



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 1591.5 MHz SMD 1.4x1.1 mm (BW=35 MHz)

TST Part No.: TA1175A

Customer Part No.: _____

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

Checked by: _____ David Chang 

Approved by: _____ Bob Chau 

Date: _____ 2013/03/25

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 1591.5 MHz SMD 1.4x1.1 mm (BW=35 MHz)

MODEL NO.:TA1175A

REV. NO.3.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

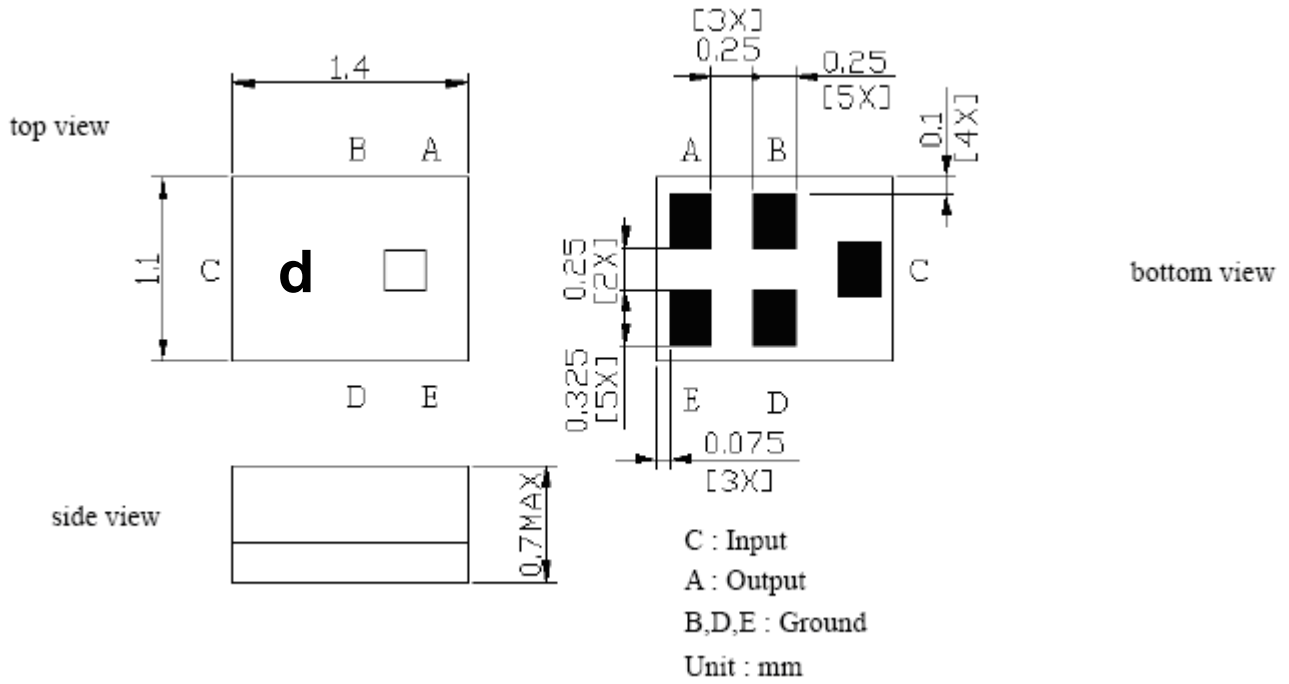
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : $Z_s = 50$

Terminating load impedance : $Z_L = 50$

| Item | Unit | Min. | Type. | Max. | |
|--|-----------|------|-------|--------|-----|
| Center Frequency | Fc | MHz | - | 1591.5 | - |
| Insertion Loss (1574~1609 MHz) | IL | dB | - | 2.4 | 3.7 |
| Amplitude ripple (1574~1609 MHz) | | dB | - | 1.3 | 2.6 |
| VSWR (1574~1609 MHz) | | - | - | 2.0 | 2.4 |
| Group Delay Variation (1574~1609 MHz) | | ns | - | 17 | 50 |
| Attenuation (Reference level from 0 dB) | | | | | |
| 10~1200 MHz | | dB | 28 | 34 | - |
| 1200~1450 MHz | | dB | 28 | 34 | - |
| 1450~1540 MHz | | dB | 20 | 37 | - |
| 1626~1710 MHz | | dB | 9 | 31 | - |
| 1710~2000 MHz | | dB | 30 | 37 | - |
| 2000~2500 MHz | | dB | 30 | 37 | - |
| Temperature Coefficient of Frequency | | Ppm/ | - | -36 | - |

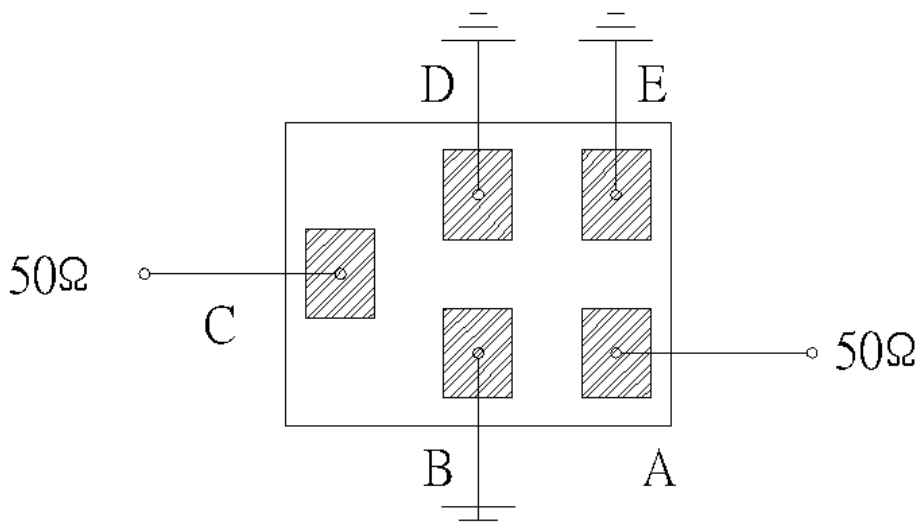
C. OUTLINE DRAWING:



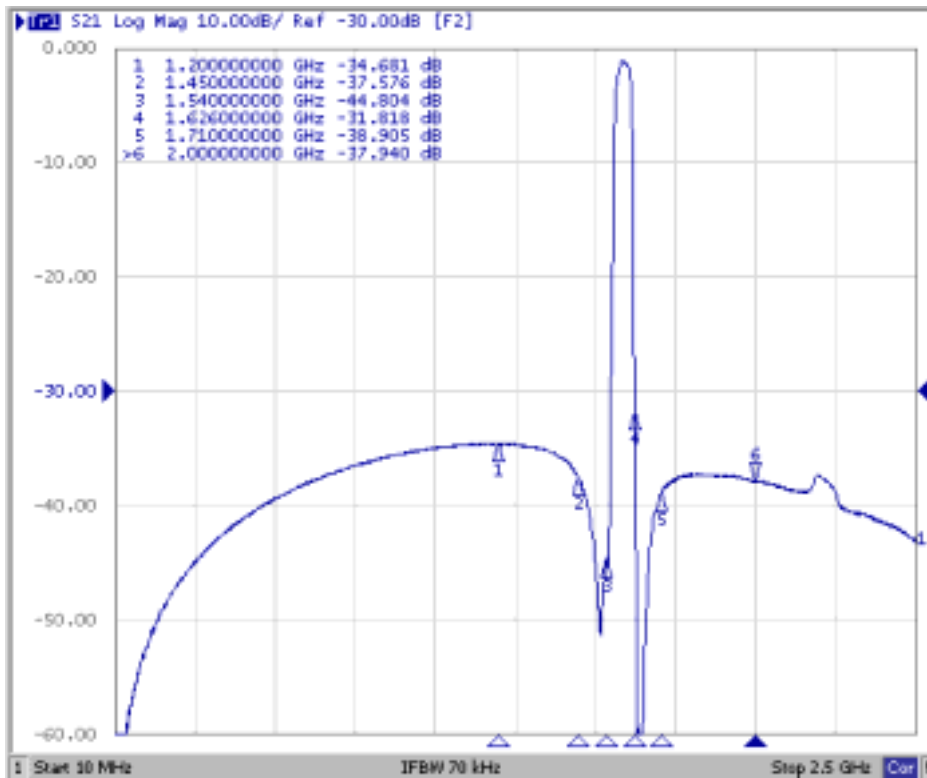
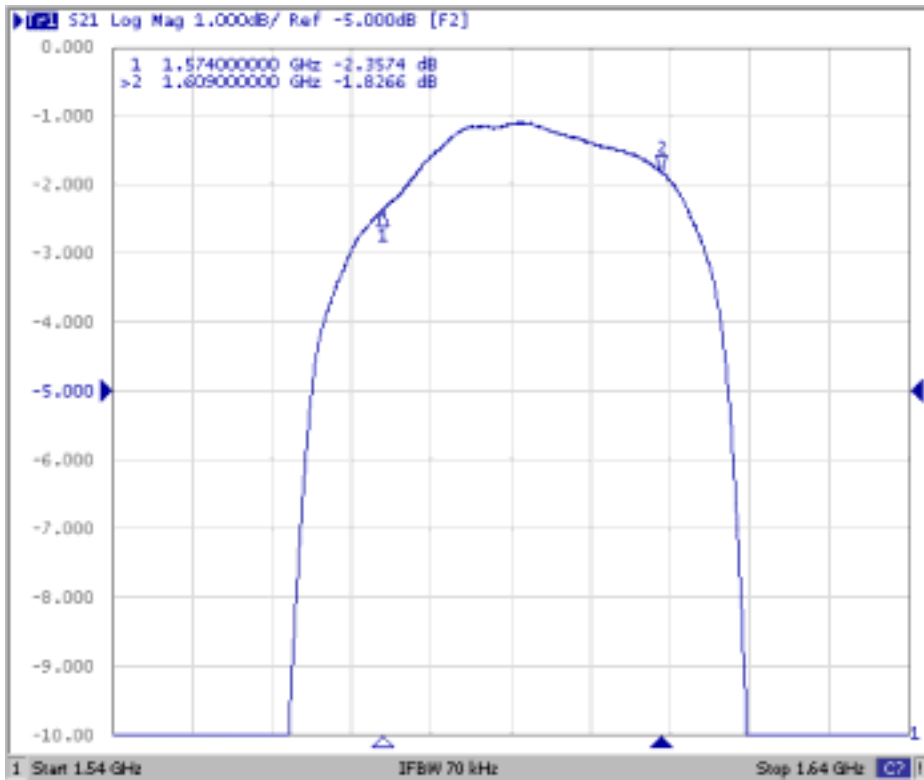
: Year/Month Code (Follow the table)

| 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> |

D. MEASUREMENT CIRCUIT:

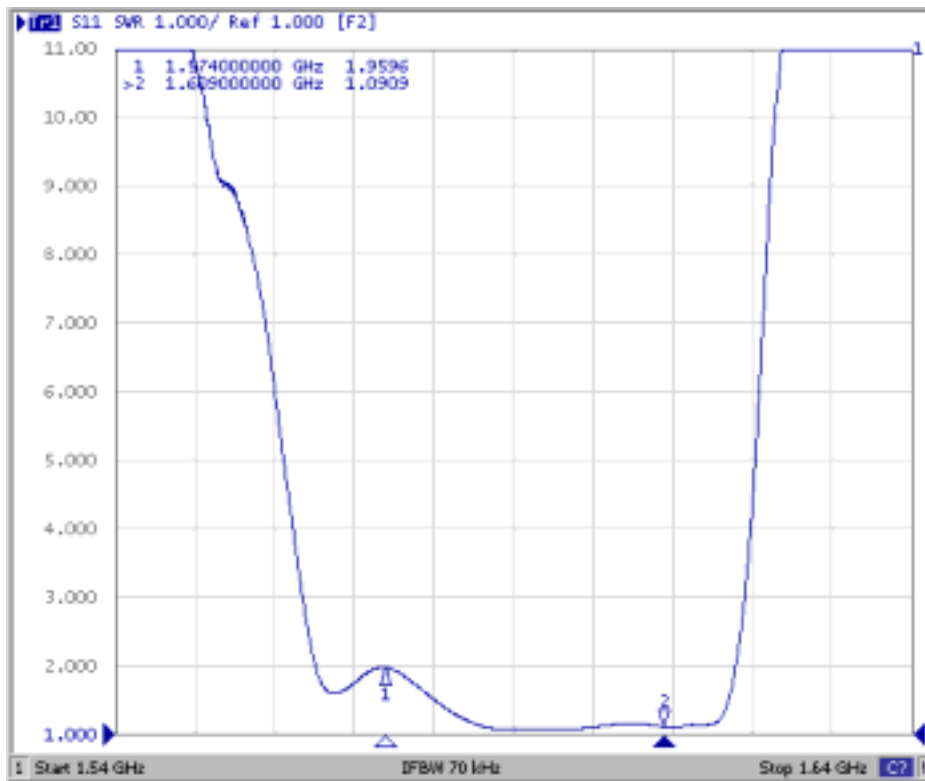


E. Frequency Characteristics:

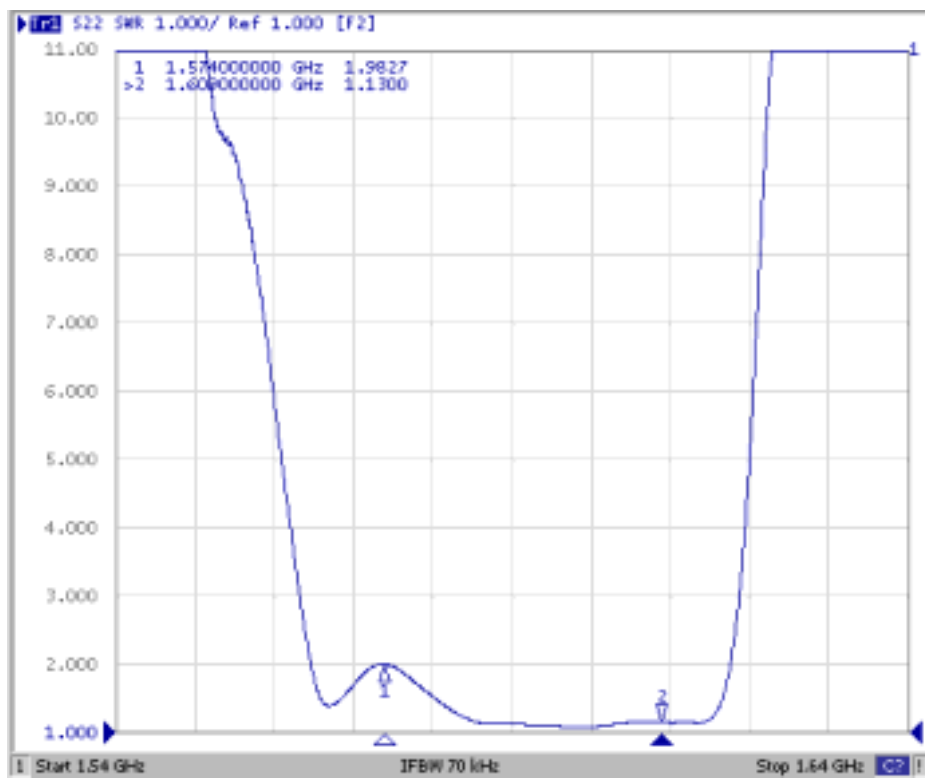


Reflection Functions:

S11



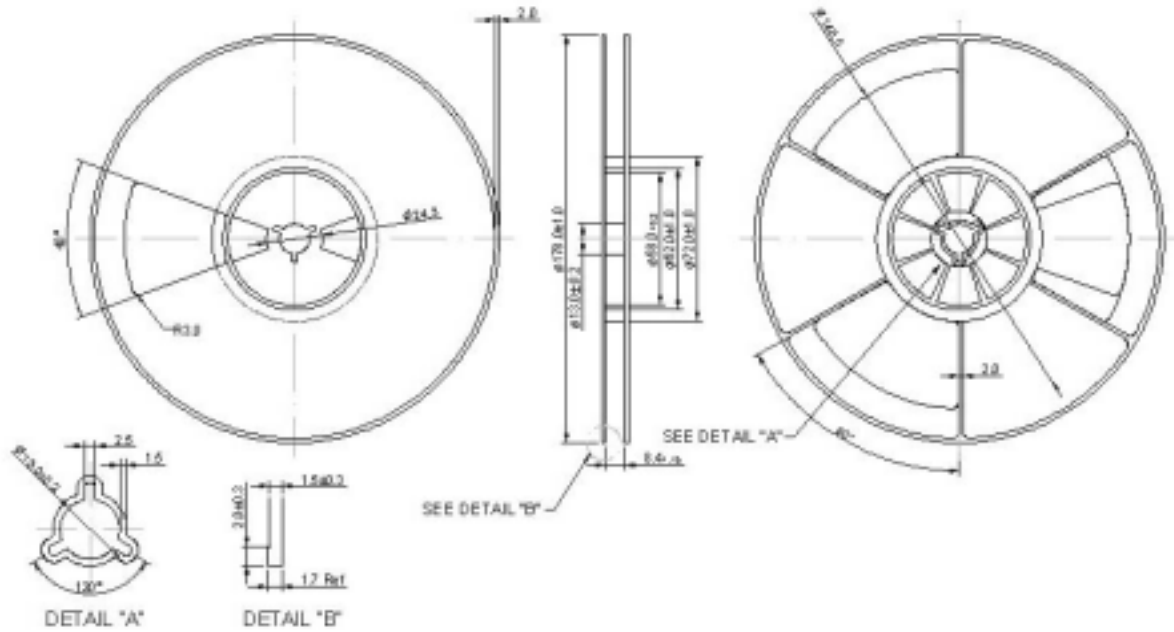
S22



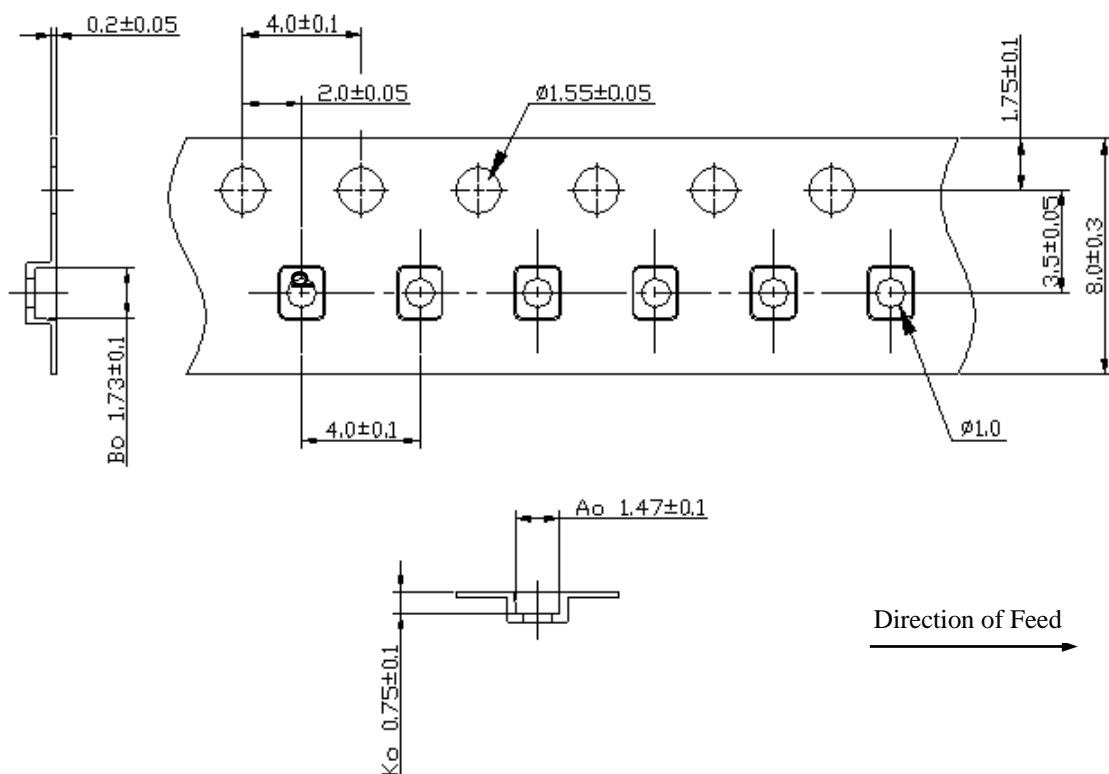
F. PACKING:

1. REEL DIMENSION

(Reel Count : 7"=3000)



2.TAPE DIMENSION



G. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180 for 60~90 seconds.
2. Ascending time to preheating temperature 150 shall be 30 seconds min.
3. Heating shall be fixed at 220 for 50~80 seconds and at 245~260 peak (min. 10sec).
4. Time : 2 times.

