



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,

Taoyuan, 324, Taiwan, R.O.C.

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## Product Specifications Approval Sheet

Product Description: SAW Filter 1575.42 MHz SMD 3.0X3.0 mm(BW=2MHz)

TST Part No.: TA1464B(This part is compliant with AEC-Q200)

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

Customer signature required

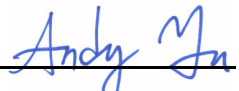
Company: \_\_\_\_\_

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

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

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

Checked by: \_\_\_\_\_ Anne Chen 

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

Date: \_\_\_\_\_ 08. 20, 2019

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 change



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## SAW Filter 1575.42 MHz

MODEL NO.:TA1464B

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40℃ to +105℃
4. Storage Temperature: -40℃ to +105℃
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

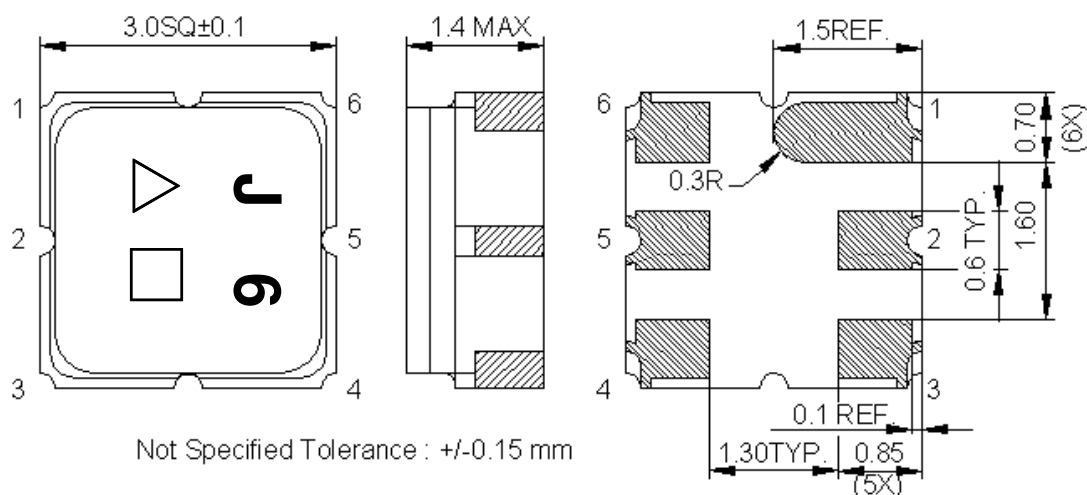
### B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single ended) :  $Z_s = 50 \Omega$

Terminating load impedance (single ended) :  $Z_L = 50 \Omega$

| Item                                               | Unit  | Min. | Typ.    | Max. | Note |
|----------------------------------------------------|-------|------|---------|------|------|
| <b>Center Frequency</b> <b>Fc</b>                  | MHz   | -    | 1575.42 | -    | -    |
| <b>Insertion Loss</b> (1574.42 ~ 1576.42 MHz)      | dB    | -    | 2.2     | 3.5  | -    |
| <b>Amplitude Variation</b> (1574.42 ~ 1576.42 MHz) | dB    | -    | 0.2     | 1.5  | -    |
| <b>VSWR</b> (1574.42 ~ 1576.42 MHz)                |       | -    | 1.9     | 2.3  | -    |
| <b>Attenuation</b> (reference level from 0 dB)     |       |      |         |      |      |
| 100~1000 MHz                                       | dB    | 60   | 64      | -    | -    |
| 1500 MHz                                           | dB    | 40   | 48      | -    | -    |
| 1535.42 MHz                                        | dB    | 35   | 45      | -    | -    |
| 1615.42 MHz                                        | dB    | 25   | 65      | -    | -    |
| 1640 MHz                                           | dB    | 45   | 60      | -    | -    |
| 1700 MHz                                           | dB    | 50   | 56      | -    | -    |
| 1700~2200 MHz                                      | dB    | 43   | 46      | -    | -    |
| <b>Temperature Coefficient of Frequency</b>        | ppm/℃ | -    | -36     | -    | -    |

## C.OUTLINE DRAWING:



Marking name :J6

△ : Year Code (2019->9, 2020->0,..., 2028->8)

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

Date 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    |

2 : Input

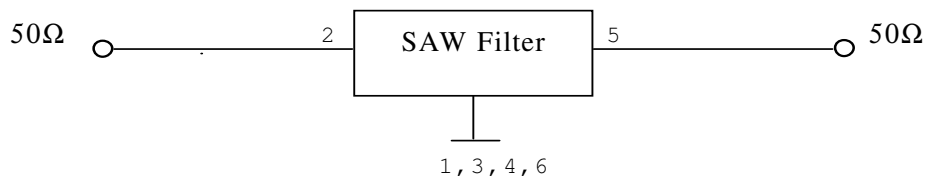
5 : Output

1,3,4,6 : Ground

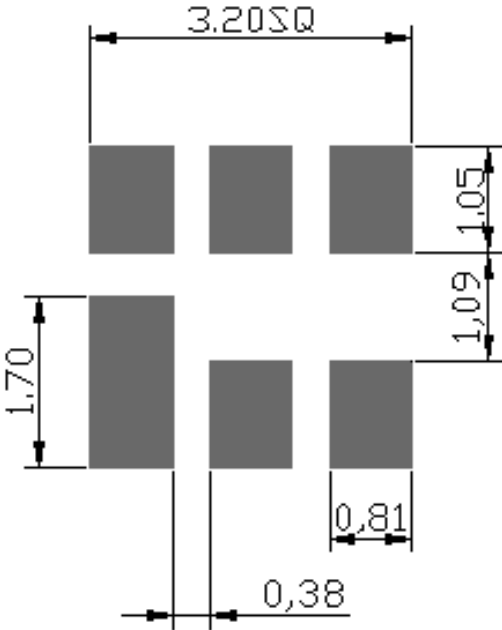
Unit : mm

## D. MEASUREMENT CIRCUIT:

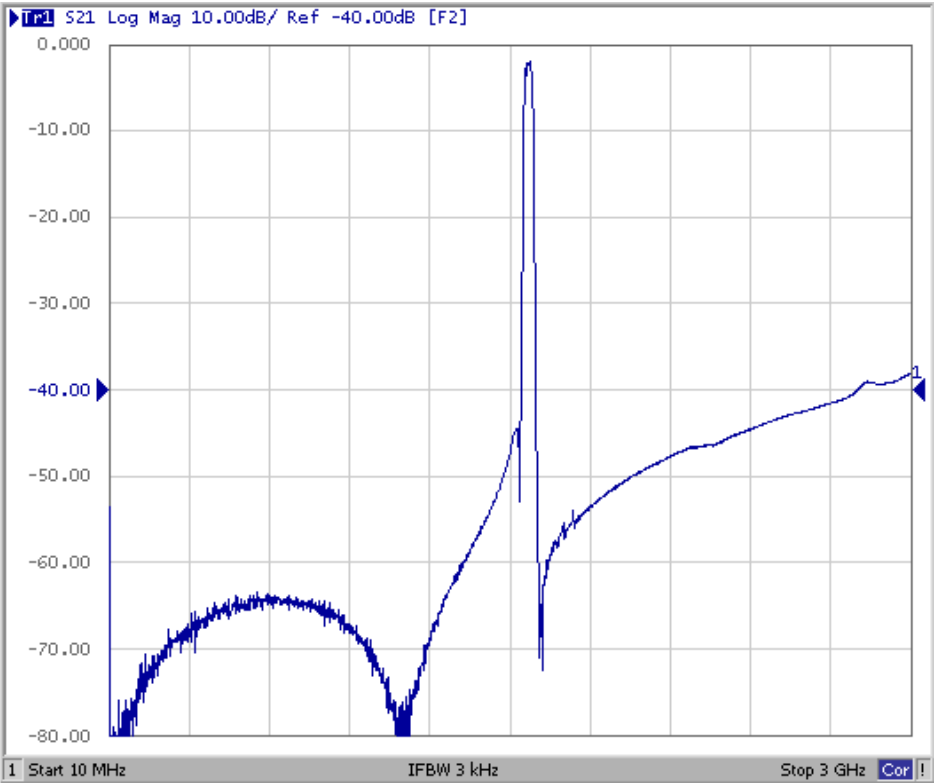
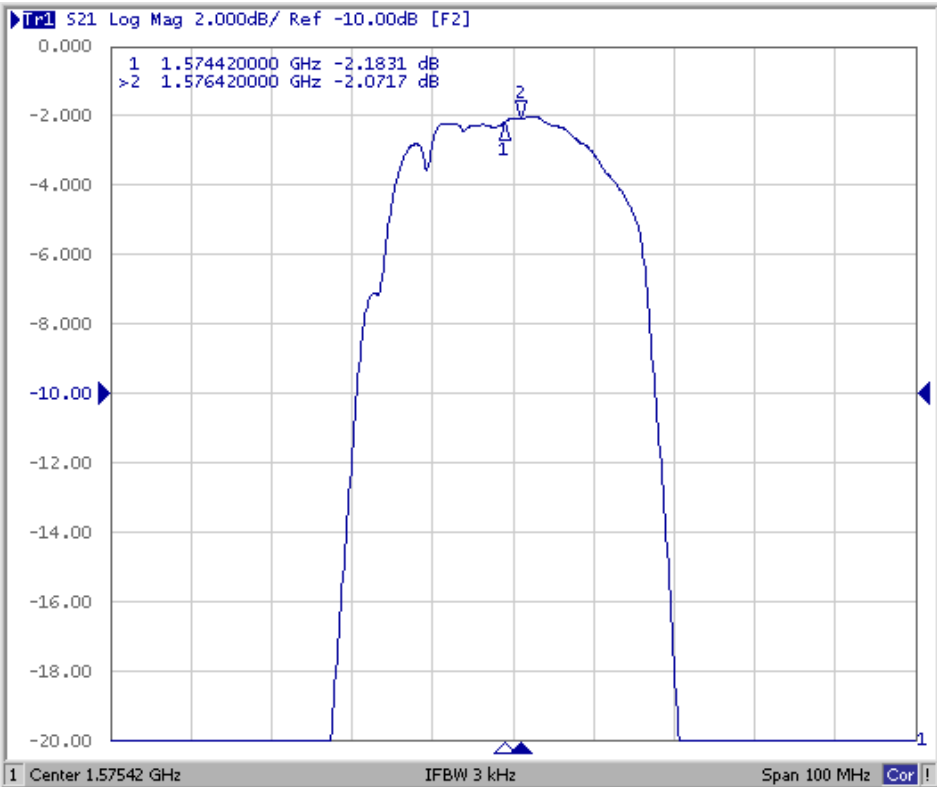
HP Network analyzer



E. PCB Footprint:

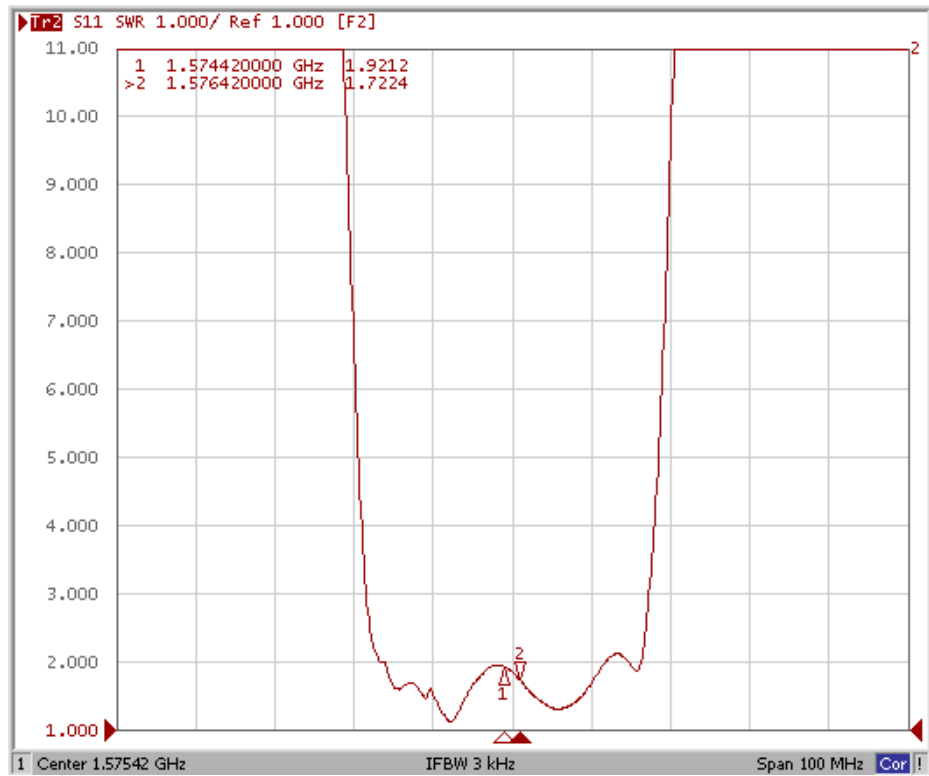


F. Frequency Characteristics :

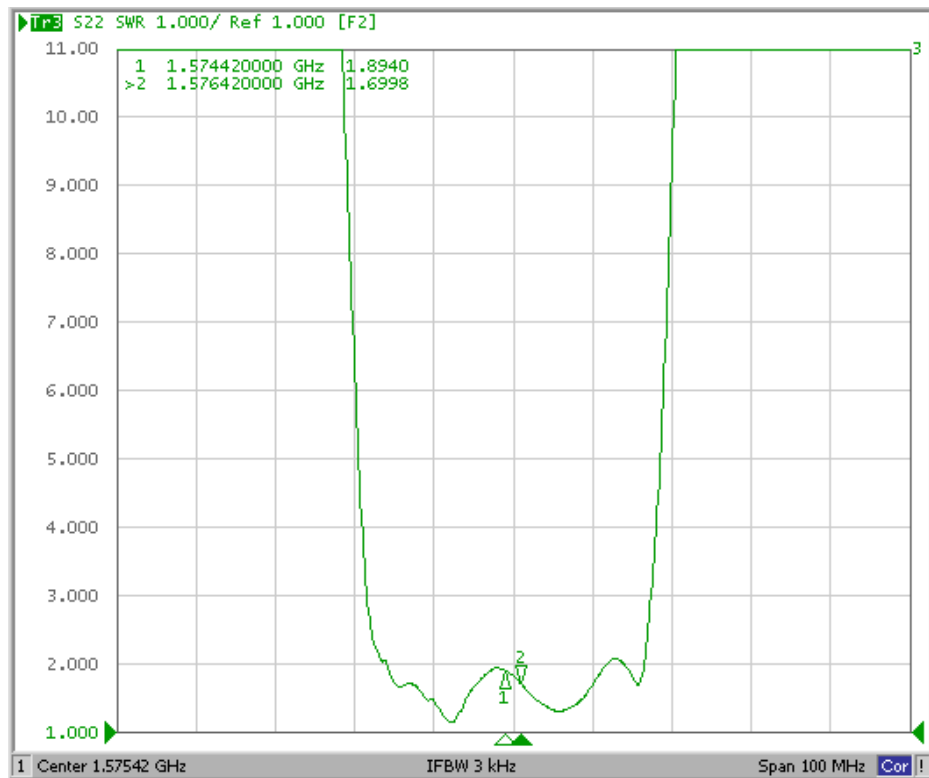


Reflection Functions :

S11



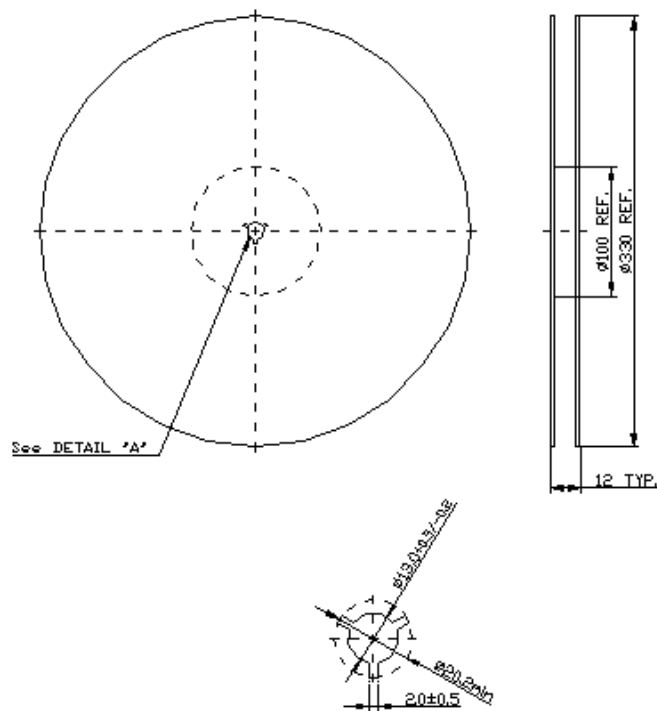
S22



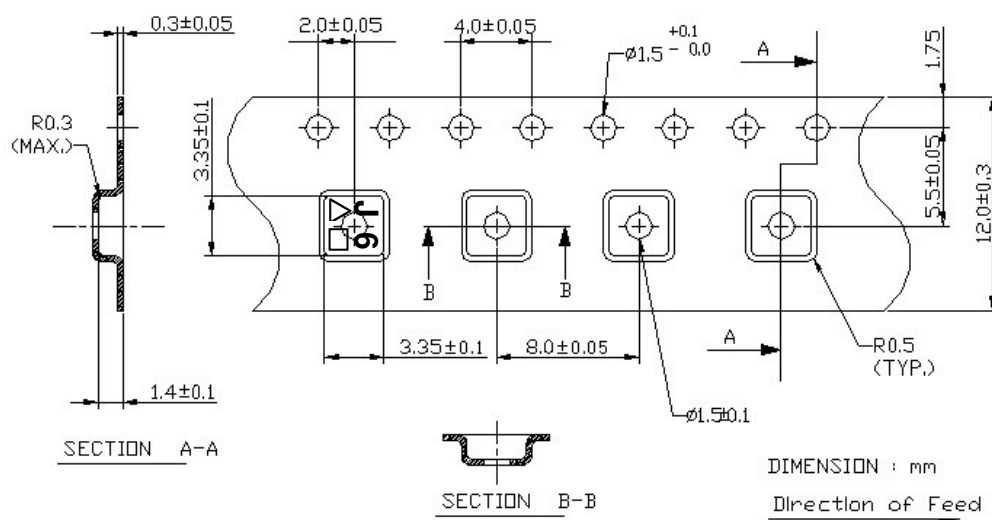
## G. PACKING:

### 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.

