



# 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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Product Specifications Approval Sheet

Product Description: 260MHz 60MHz BW SMD 7.0 x 5.0 mm SAW IF Filter

TST Parts No.: TB1240A

Customer Parts No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ Kazuma Lee 

Approval by: \_\_\_\_\_ Bob Chau 

Date: \_\_\_\_\_ 06 / 30 / 2016

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, Taiwan, R.O.C.

TEL: 886-3-4690038

FAX: 886-3-4697532

E-mail: [tstsales3@mail.taisaw.com](mailto:tstsales3@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

SAW Filter 260MHz 60MHz BW (SMD 7.0×5.0mm)

MODEL NO.: TB1240A

REV. NO.1

## A. MAXIMUM RATING:

1. Operating temperature range: -20℃ to 75℃
2. Storage temperature range: -40℃ to 85℃
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device

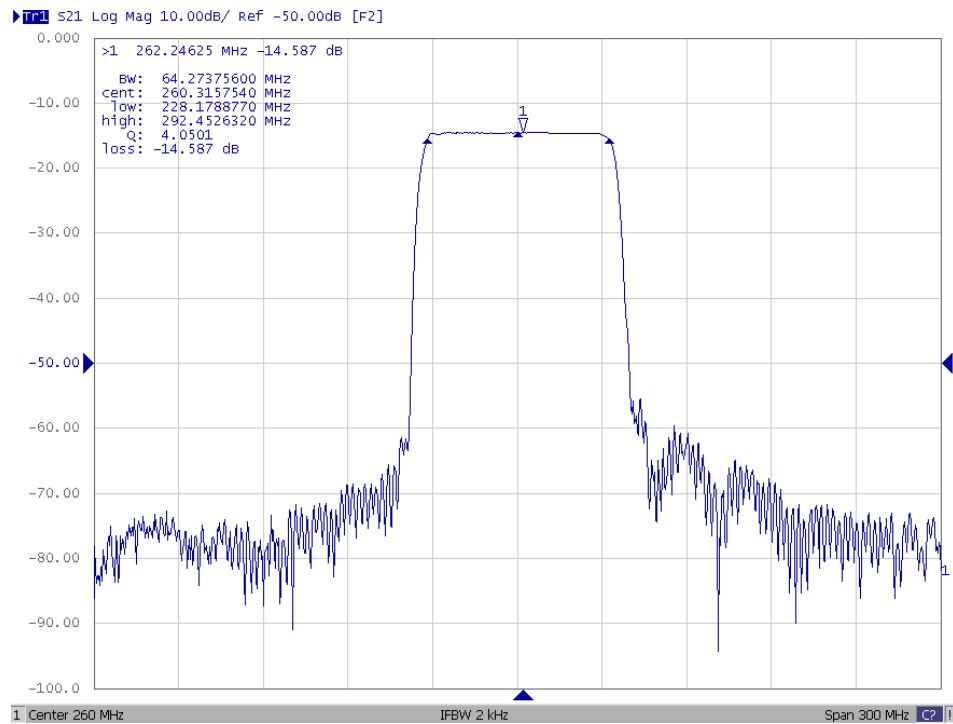
## B. CHARACTERISTICS:

1. Ambient Temperature: 25 °

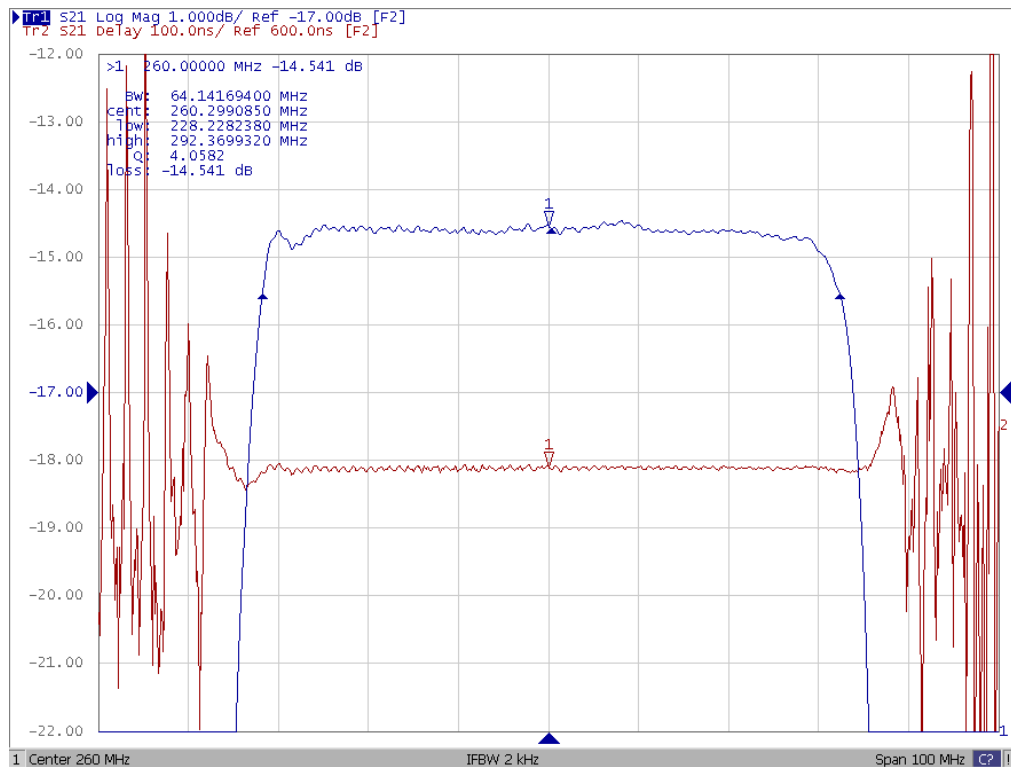
| Item                                             | Unit   | Min. | Typ. | Max. |
|--------------------------------------------------|--------|------|------|------|
| Center frequency, <b>F<sub>c</sub></b>           | MHz    | -    | 260  | -    |
| Insertion Loss, <b>IL</b>                        | dB     | -    | 14.5 | 17.0 |
| -1dB bandwidth                                   | MHz    | 60   | 64   | -    |
| Passband Ripple <b>F<sub>c</sub>±30MHz</b>       | dB     | -    | 0.5  | 1.0  |
| Group Delay Variation <b>F<sub>c</sub>±30MHz</b> | ns     | -    | 15   | -    |
| Absolute Delay at <b>F<sub>c</sub></b>           | us     | -    | 0.5  | -    |
| Attenuation:(Reference level from typical IL)    |        |      |      |      |
| 10 MHz ~ 200MHz                                  | dB     | 40   | 50   | -    |
| 320MHz ~ 440MHz                                  | dB     | 40   | 45   | -    |
| 440MHz ~ 520MHz                                  | dB     | 35   | 39   | -    |
| 520MHz ~ 1000MHz                                 | dB     | 40   | 45   | -    |
| Temperature Coefficient                          | ppm/°C | -    | -94  | -    |
| Source Impedance                                 | Ohm    | -    | 50   | -    |
| Load Impedance                                   | Ohm    | -    | 50   | -    |

## C. FREQUENCY CHARACTERISTICS:

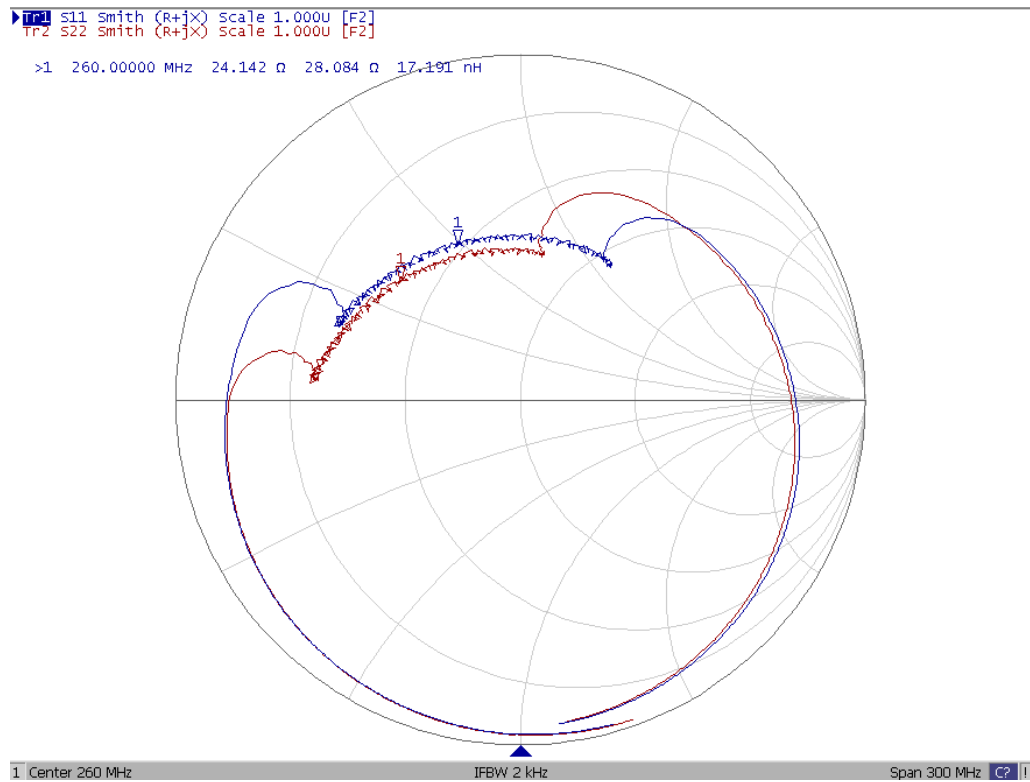
### (1) Narrow Band Response:



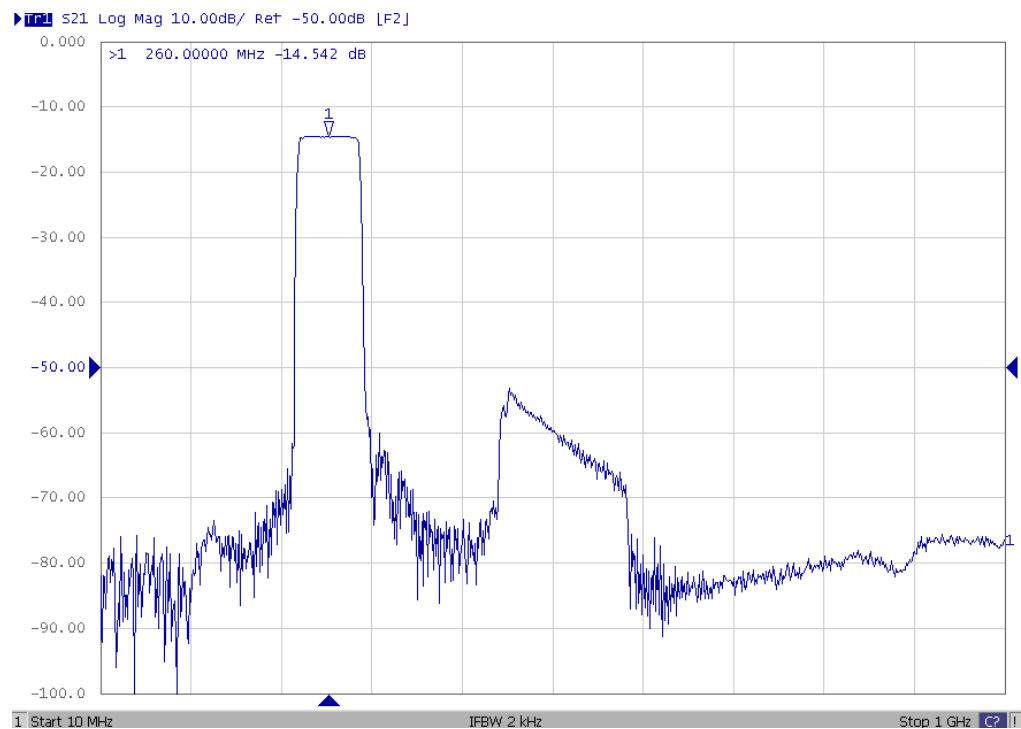
### (2) Pass Band Response and Group Time Delay Response:



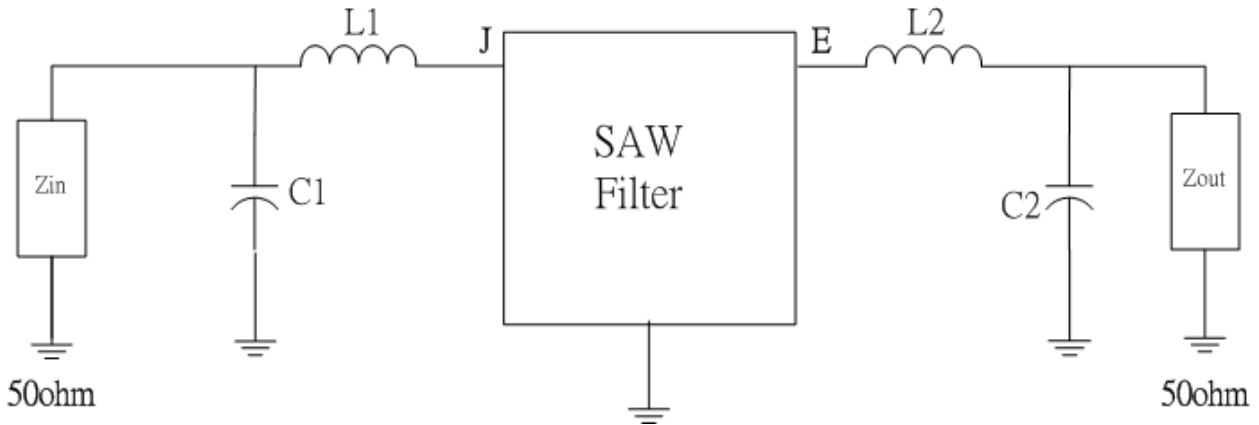
### (3) Smith Chart:



### (4) Wide Band Response:

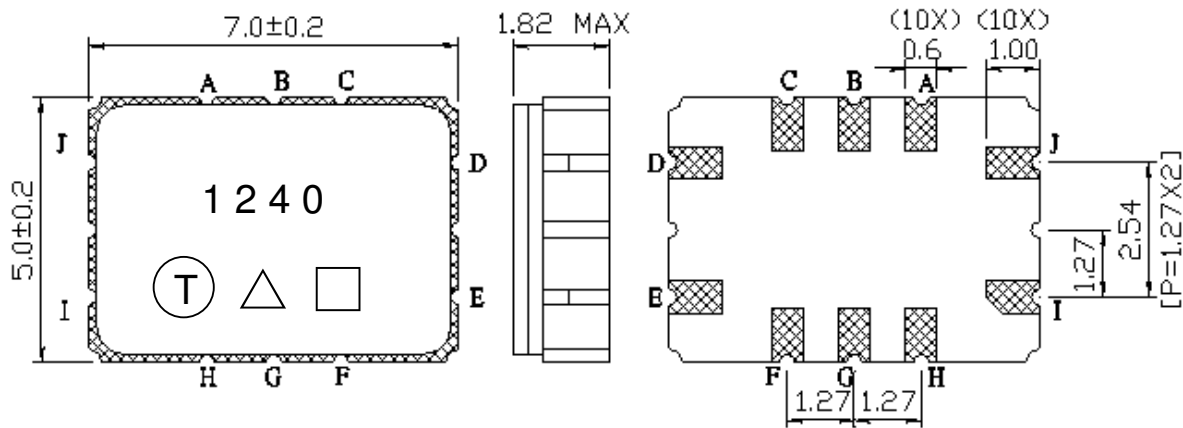


#### D. MATCHING CIRCUIT:



$$L1=47\text{nH} \quad L2=47\text{nH} \quad C1=8\text{pF} \quad C2=8\text{pF}$$

#### E. OUTLINE DRAWING:



Pin J: RF Input

Pin E: RF Output

Pin A, B, C, D, F, G, H, I: To be ground

Unit : mm

□ : Week Code

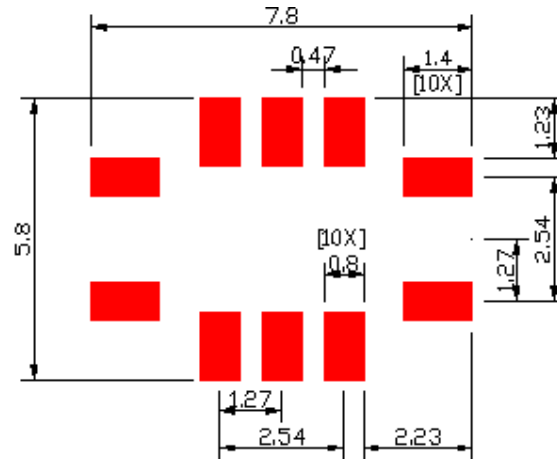
△ : Product / Year Code

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

#### Week Code Table

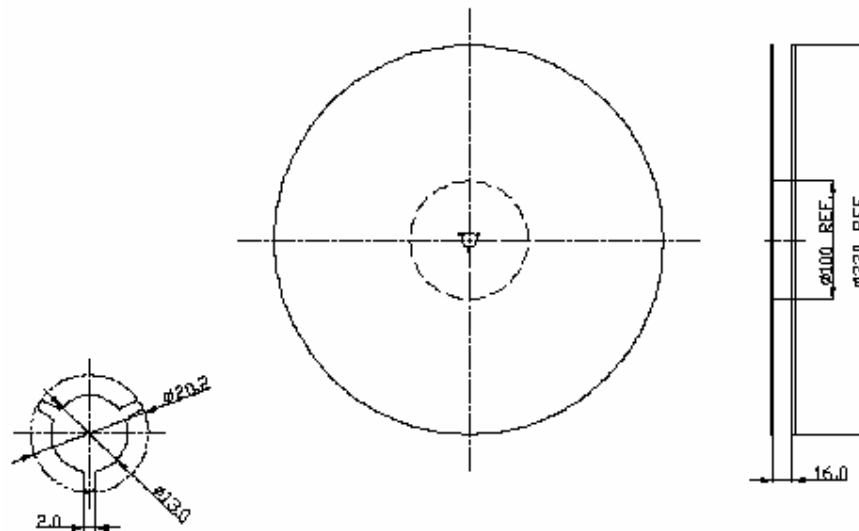
| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| A    | B    | C    | D    | E    | F    | G    | H    | I    | J    | K    | L    | M    |
| WK14 | WK15 | WK16 | WK17 | WK18 | WK19 | WK20 | WK21 | WK22 | WK23 | WK24 | WK25 | WK26 |
| N    | O    | P    | Q    | R    | S    | T    | U    | V    | W    | X    | Y    | Z    |
| WK27 | WK28 | WK29 | WK30 | WK31 | WK32 | WK33 | WK34 | WK35 | WK36 | WK37 | WK38 | WK39 |
| a    | b    | c    | d    | e    | f    | g    | h    | i    | j    | k    | l    | m    |
| WK40 | WK41 | WK42 | WK43 | WK44 | WK45 | WK46 | WK47 | WK48 | WK49 | WK50 | WK51 | WK52 |
| n    | o    | p    | q    | r    | s    | t    | u    | v    | w    | x    | y    | z    |

## F. PCB FOOTPRINT:

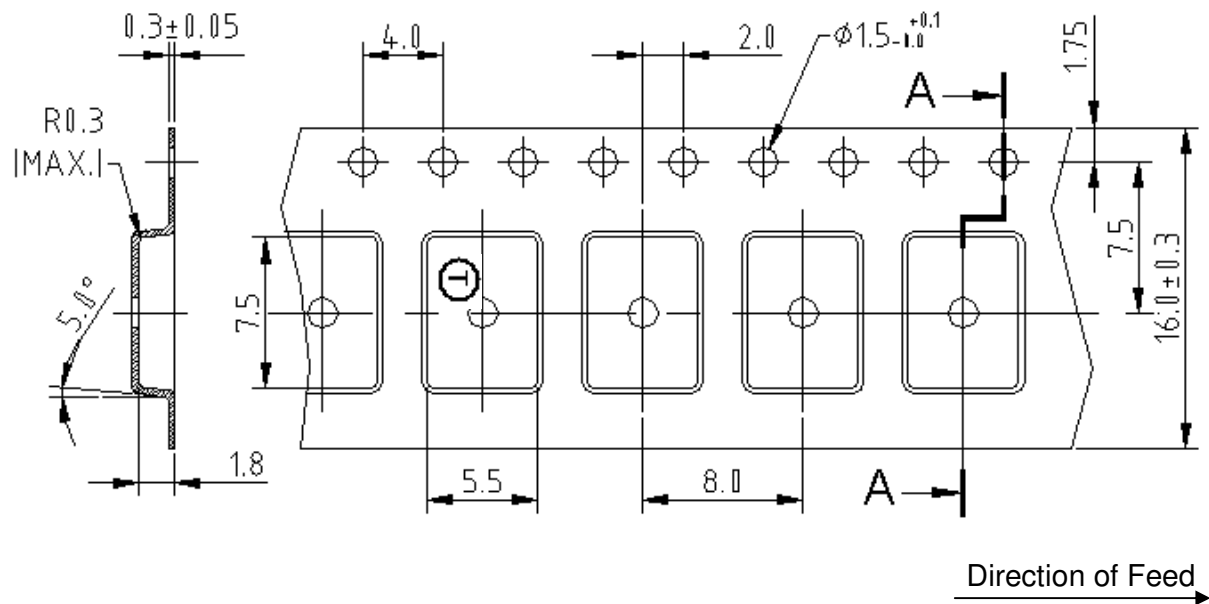


## G. PACKING:

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



## 2. TAPE DIMENSION



### H. RECOMMENDED REFLOW PROFILE:

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

