



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Filter 836.5MHz SMD 2.5x2.0mm

TST Parts No.:TA0183A

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

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

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

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

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

Checked by:\_\_\_\_\_Elvis Chiu

Approval by:\_\_\_\_\_Francis Chen

Date:\_\_\_\_\_2004/06/09



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## SAW Filter 836.5 MHz

MODEL NO.: TA0183A

REV. NO.:4

### A. MAXIMUM RATING:

1. Input Power Level: 15 dB<sub>m</sub>
2. DC voltage: +5 V
3. Operating Temperature: -25°C to +80°C
4. Storage Temperature: -40°C to +85°C

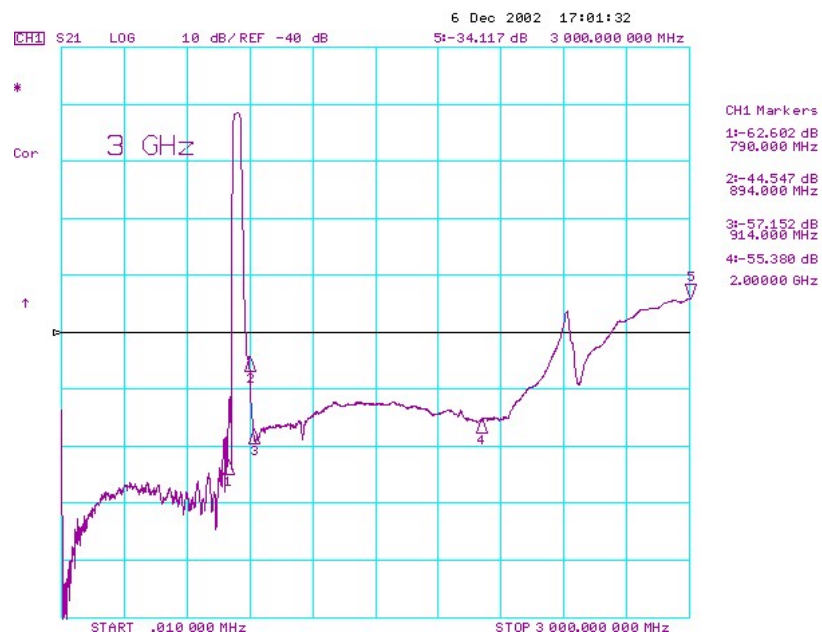
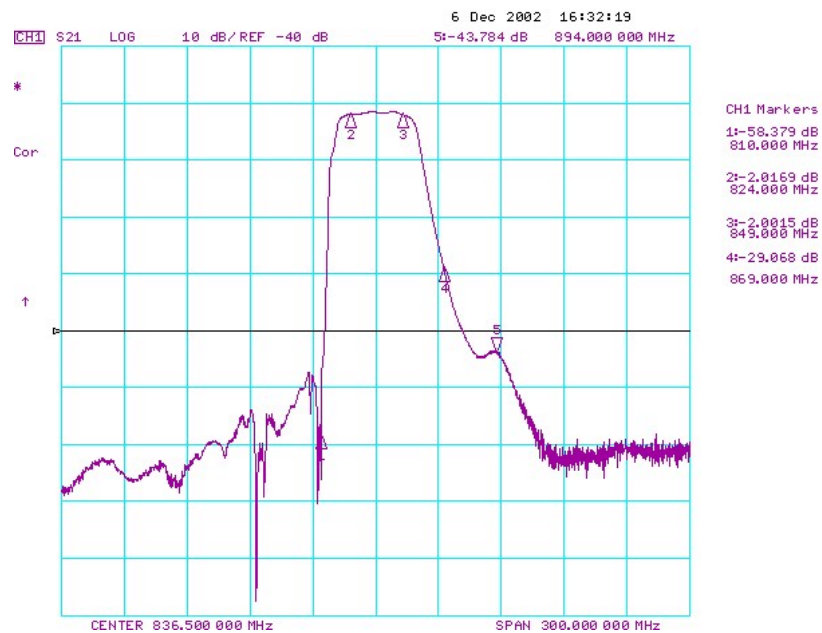
RoHS Compliant  
Lead free  
Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

| Item                                           |                 |                      |      | Min. | Typ.  | Max. |
|------------------------------------------------|-----------------|----------------------|------|------|-------|------|
| <b>Center frequency</b>                        |                 | <b>Fc</b>            | MHz  | -    | 836.5 | -    |
| <b>Insertion loss</b>                          | 824 ~ 849 MHz   | <b>IL</b>            | (dB) | -    | 2.1   | 2.8  |
| <b>Amplitude ripple</b>                        | 824 ~ 849 MHz   |                      | (dB) | -    | 0.6   | 1.3  |
| <b>Return loss</b>                             | 824 ~ 849 MHz   |                      |      | 9.0  | 12.0  | -    |
| <b>Attenuation</b> (Reference level from 0 dB) |                 |                      |      |      |       |      |
|                                                | D.C. ~ 790 MHz  |                      | (dB) | 45   | 55    | -    |
|                                                | 790 ~ 810 MHz   |                      | (dB) | 22   | 46    | -    |
|                                                | 869 ~ 894 MHz   |                      | (dB) | 20   | 29    | -    |
|                                                | 894 ~ 914 MHz   |                      | (dB) | 33   | 43    | -    |
|                                                | 914 ~ 2000 MHz  |                      | (dB) | 40   | 51    | -    |
|                                                | 2000 ~ 3000 MHz |                      | (dB) | 27   | 34    | -    |
| <b>Rx band suppression</b>                     | 869 ~ 894 MHz   |                      | (dB) | 20   | 29    | -    |
| <b>Source impedance</b>                        |                 | <b>Z<sub>s</sub></b> | (Ω)  | -    | 50    | -    |
| <b>Load impedance</b>                          |                 | <b>Z<sub>L</sub></b> | (Ω)  | -    | 50    | -    |

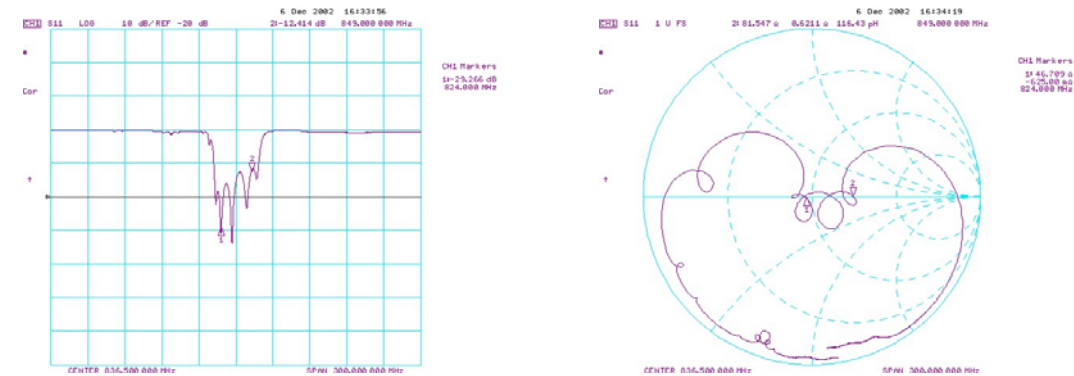
Note1. No matching network required for operation at 50(

C. Frequency Characteristics :

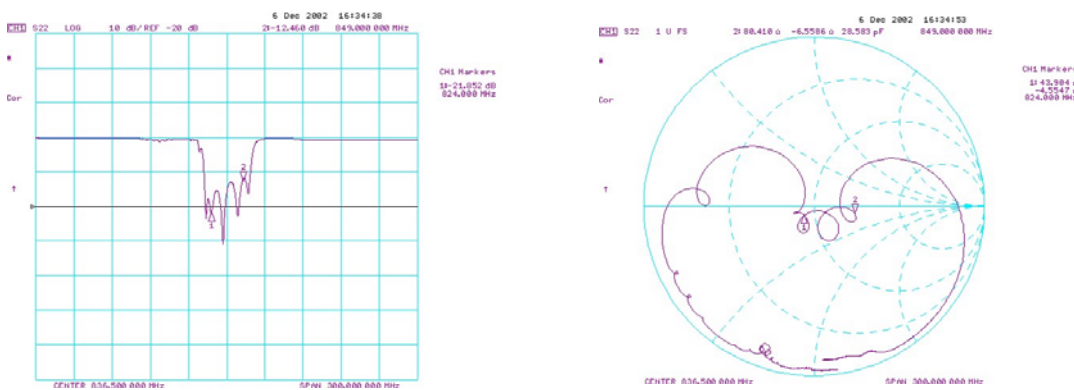


D.Reflections Functions :

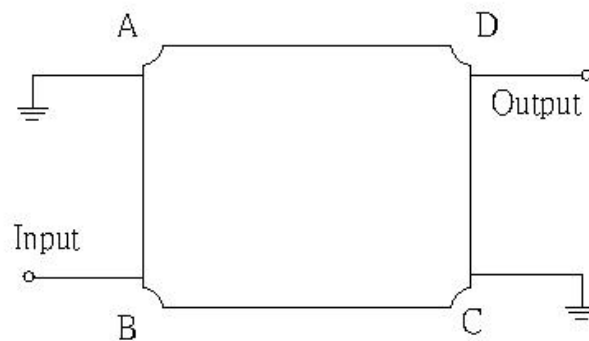
S11:



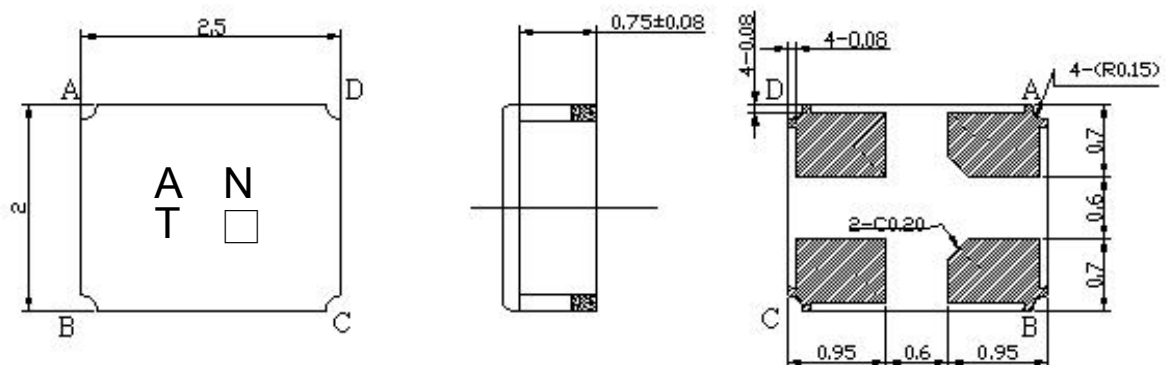
S22:



### E. MEASUREMENT CIRCUIT:



### F.OUTLINE DRAWING:



B : Input

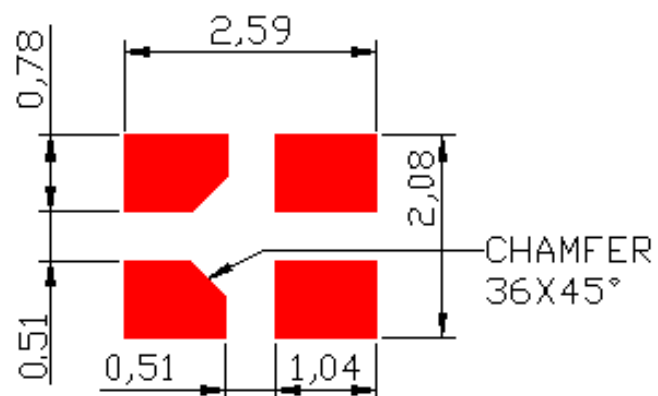
D : Output

A, C : Ground

□ : Date Code

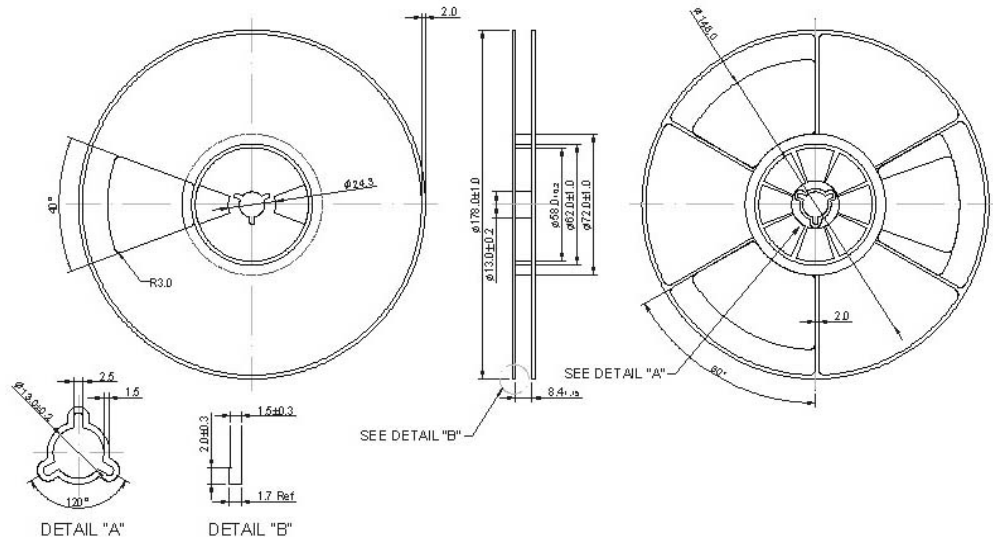
Unit : mm

### G. PCB FOOTPRINT:



## H. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION

