



# 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 Name: SAW Filter 902.5MHz 25MHz Bw SMD 3.0 x 3.0 mm

TST Parts No.:TA0143A

Customer Parts No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ Anne Chen 陳秀宜

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

Date: \_\_\_\_\_ 12, 12, 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 902.5 MHz 25MHz Bw SMD 3.0 x 3.0 mm

MODEL NO.: TA0143A

REV. NO.:4

### A. MAXIMUM RATING:

1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 0 V
3. Operating Temperature: -25°C to +75°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

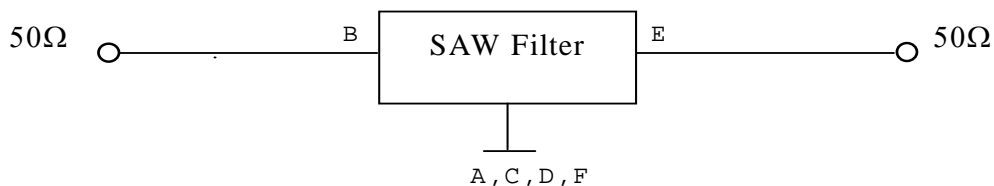
### B. ELECTRICAL CHARACTERISTICS:

| Characteristics                                 |                           |     | Specification |       |     | Note |
|---|---------------------------|-----|---------------|-------|-----|------|
|   |                           |     | Min.          | Typ.  | Max |      |
| Center frequency                                | $F_c$                     | MHz | -             | 902.5 | -   | -    |
| Insertion loss( 890~915 MHz )                   | I.L.                      | dB  | -             | 2.9   | 3.5 | -    |
| V.S.W.R( 890~915 MHz )                          |                           |     | -             | 1.5   | 2.3 | -    |
| Ripple( 890~915 MHz )                           |                           | dB  | -             | 0.5   | 1.5 | -    |
| <b>Attenuation:( Reference level from 0 dB)</b> |                           |     |               |       |     |      |
| 1) 0 ~ 845 MHz                                  |                           | dB  | 45            | 51.0  | -   | -    |
| 2) 925 ~ 935 MHz                                |                           | dB  | 5             | 21.0  | -   | -    |
| 3) 935 ~ 980 MHz                                |                           | dB  | 25            | 28.0  | -   | -    |
| 4) 980 ~ 1200 MHz                               |                           | dB  | 50            | 56.0  | -   | -    |
| 5) 1200~3000 MHz                                |                           | dB  | 25            | 28.0  | -   | -    |
| Impedance at $F_c$ ; Input                      | $Z_{IN}=R_{IN}/C_{IN}$    |     | 50Ω // 0 PF   |       |     | 1    |
| Output  | $Z_{OUT}=R_{OUT}/C_{OUT}$ |     | 50Ω // 0 PF   |       |     | 1    |

Note1. No matching network required for operation at 50 Ω

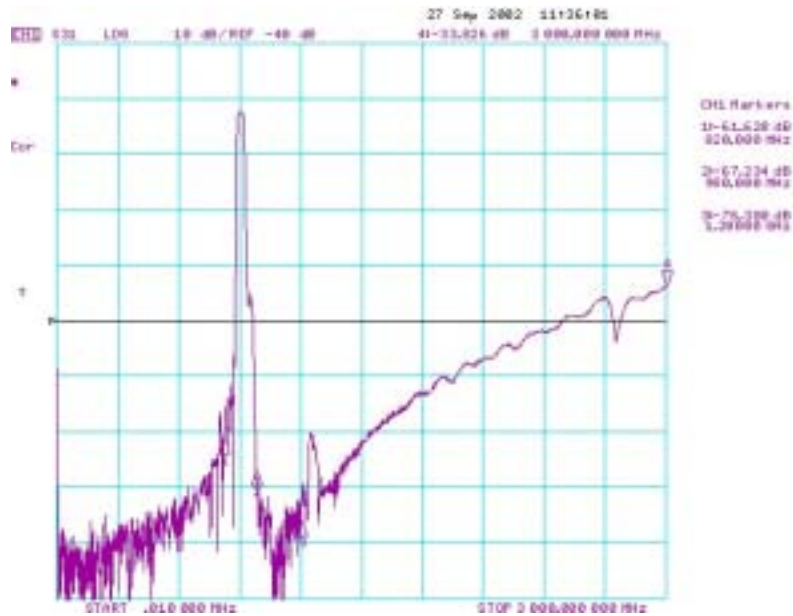
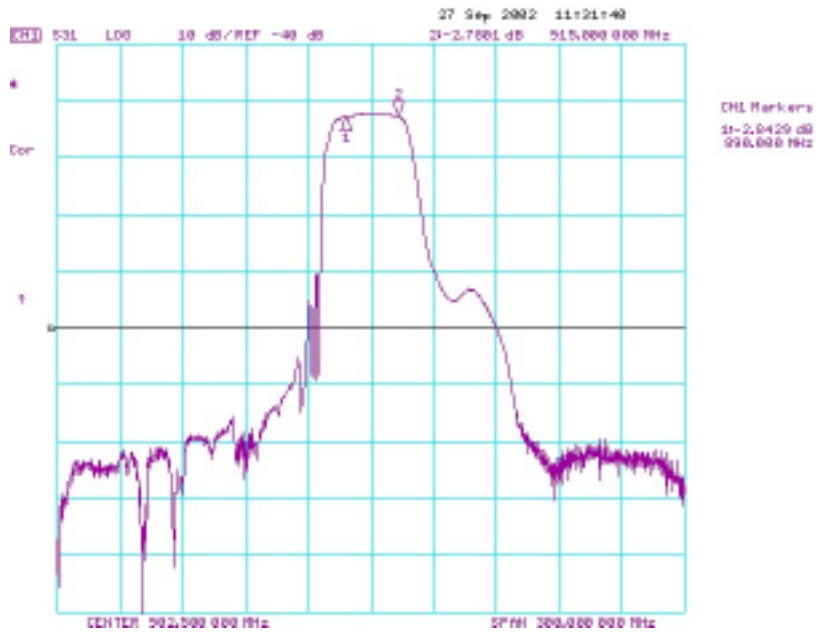
### MEASUREMENT CIRCUIT:

HP Network analyzer



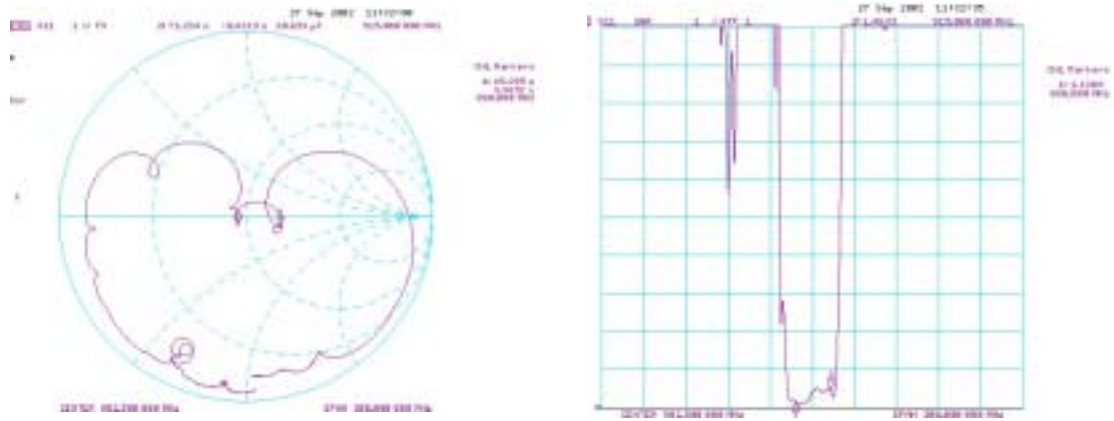
### C. Frequency Characteristics :

1.wide band of S21

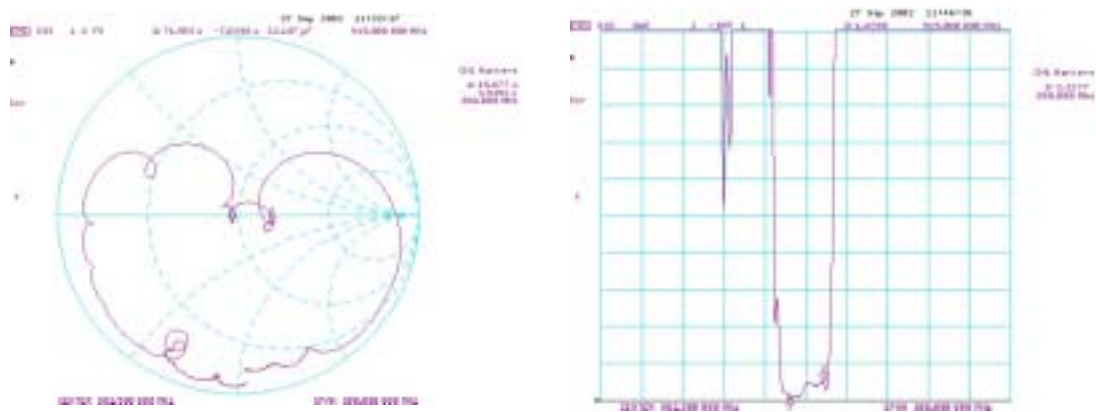


**D. Reflections Functions :**

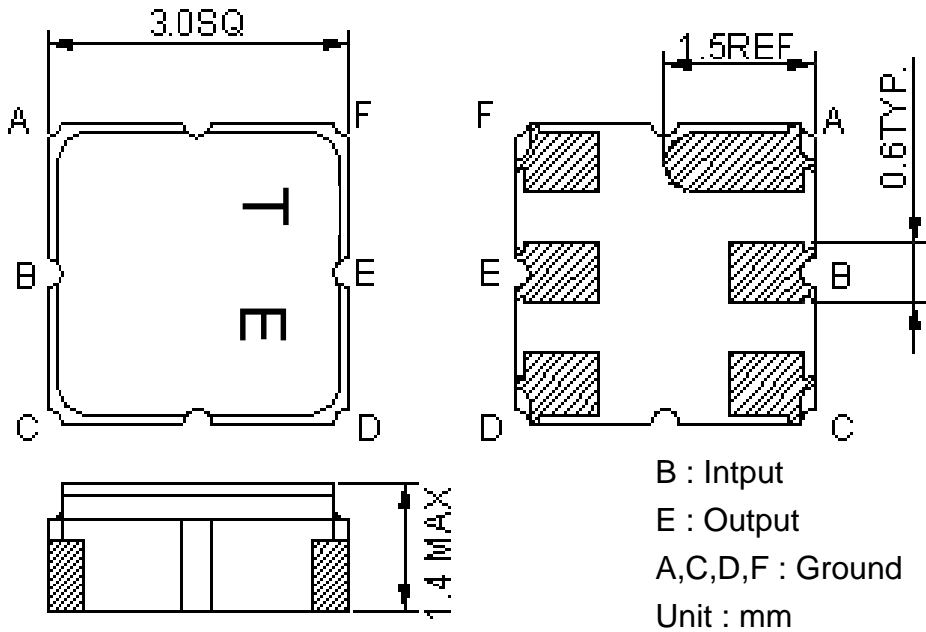
S11



S22



**E. OUTLINE DRAWING:**



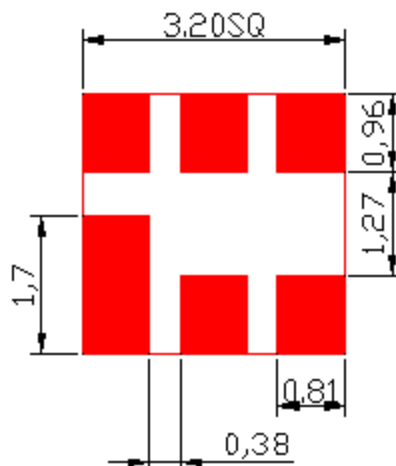
: Year Code (2011->1, 2012->2, ..., 2019->9)

: 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    |

**F. LAND PATTERN:**





## H. 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.

