



# 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 1575.5 MHz SMD 3.0X3.0 mm

TST Part No.: TA0549A

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

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

Checked by: \_\_\_\_\_ Bob Chau 

Approved by: \_\_\_\_\_ Francis Chen 

Date: \_\_\_\_\_ 7, 24, 2012

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 1575.5 MHz

MODEL NO.:TA0549A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -55°C to +85°C
4. Storage Temperature: -55°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS: ( By 20°C )

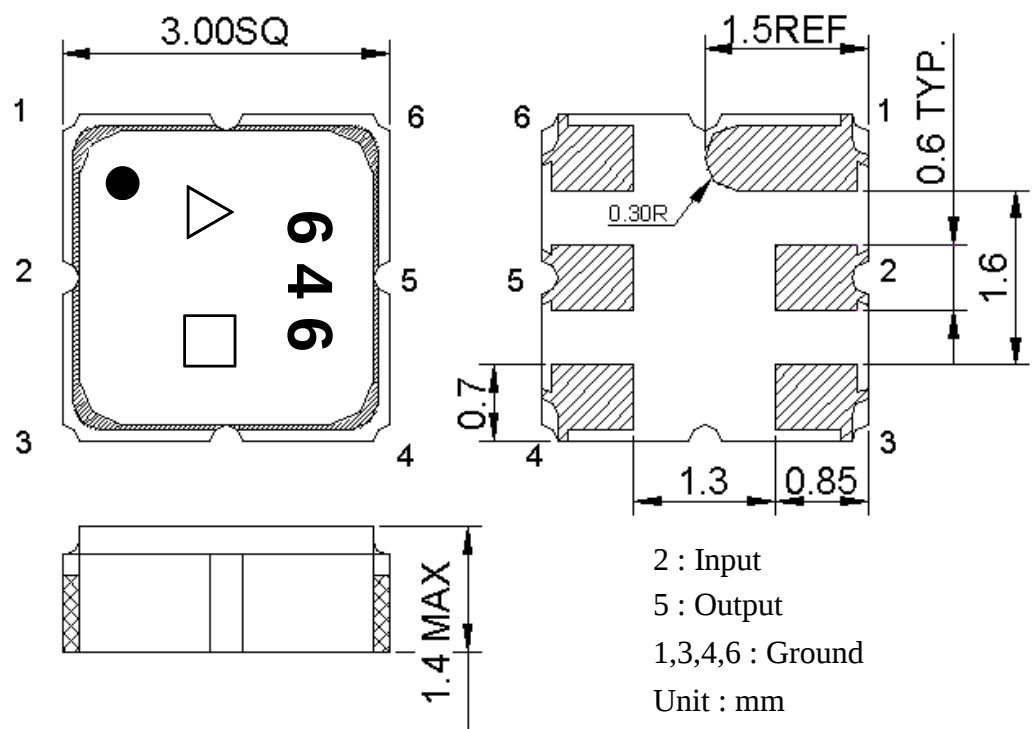
Terminating source impedance (single ended) :  $Z_s = 50 \Omega$

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

| Item                                    | Unit | Min. | Typ.   | Max. | Note |
|-----------------------------------------|------|------|--------|------|------|
| Center Frequency <b>Fc</b>              | MHz  | -    | 1575.5 | -    | -    |
| Min. Insertion Loss <b>IL</b>           | dB   | -    | 3      | 5    | -    |
| Amplitude Ripple (1569 ~ 1582 MHz)      | dB   | -    | 0.8    | 1.2  | -    |
| Group Delay Ripple (1569 ~ 1582 MHz)    | ns   | -    | 9      | 18   | -    |
| VSWR (1569 ~ 1582 MHz)                  |      | -    | 2      | 2.2  | -    |
| Relative Attenuation (relative to 0 dB) |      |      |        |      |      |
| D.C. ~ 1525 MHz                         | dB   | 35   | 50     | -    | -    |
| 1602 ~ 1616 MHz                         | dB   | 20   | 43     | -    | -    |
| 1616 ~ 3000 MHz                         | dB   | 35   | 43     | -    | -    |

Deviation of Center and Bounder Frequencies in temperature range from -55 °C to +85 °C by TCD = -35 ppm/grad.

C.OUTLINE DRAWING:

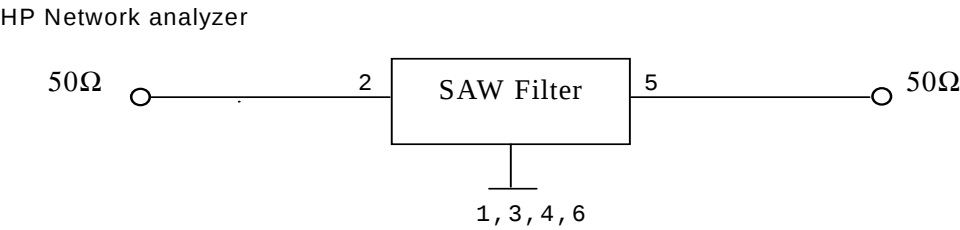


△ : Year Code (2009->9, 2010->0,..., 2018->8)  
□ : Date Code (Follow the table from planner each year)

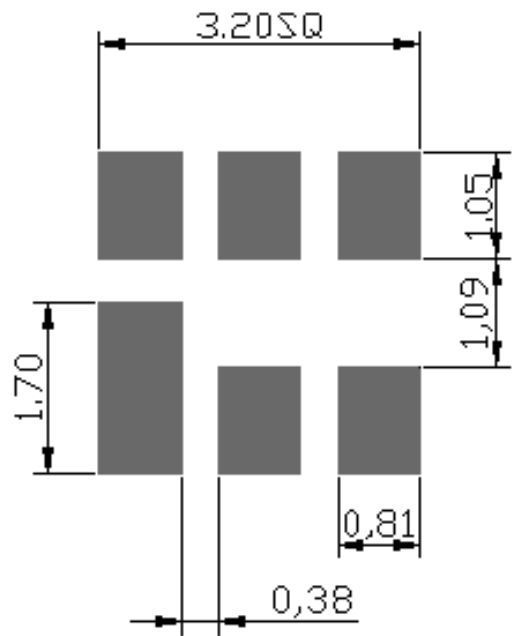
Date Code Table

| 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    |

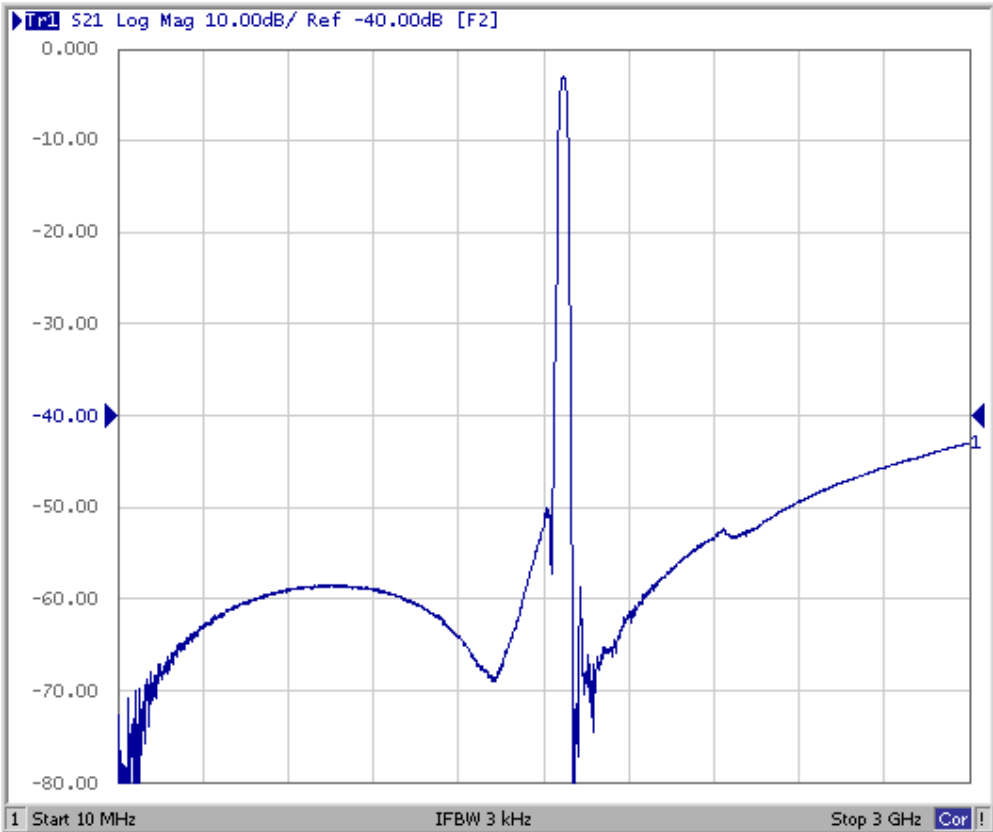
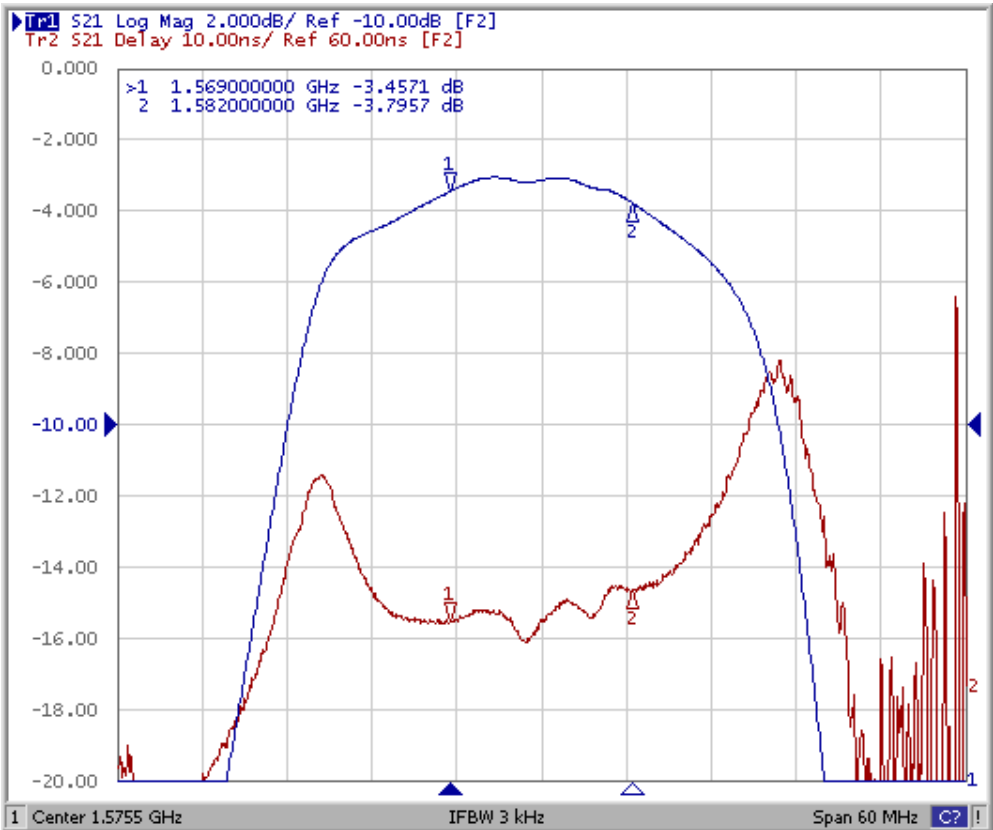
D. MEASUREMENT CIRCUIT:



E. PCB Footprint:

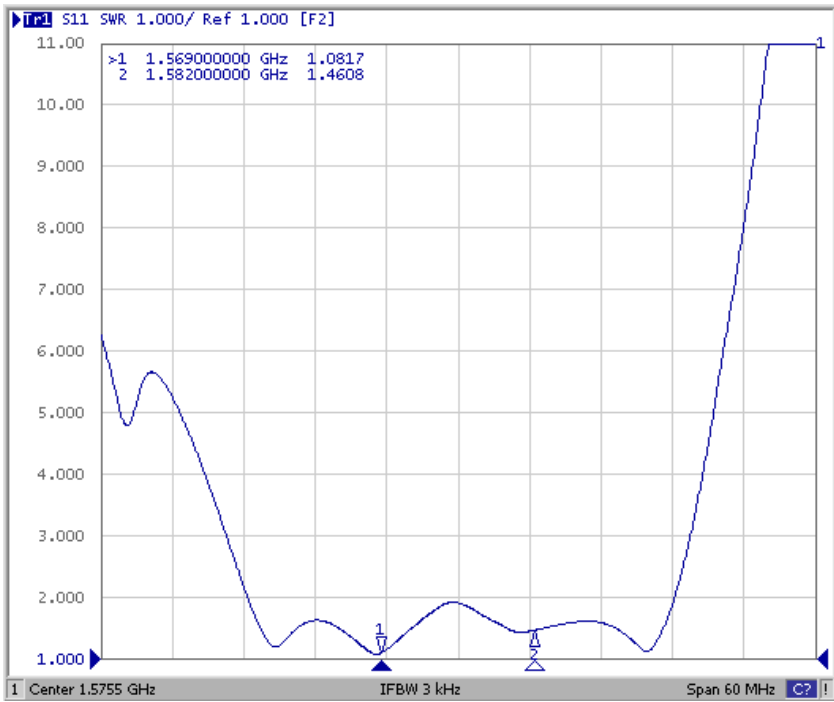


F. Frequency Characteristics :

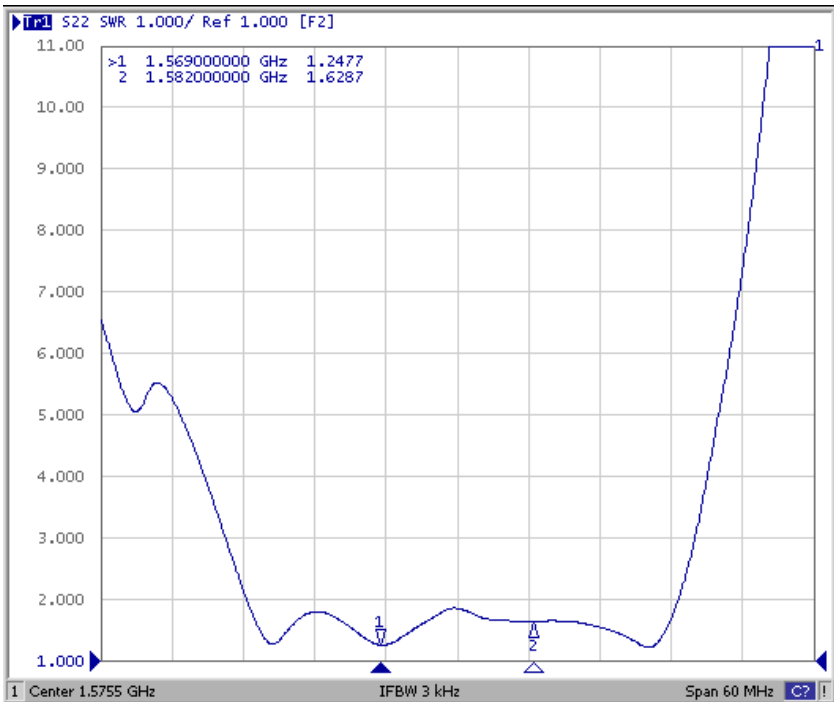


Reflections Functions :

S11 VSWR



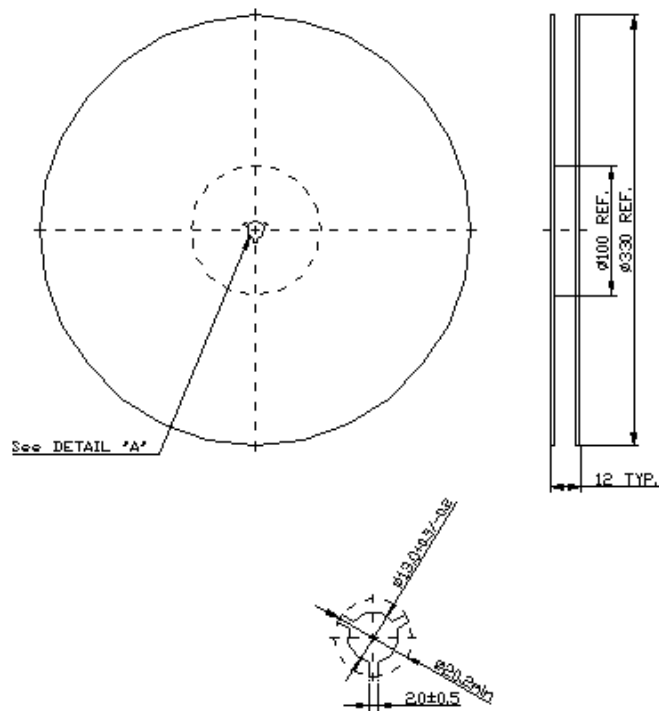
S22 VSWR



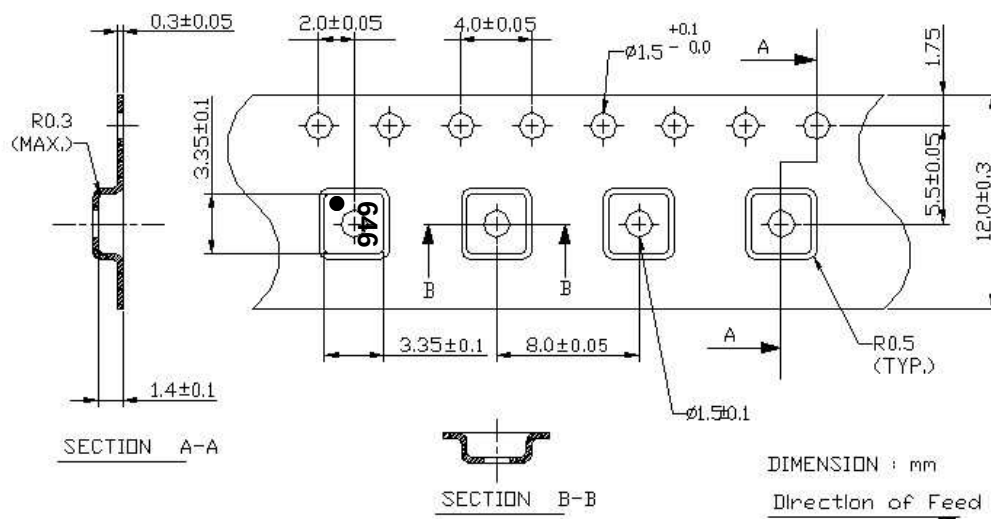
## G. PACKING:

### 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.

