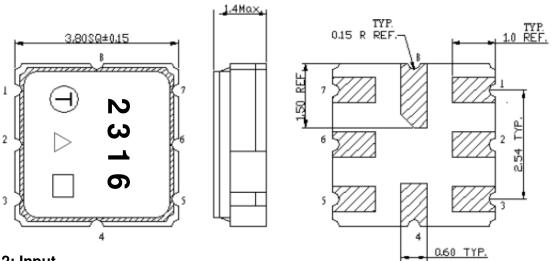
| Item                                    | Unit   | Min.              | Тур. | Max.  |     |  |  |  |
|---|--------|-------------------|------|-------|-----|--|--|--|
| Center frequency                        | Fc     | MHz               | -    | 725.5 | -   |  |  |  |
| Insertion Loss (722~728 MHz)            | IL     | dB                | -    | 1.4   | 2.8 |  |  |  |
| Amplitude Variation (722~728 MHz)       |        | dB <sub>p-p</sub> | -    | 0.3   | 1.8 |  |  |  |
| Return Loss (722~728 MHz)               |        | dB                | 10   | 13    | -   |  |  |  |
| Attenuation (Reference level from 0 dB) |        |                   |      |       |     |  |  |  |
| 10 ~ 680 MHz                            |        | dB                | 30   | 44    | -   |  |  |  |
| 748 ~ 1000 MHz                          |        | dB                | 25   | 48    | -   |  |  |  |
| 1950 ~ 2200 MHz                         |        | dB                | 16   | 24    | -   |  |  |  |
| 2200 ~ 3960 MHz                         | _      | dB                | 1.2  | 3     | -   |  |  |  |
| Temperature Coefficient of Frequency    | ppm/°C | -                 | -36  | -     |     |  |  |  |

#### **C. MEASUREMENT CIRCUIT:**

HP Network analyzer



#### D. OUTLINE DRAWING:



2: Input

6: Output

1, 3, 4, 5, 7, 8: Ground

 ∴ Year Code ☐: Date Code

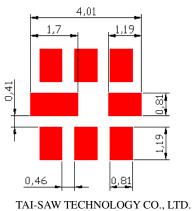
Unit: mm

| Year         | 2011<br>2013<br>2015<br>2017 | 2012<br>2014<br>2016<br>2018 |  |  |  |  |  |  |
|--------------|------------------------------|------------------------------|--|--|--|--|--|--|
| Product Code | Α                            | а                            |  |  |  |  |  |  |

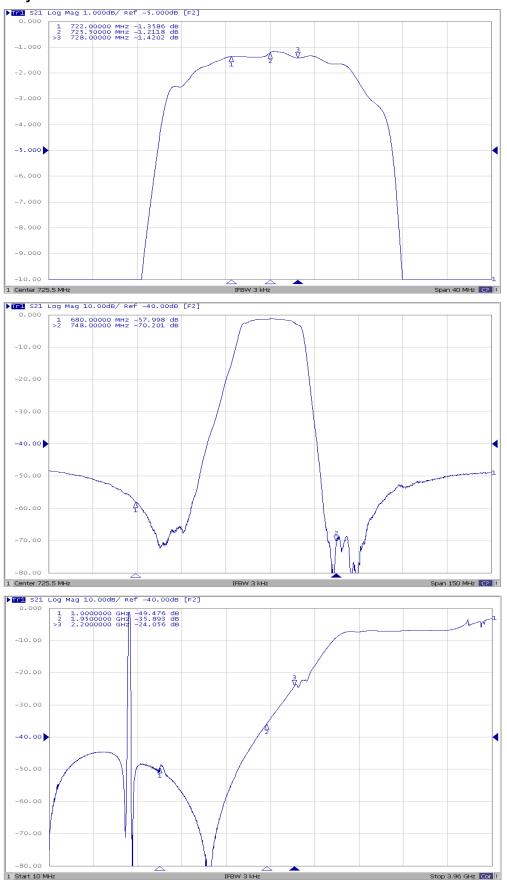
### **Date Code Table:**

| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Α    | В    | С    | D    | Е    | F    | G    | Н    | 1    | 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    | ü    | V    | W    | Х    | У    | Z    |

# **E. PCB Footprint:**

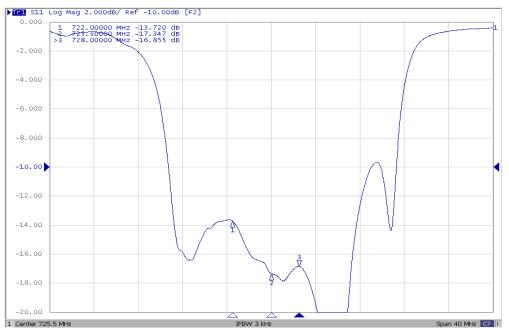


# F. Frequency Characteristics:



## **Reflection Functions:**





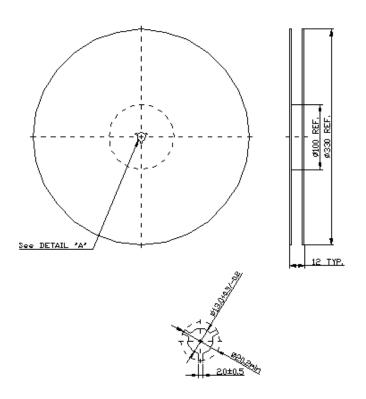
### **S22**



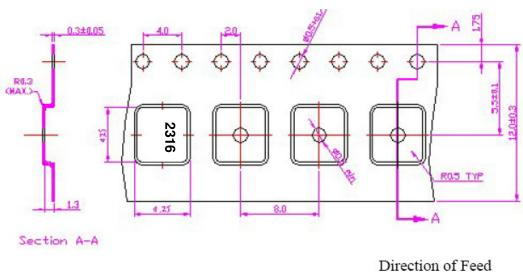
# G. PACKING: (Ref. WI-75M03)

1. REEL DIMENSION

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



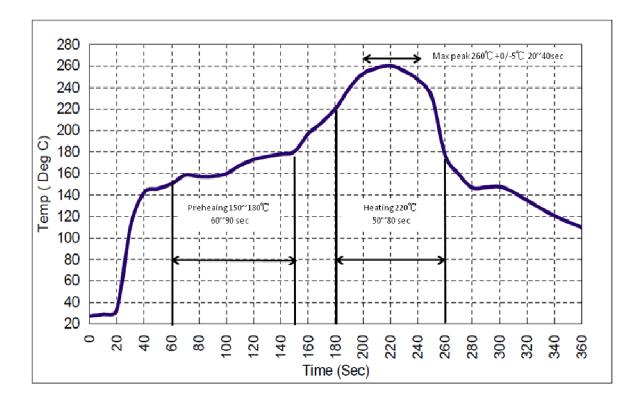
#### 2. TAPE DIMENSION



Direction of Feed

#### H. Recommended Reflow Profile:

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



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