



# 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 874MHz SMD 13.3x6.5mm

TST Part No.: TB0805A

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

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

Checked by: Ricky Lee 

Approved by: Francis Chen 

Date: 2010/01/22

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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## IF SAW Filter 874MHz(BW=15.1MHz) SMD 13.3X6.5mm

MODEL NO.: TB0805A

REV.2.0

### A. MAXIMUM RATING:

1. Operating Temperature: -40 °C ~ +85 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input power: 10dBm

RoHS Compliant  
Lead free  
Lead-free soldering

### B. Characteristics :

Ambient Temperature: 25 °C

| Item                                 | Unit                 | Min.     | Type. | Max. |
|--------------------------------------|----------------------|----------|-------|------|
| Center frequency, Fc                 | MHz                  | -        | 874   | -    |
| Insertion Loss, IL                   | dB                   | -        | 23    | 26.5 |
| 1 dB Bandwidth                       | MHz                  |          | 15.6  | -    |
| 3 dB Bandwidth                       | MHz                  |          | 16.1  |      |
| 40 dB Bandwidth                      | MHz                  |          | 19.5  | 21.1 |
| Amplitude Ripple Fc ± 7.0MHz         | dB                   | -        | 0.8   | 1.2  |
| Group-Delay Ripple Fc ± 7.0MHz       | nsec                 | -        | 85    | 120  |
| Absolute Delay                       | usec                 | -        | 0.9   |      |
| Temperature Coefficient of frequency | PPM/ °C <sup>2</sup> | -0.036   |       |      |
| Package                              | mm <sup>3</sup>      | 13.3x6.5 |       |      |
| Notes                                |                      |          |       |      |

### C. Frequency Characteristics :

#### 1. S21 Response: (span : 80MHz)

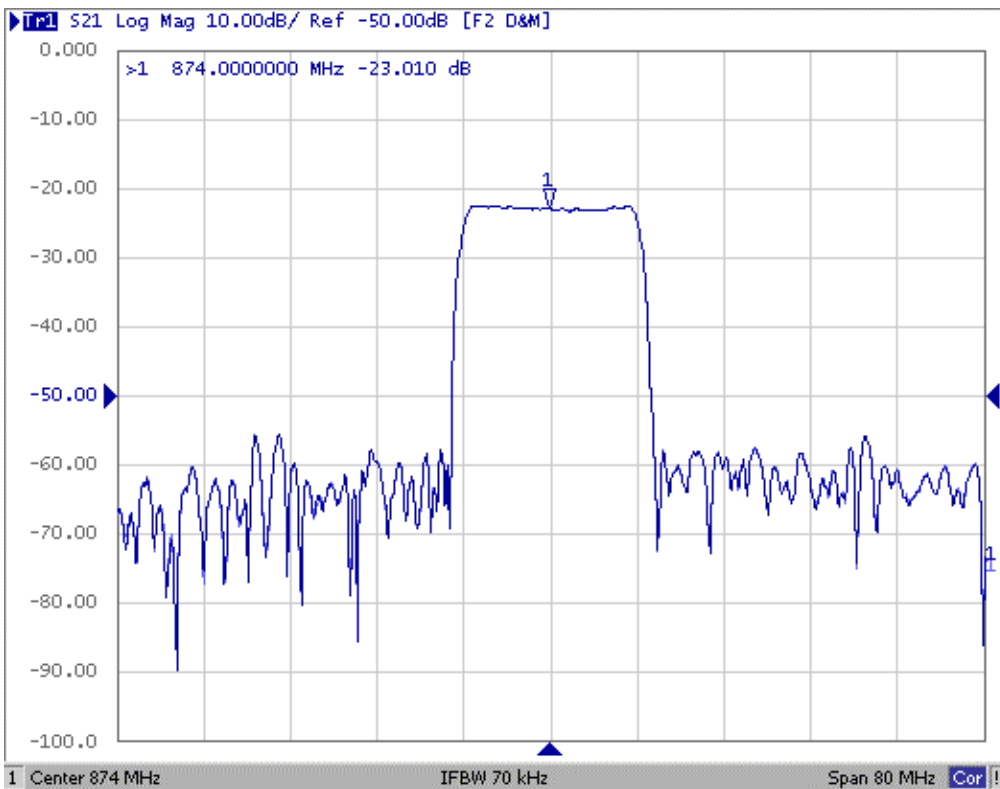


Fig1. Horizontal: 8MHz/Div Vertical: 10dB/Div

#### 2. Group-Delay Ripple: (span : 20MHz)

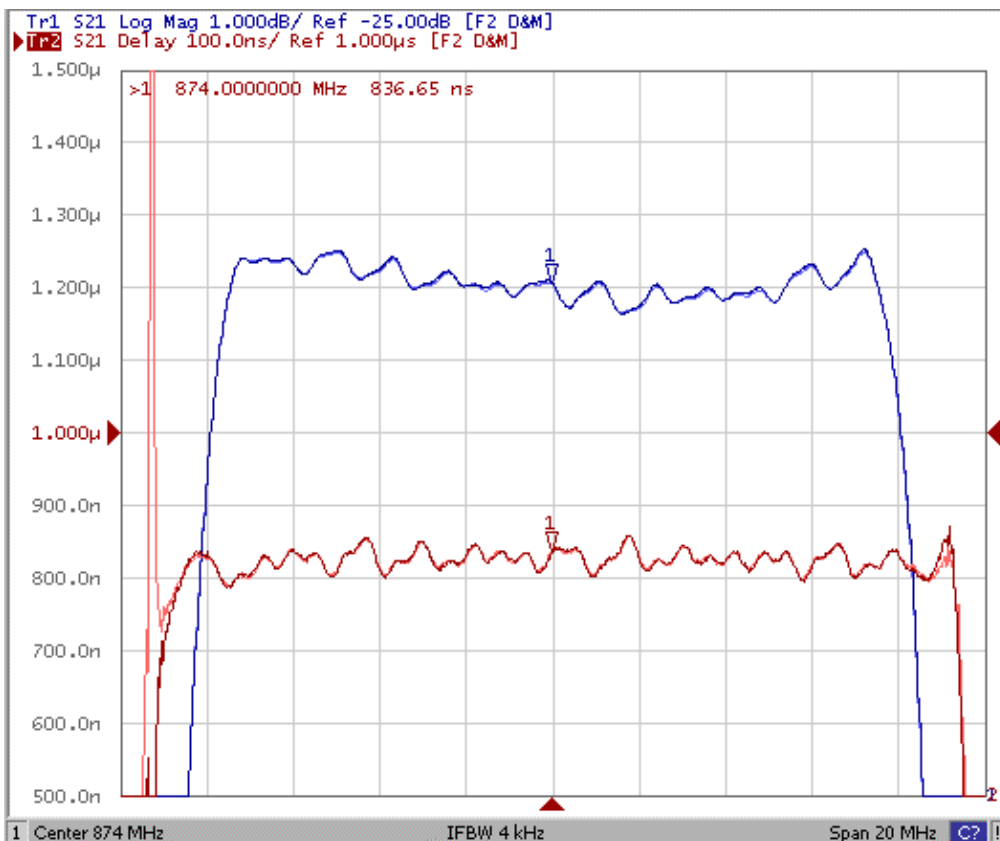
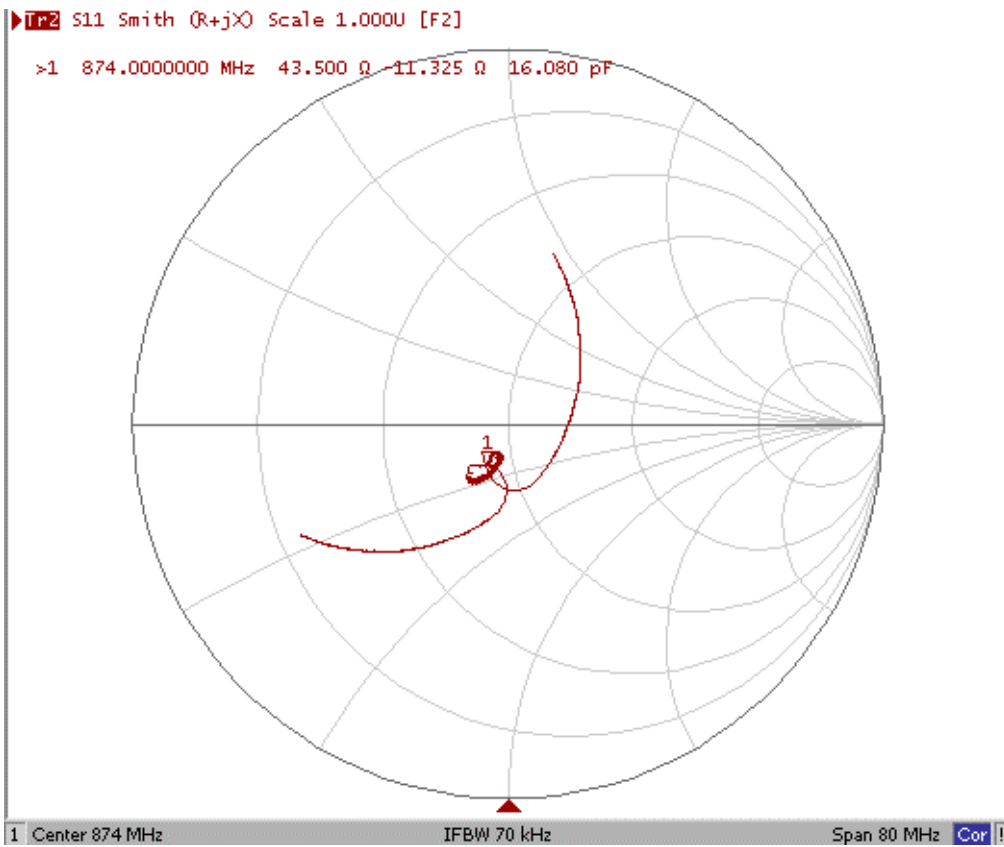
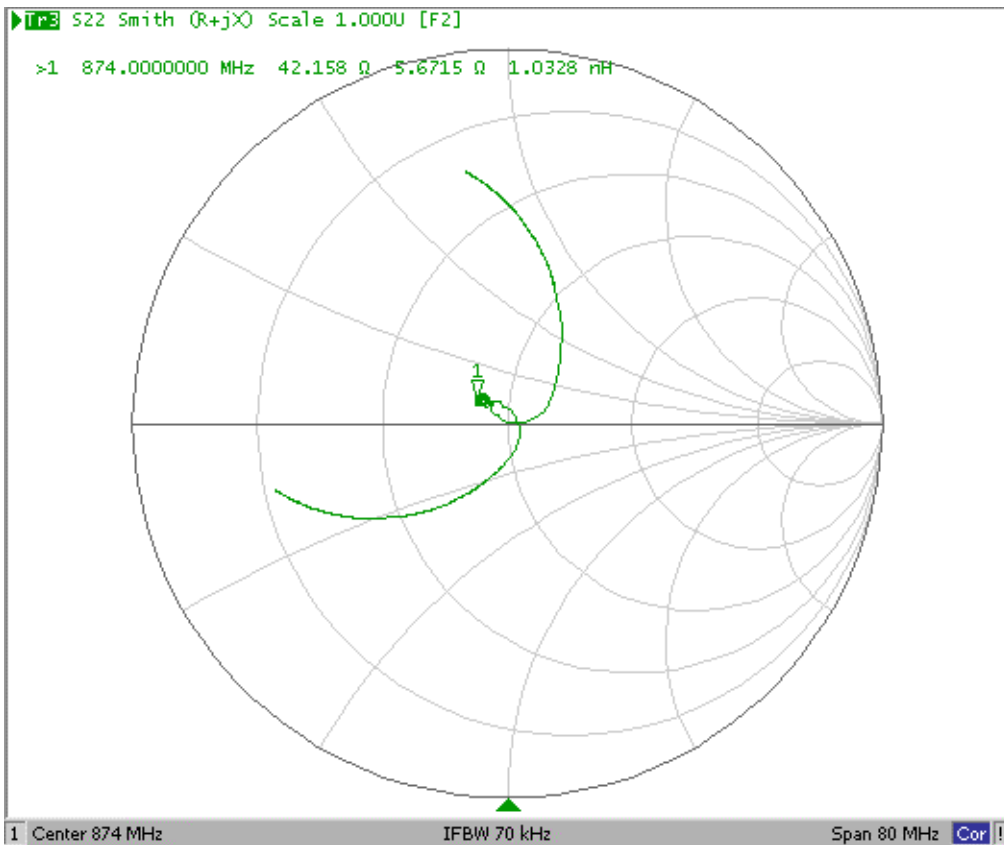


Fig2. Horizontal: 2MHz/Div Vertical: 100nec/Div

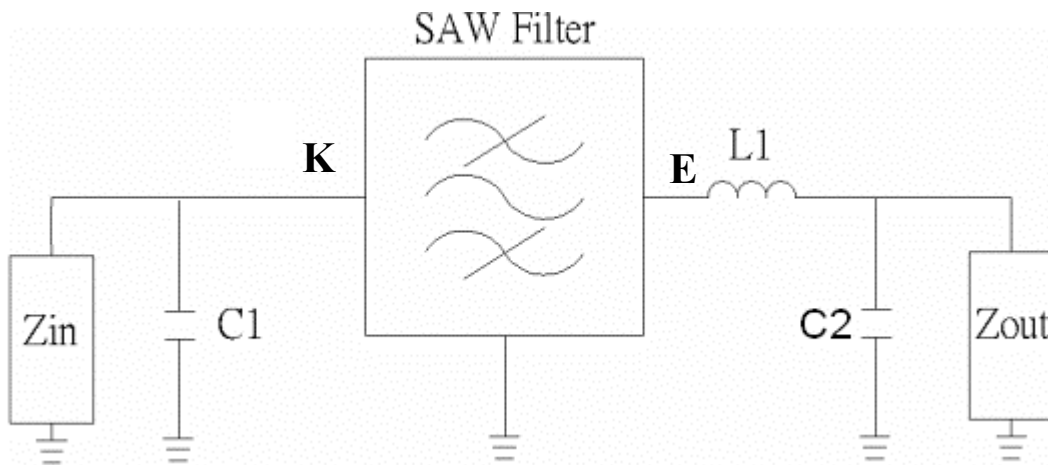
### 3. S11 Smith Chart: (span : 80MHz)



### 4. S22 Smith Chart (span : 80MHz)

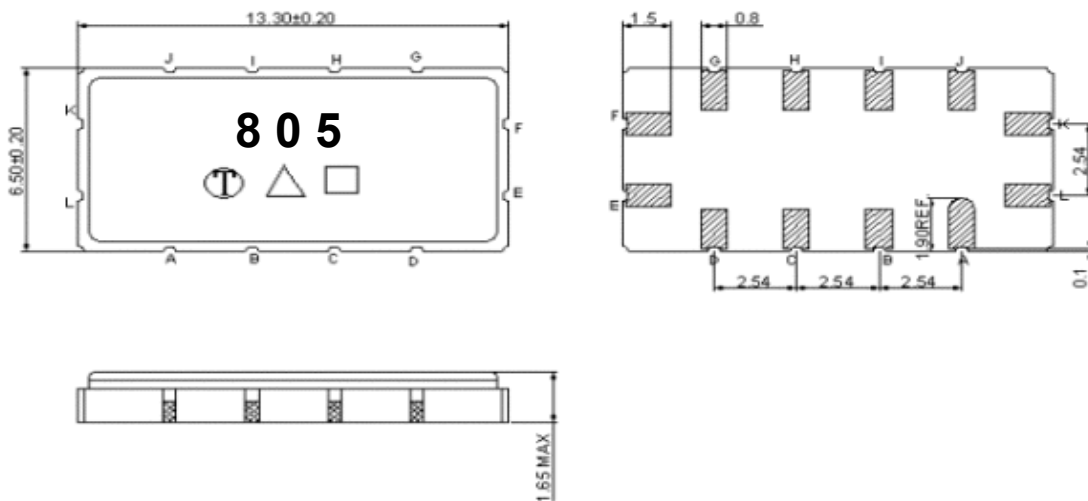


**D. Measurement Circuit:**



Zin and Zout are 50ohm.  
 C1=10pF, L1=1.4nH, C2=12pF

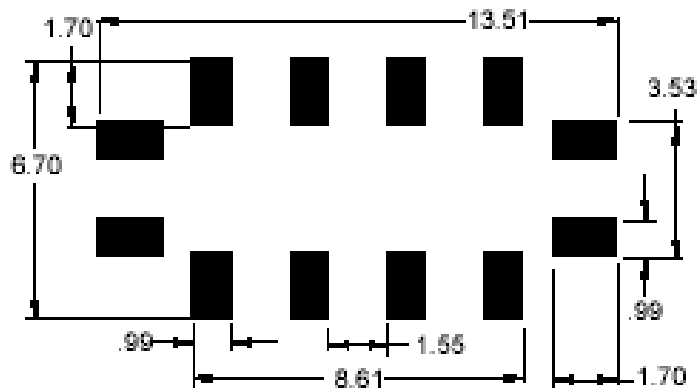
**E. Outline Drawing:**



- Pin K: RF input
- Pin E: RF output
- Pin A, B, C, D, G, H, I, L, F, J: To be Ground
- : Week Code (Follow the table from planner each year)
- Unit : mm (week01, 02, 03...52 =>A, B, C...z)
- △ : Product / Year Code

|              |      |      |          |          |
|--------------|------|------|----------|----------|
| Year         | 2009 | 2010 | 2011     | 2012     |
| Product Code | B    | b    | <u>B</u> | <u>b</u> |

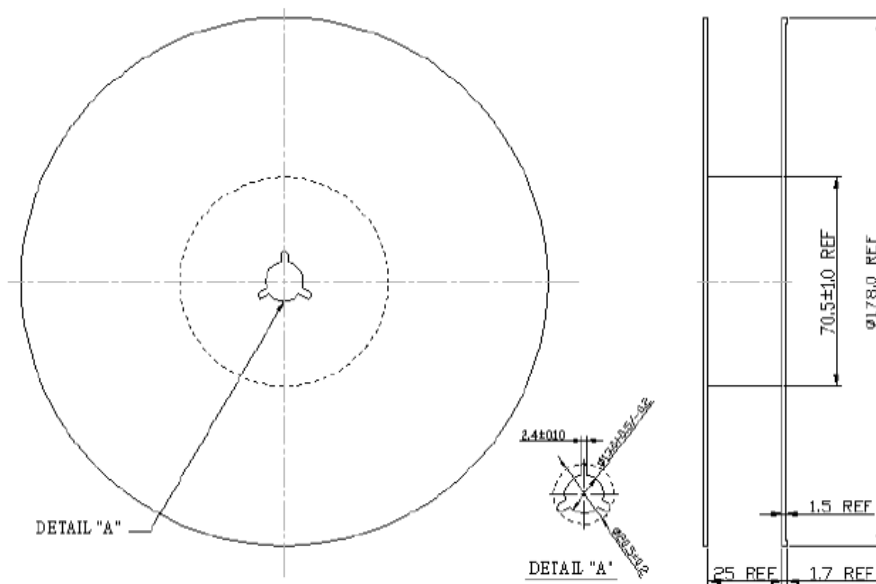
**F. PCB Footprint:**



Unit: mm

**H. PACKING:**

**1. REEL DIMENSION**



Unit: mm

