

## 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

Issued Date: May, 01, 2013

Product Description: SAW Filter 1575MHz SMD 3.0X3.0 mm (BW=20MHz)

TST Part No.: TA1153A

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

Customer signature required

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

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

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

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

Checked by: \_\_\_\_\_ Paul Ni \_\_\_\_\_

Approved by: \_\_\_\_\_ Bob Chan \_\_\_\_\_

Date: \_\_\_\_\_ 2013/05/01 \_\_\_\_\_

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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**TST DCC**  
Release document

FR-71S03-02



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## SAW Filter 1575MHz

MODEL NO.: TA1153A

REV. NO : 1.0

### A. MAXIMUM RATING:

1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 3 V
3. Operating Temperature: -20°C to +70°C
4. Storage Temperature: -30°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

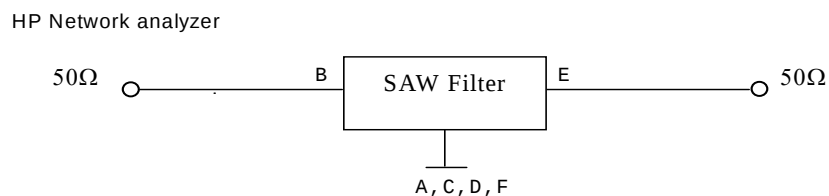
Electrostatic Sensitive Device

### B. ELECTRICAL CHARACTERISTICS:

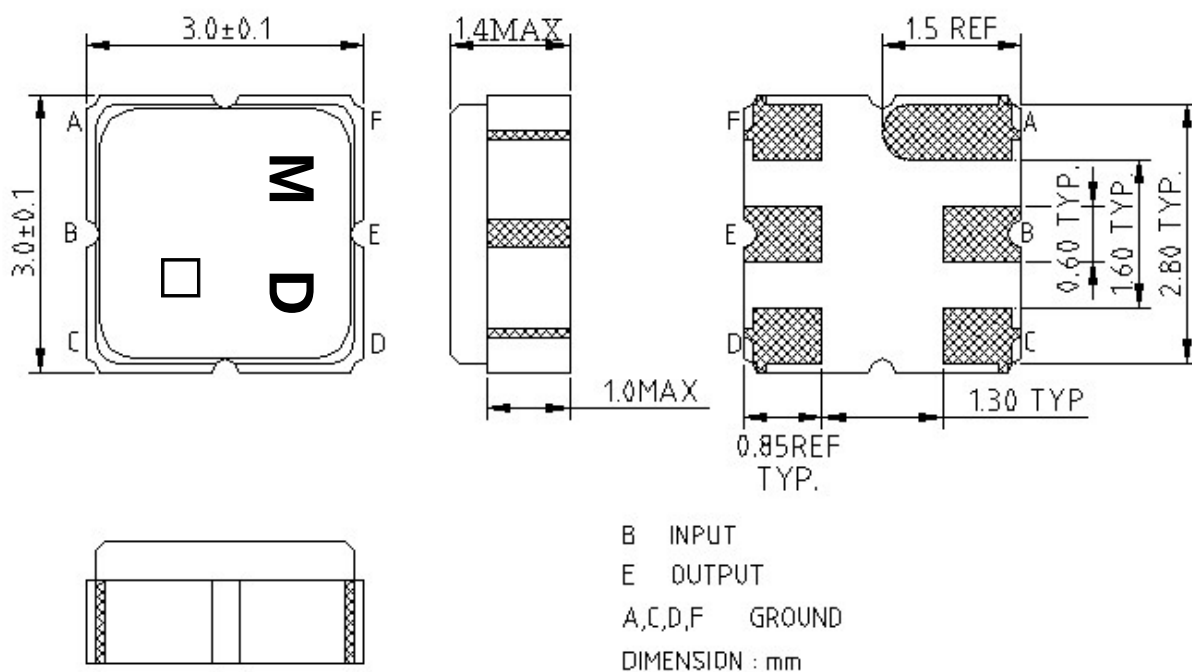
| Item                                            | Unit | Min. | Typ. | Max. |
|-------------------------------------------------|------|------|------|------|
| Center frequency <b>F<sub>c</sub></b>           | MHz  | -    | 1575 | -    |
| 3dB BW                                          | MHz  | -    | 47   | -    |
| Insertion loss within 1565 ~ 1585 MHz <b>IL</b> | dB   | -    | 1.9  | 4.0  |
| Amplitude ripple(p-p) within 1565 ~ 1585 MHz    | dB   | -    | 0.5  | 1.8  |
| Group delay ripple(p-p) within 1565 ~ 1585 MHz  | ns   | -    | 8    | 25   |
| Return Loss 1565 ~1585 MHz                      | dB   | 8    | 12   | -    |
| Attenuation (Reference level from 0 dB)         |      |      |      |      |
| 10 ~ 1425 MHz                                   | dB   | 33   | 40   | -    |
| 1425 ~ 1500 MHz                                 | dB   | 40   | 42.5 | -    |
| 1640 ~ 2100 MHz                                 | dB   | 38   | 47   | -    |
| 2100 ~ 3000 MHz                                 | dB   | 25   | 41   | -    |
| Source impedance <b>Z<sub>s</sub></b>           | Ω    | -    | 50   | -    |
| Load impedance <b>Z<sub>L</sub></b>             | Ω    | -    | 50   | -    |

### C. MEASUREMENT CIRCUIT:

50 Ohm Test circuit ( single-ended / single-ended )



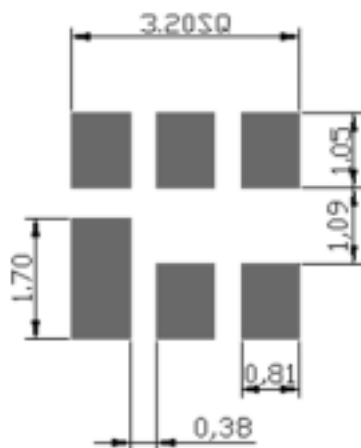
### D.OUTLINE DRAWING:



: Year Code(2012→2,2013→3...2019→9)

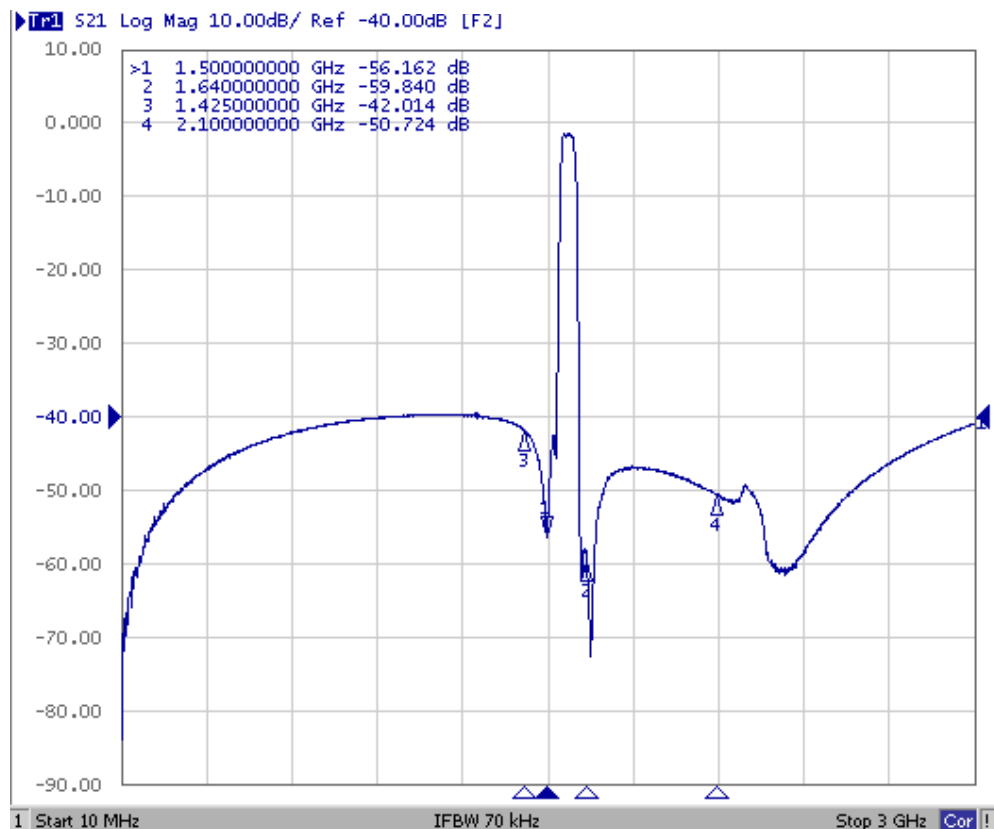
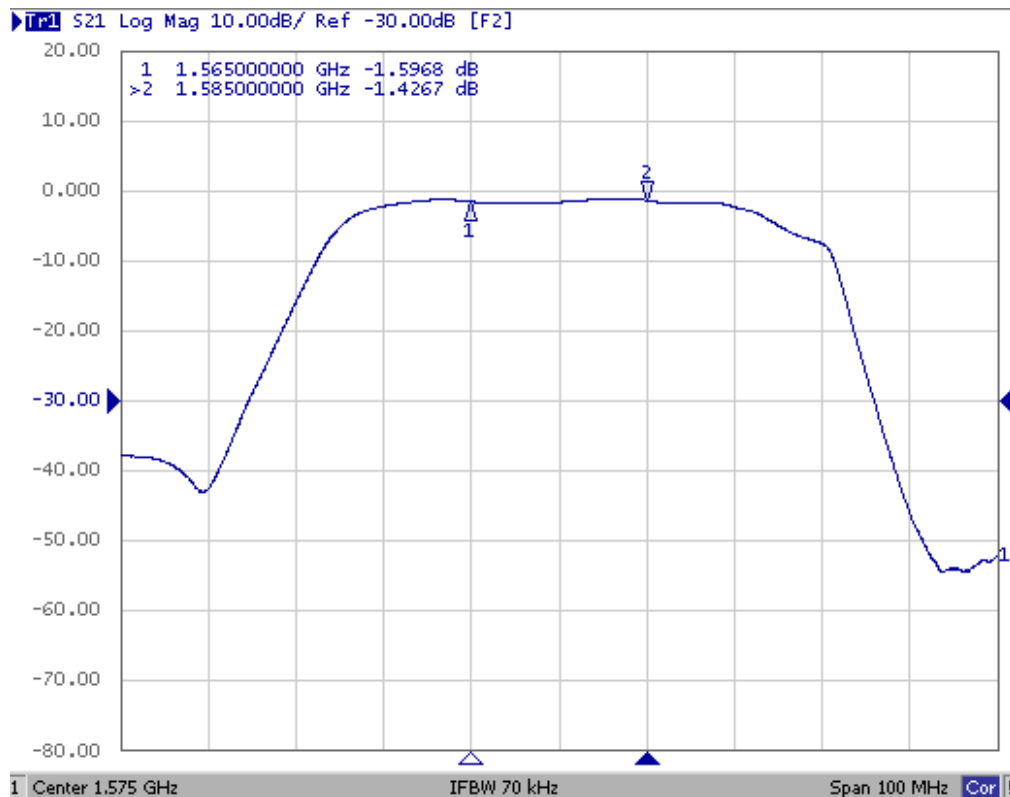
□ : Date Code(Follow the table from planner each year)

### E. PCB Footprint :

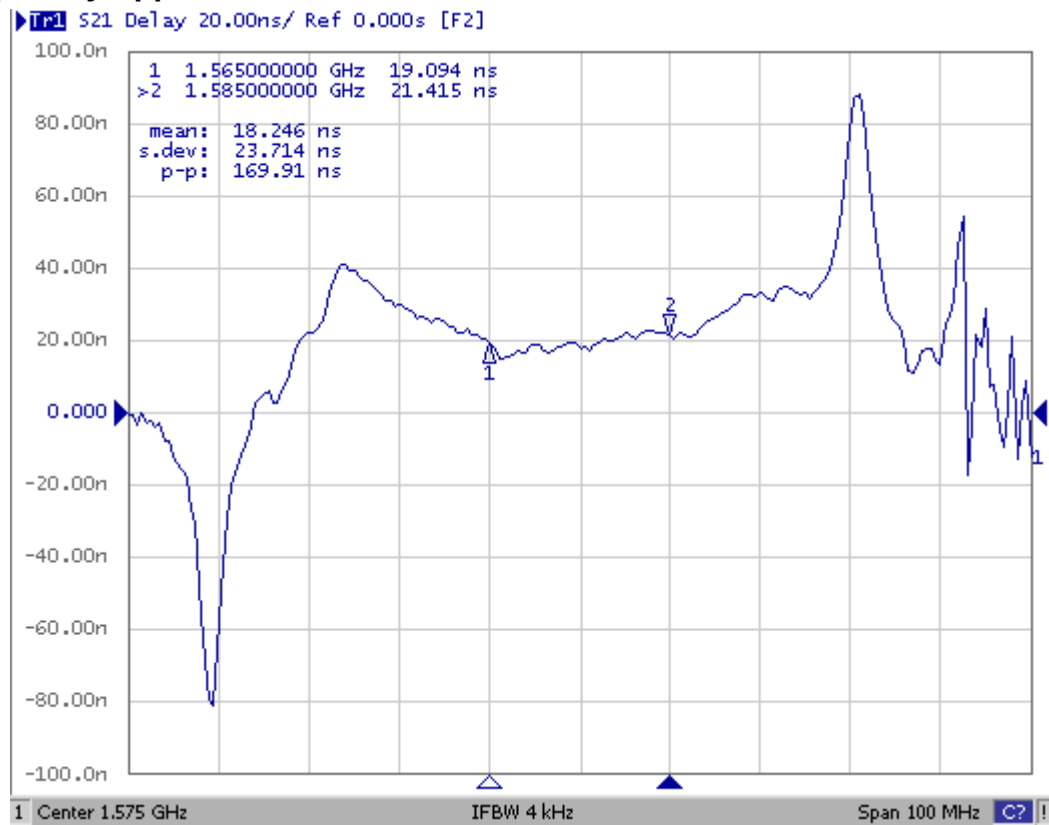


## F. Frequency Characteristics :

### Transfer function

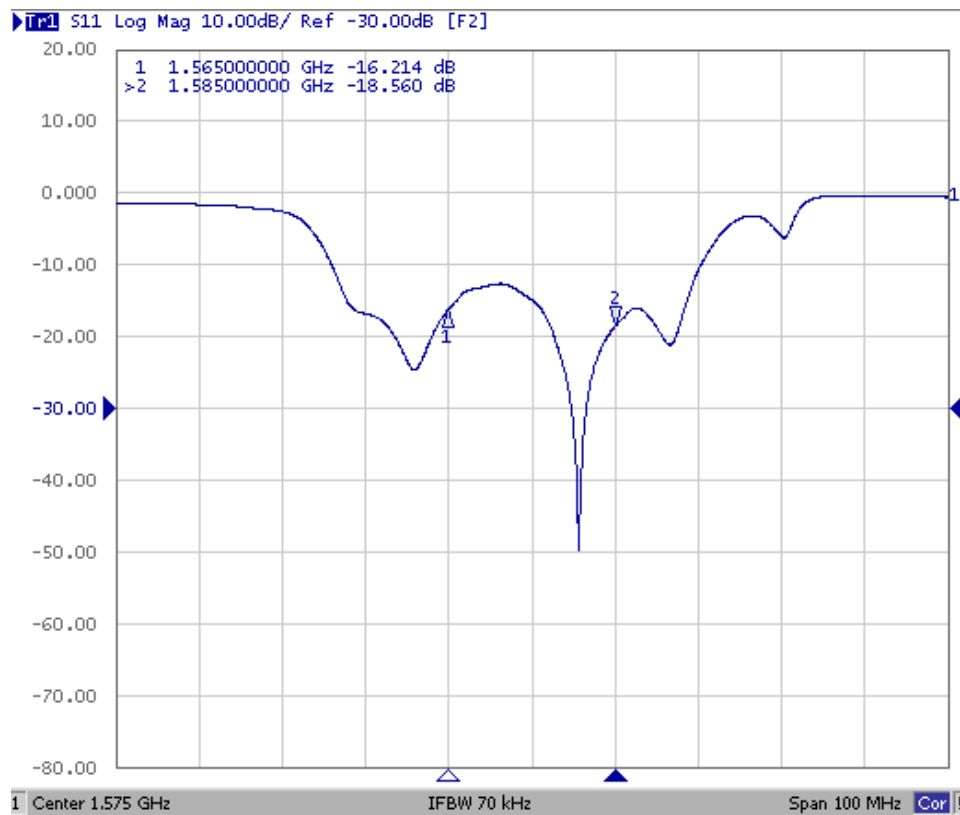


## Group delay ripple :

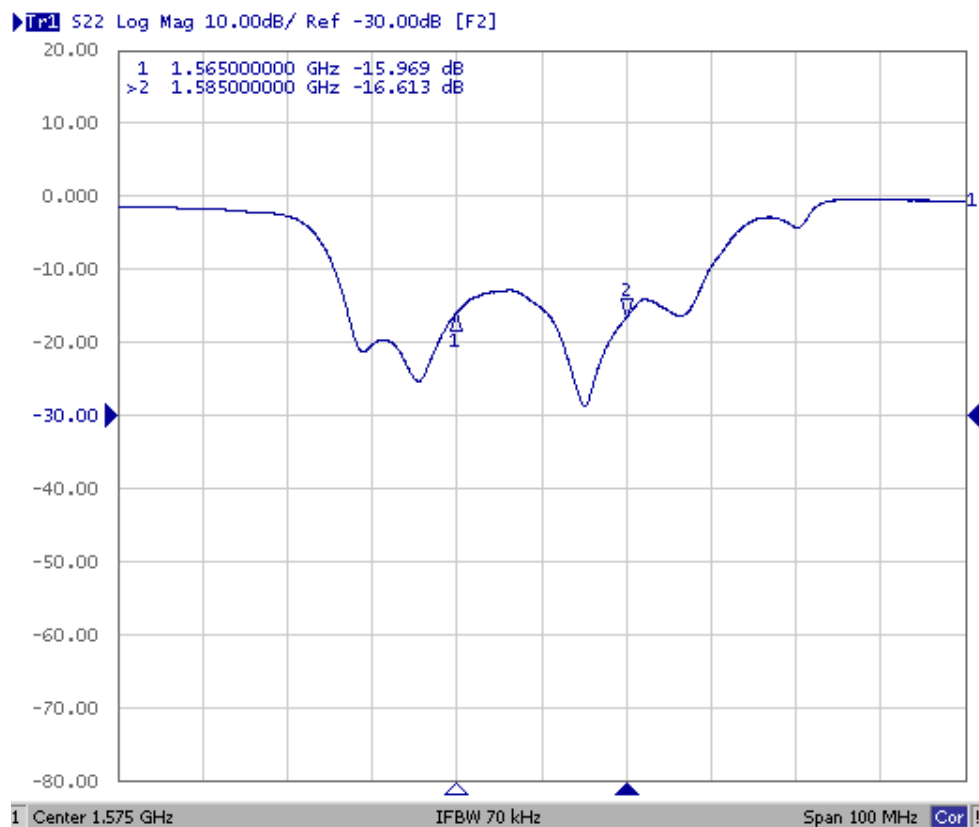


## Reflection Functions :

### Return Loss--S11

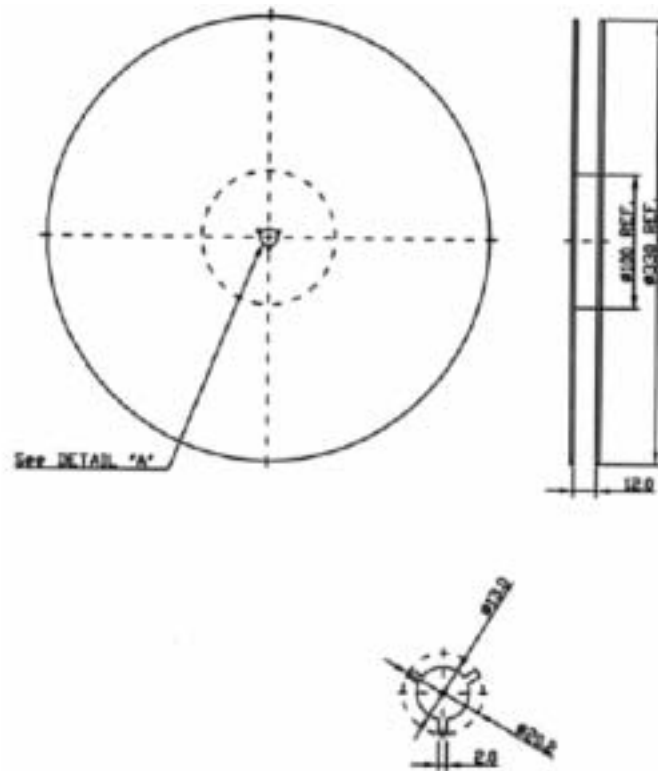


### Return Loss—S22

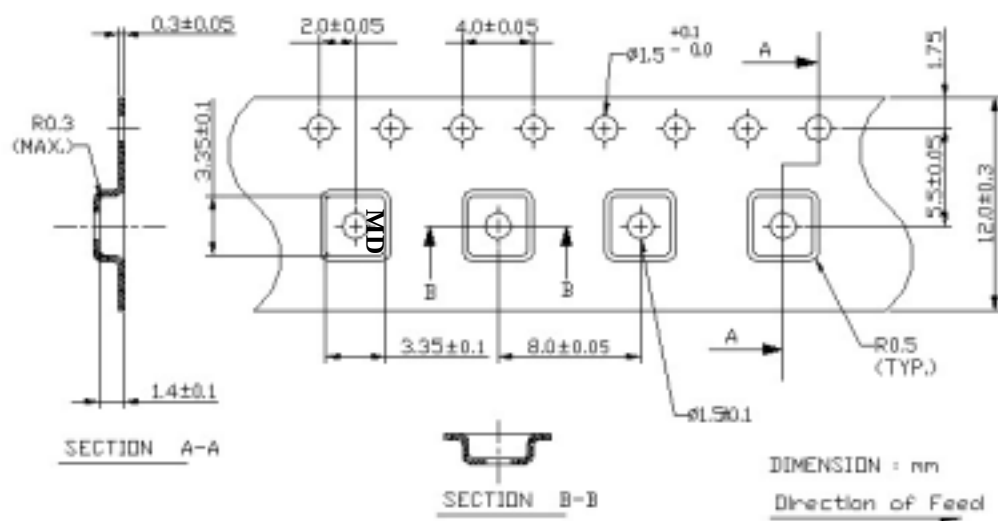


## G. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION



#### H. RECOMMENDED REFLOW PROFILE:

