



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

## Product Specifications Approval Sheet

Product Description: SAW Filter 911.5 MHz SMD 1.4x1.1 mm (BW=27 MHz)

TST Part No.: TA2380A

Customer Part No.: \_\_\_\_\_

Customer signature required

Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ David Chang *David*

Approved by: \_\_\_\_\_ Andy Yu *Andy Yu*

Date: \_\_\_\_\_ 2018/04/18

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, 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)

## SAW Filter 911.5 MHz

MODEL NO.:TA2380A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 15 dBm
2. DC Voltage : 3 V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 3(MSL3)
6. ESD voltage: 100V(MM), 200V(HBM)

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

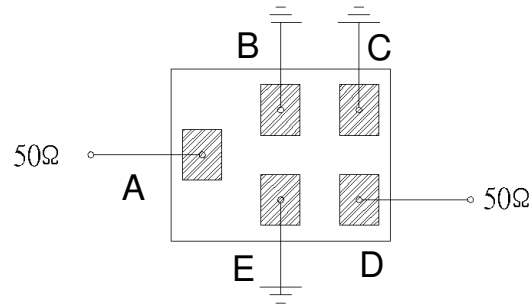
Terminating source impedance :  $Z_s = 50 \Omega$

Terminating load impedance :  $Z_L = 50 \Omega$

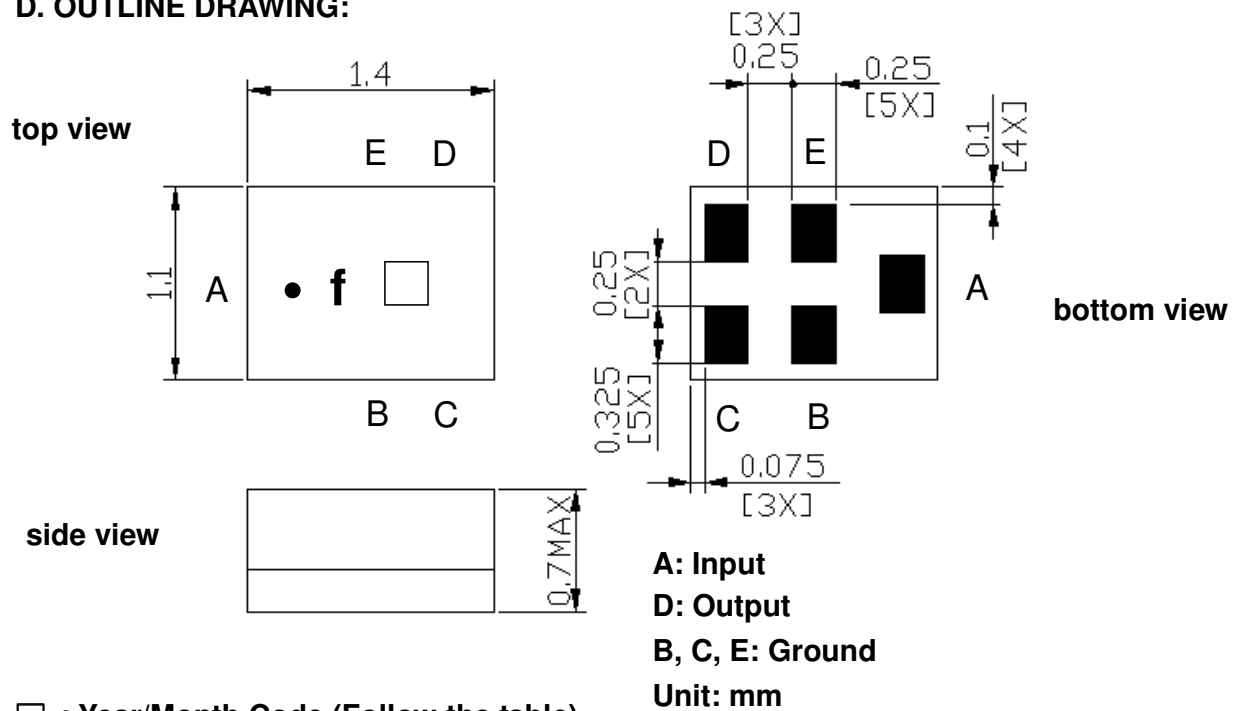
| Item                                           | Unit  | Min. | Typ.  | Max. |
|------------------------------------------------|-------|------|-------|------|
| <b>Center Frequency</b> <b>Fc</b>              | MHz   | -    | 911.5 | -    |
| <b>Insertion Loss</b> (898~925 MHz) <b>IL</b>  | dB    | -    | 2.1   | 3.4  |
| <b>Amplitude ripple</b> (898~925 MHz)          | dB    | -    | 1.0   | 2.0  |
| <b>VSWR</b> (898~925 MHz)                      | -     | -    | 1.9   | 2.4  |
| <b>Attenuation</b> (Reference level from 0 dB) |       |      |       |      |
| 720 ~ 800 MHz                                  | dB    | 45   | 48    | -    |
| 843 ~ 870 MHz                                  | dB    | 40   | 44    | -    |
| 940 ~ 2000 MHz                                 | dB    | 10   | 23    | -    |
| 2000 ~ 3000 MHz                                | dB    | 30   | 33    | -    |
| <b>Temperature coefficient of frequency</b>    | ppm/k | -    | -36   | -    |

| Item                                           | Unit | Min. | Typ. | Max. |
|------------------------------------------------|------|------|------|------|
| <b>Attenuation</b> (Reference level from 0 dB) |      |      |      |      |
| <b>2nd Harmonic</b> (1736~1738MHZ)             | dB   | 37   | 39   | -    |
| <b>3rd Harmonic</b> (2604~2607MHZ)             | dB   | 32   | 34   | -    |
| <b>4th Harmonic</b> (3472~3476MHZ)             | dB   | 29   | 31   | -    |

### C. MEASUREMENT CIRCUIT:



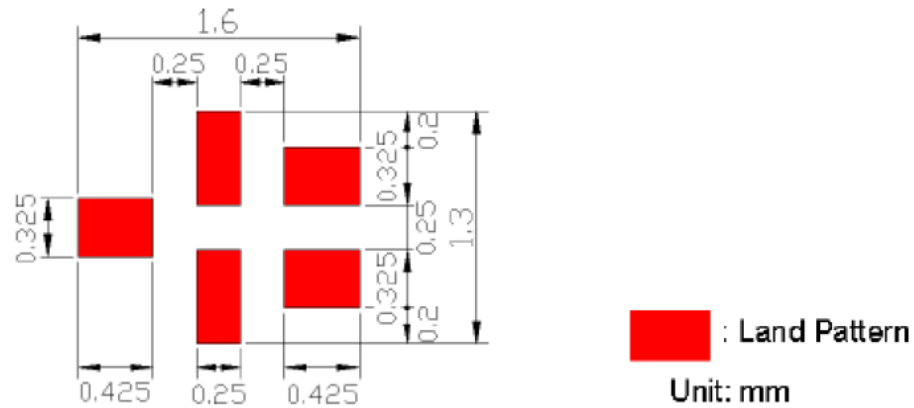
### D. OUTLINE DRAWING:



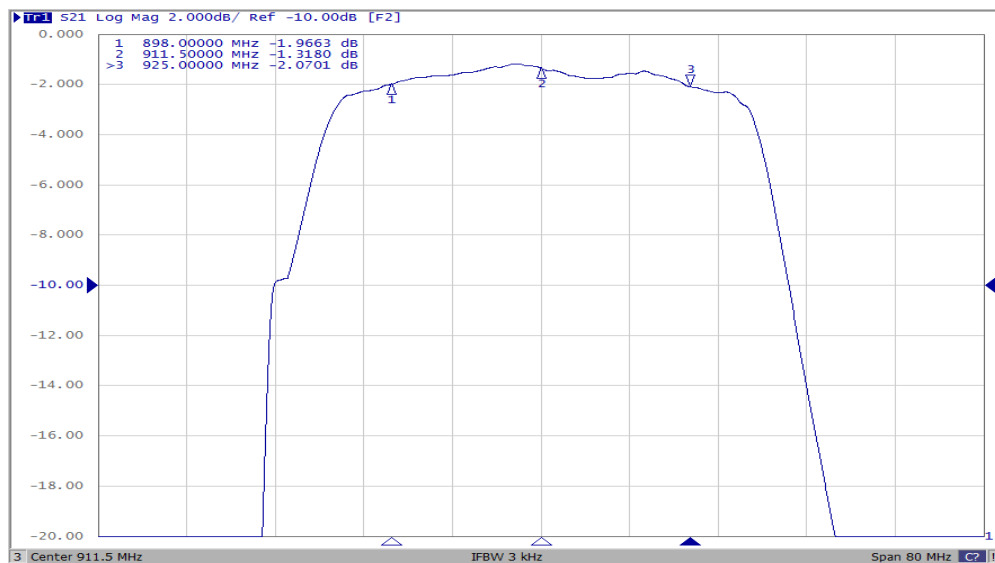
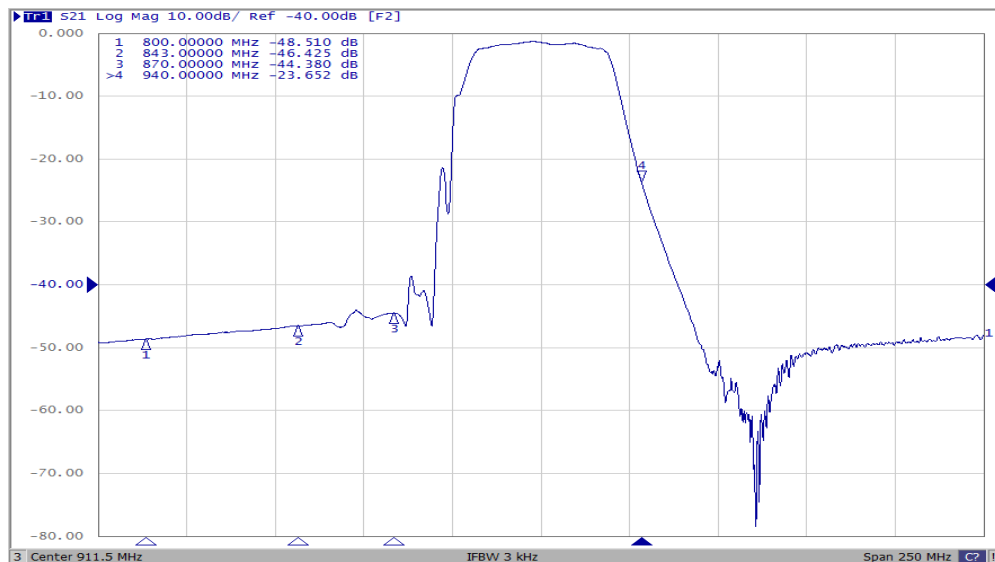
□ : Year/Month Code (Follow the table)

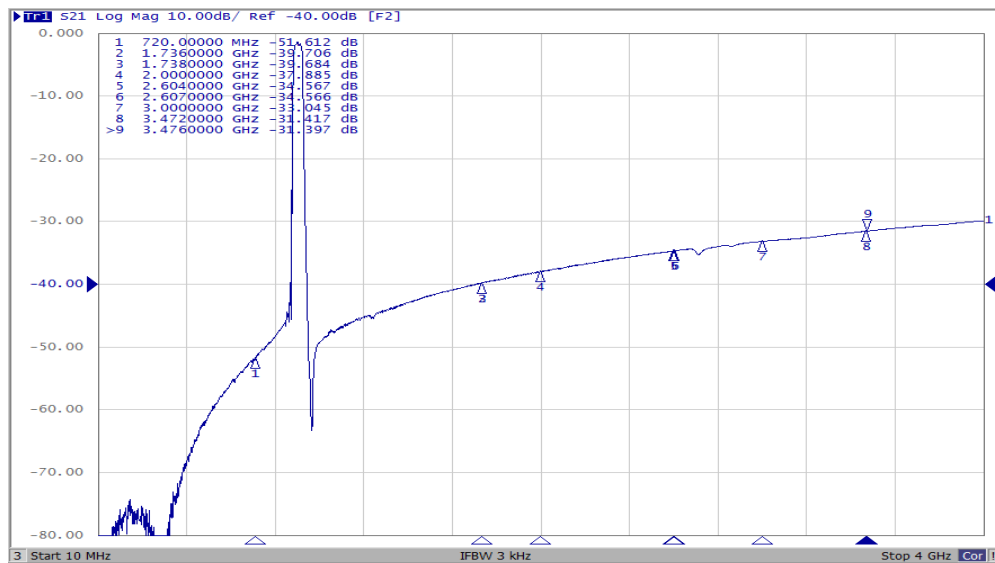
| YEAR/Month | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2013       | A        | B        | C        | D        | E        | F        | G        | H        | J        | K        | L        | M        |
| 2014       | N        | P        | Q        | R        | S        | T        | U        | V        | W        | X        | Y        | Z        |
| 2015       | a        | b        | c        | d        | e        | f        | g        | h        | j        | k        | l        | m        |
| 2016       | n        | p        | q        | r        | s        | t        | u        | v        | w        | x        | y        | z        |
| 2017       | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> | <u>G</u> | <u>H</u> | <u>J</u> | <u>K</u> | <u>L</u> | <u>M</u> |
| 2018       | <u>N</u> | <u>P</u> | <u>Q</u> | <u>R</u> | <u>S</u> | <u>T</u> | <u>U</u> | <u>V</u> | <u>W</u> | <u>X</u> | <u>Y</u> | <u>Z</u> |
| 2019       | <u>a</u> | <u>b</u> | <u>c</u> | <u>d</u> | <u>e</u> | <u>f</u> | <u>g</u> | <u>h</u> | <u>j</u> | <u>k</u> | <u>l</u> | <u>m</u> |
| 2020       | <u>n</u> | <u>p</u> | <u>q</u> | <u>r</u> | <u>s</u> | <u>t</u> | <u>u</u> | <u>v</u> | <u>w</u> | <u>x</u> | <u>y</u> | <u>z</u> |

## E. PCB Footprint:



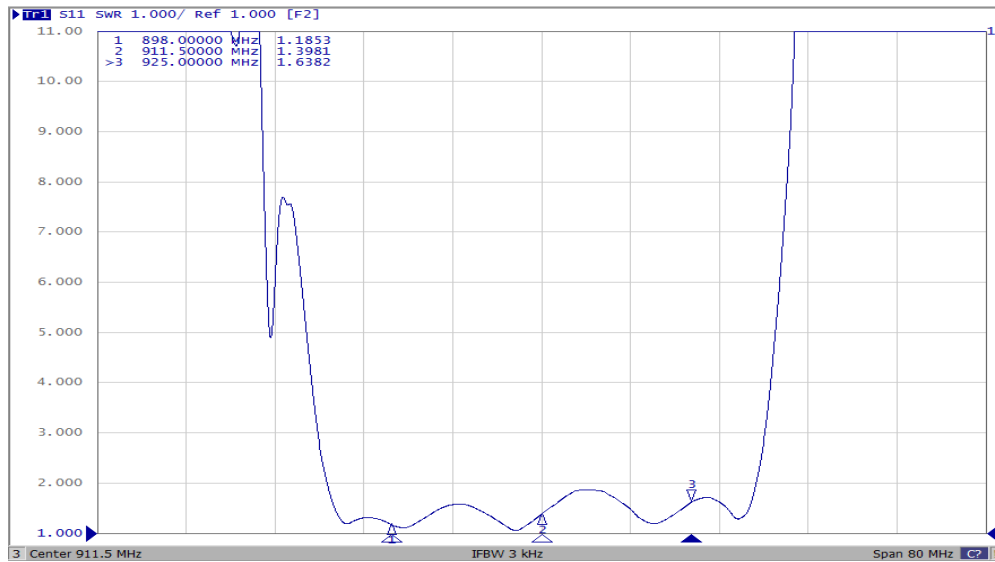
## F. Frequency Characteristics:



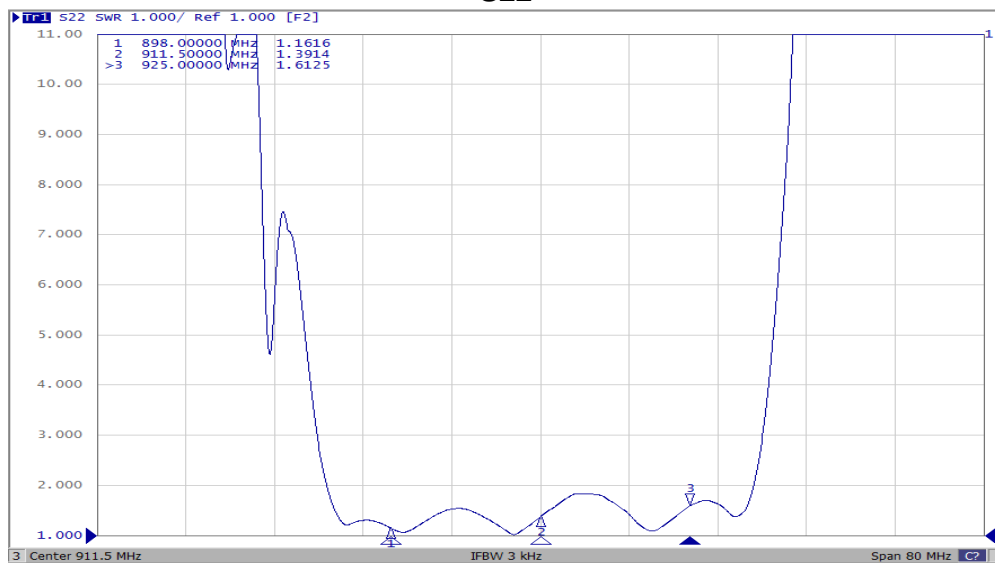


## Reflection Functions:

S11



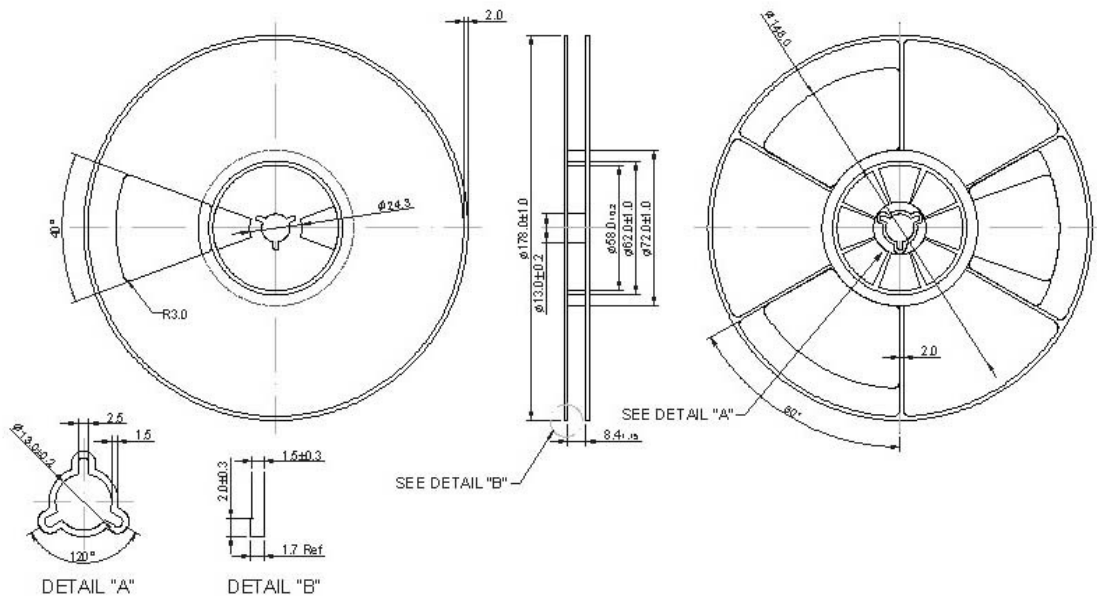
S22



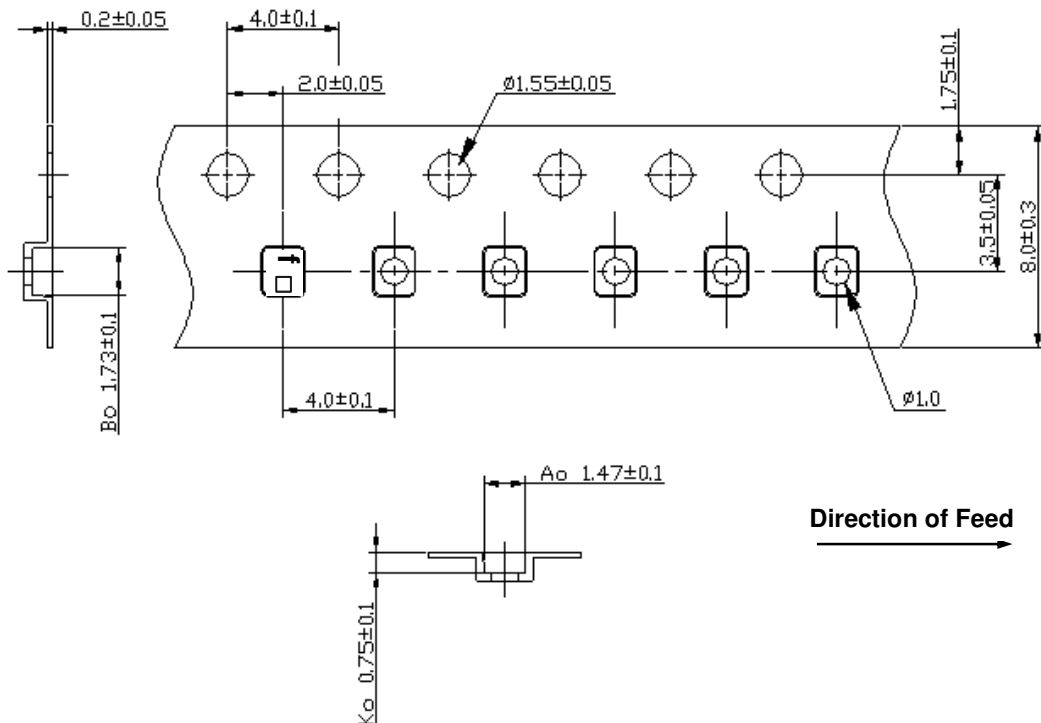
## G. PACKING: (Ref. WI-75M03)

### 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 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

