



# TAI-SAW TECHNOLOGY CO., LTD.

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

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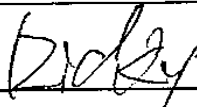
## Product Specifications Approval Sheet

Product Description: SAW Filter 333.04MHz SMD 5.0×7.0mm

TST Part No.: TB0787A

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

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

Checked by: Ricky Lee 

Approved by: Francis Chen 

Date: 2009/09/10

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 333.04MHz(BW=7MHz) SMD 5X7mm

MODEL NO.: TB0787A

REV.1.0

### A. MAXIMUM RATING:

1. Operating Temperature: -30 °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	Typ	Max
Center Frequency	MHz	-	333.04	-
Insertion Loss (Fc ± 3.5 MHz)	dB	-	10.5	15
Passband Ripple (Fc ± 3.5 MHz)	dB	-	0.6	1.0
1dB BW	MHz	7	8.3	-
45dB BW	MHz	-	18.5	19
Attenuation 1 @ 10 ~ 321 MHz	dB	40	43	-
Attenuation 2 @ 345 ~ 600 MHz	dB	40	43	-

### C. Frequency Characteristics :

#### 1. S21 Response: (span : 50MHz)

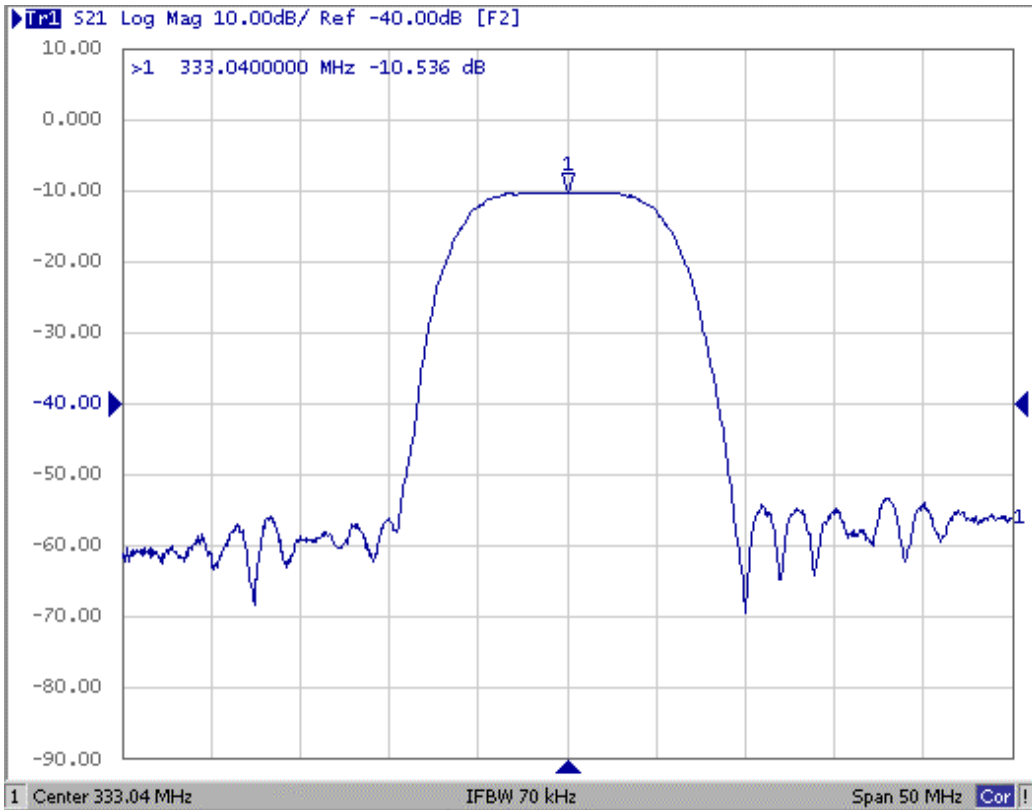


Fig1. Horizontal: 5MHz/Div Vertical: 10dB/Div

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

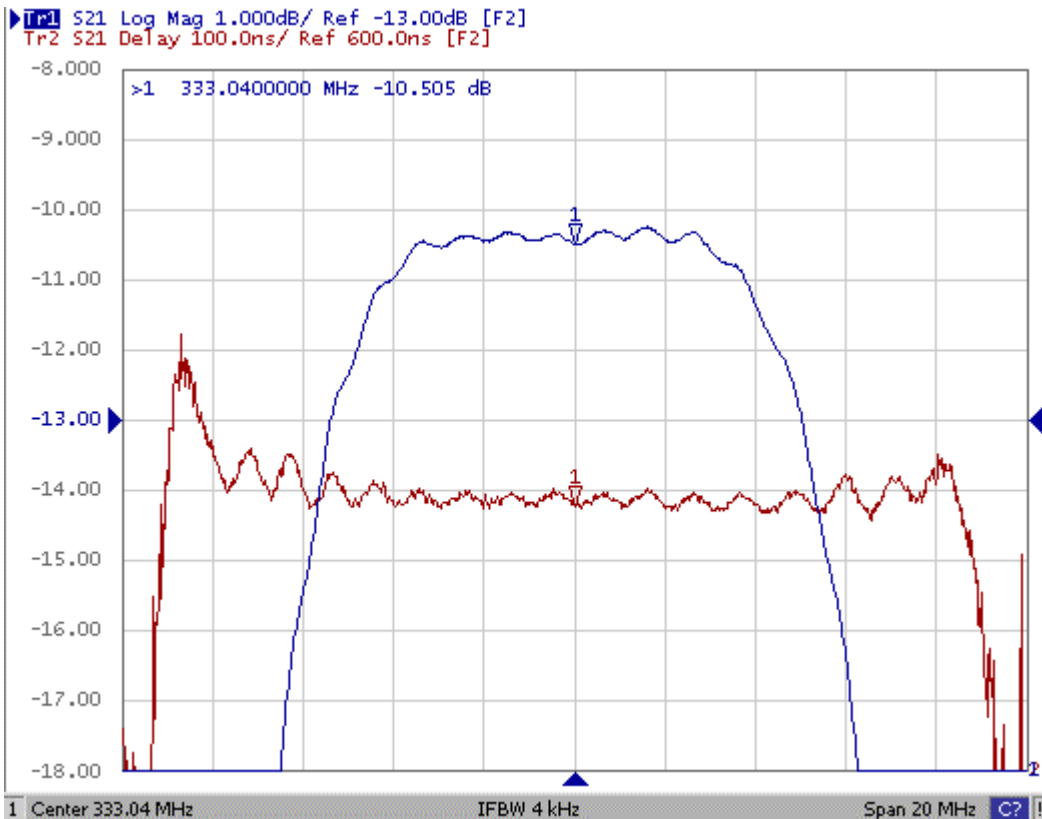
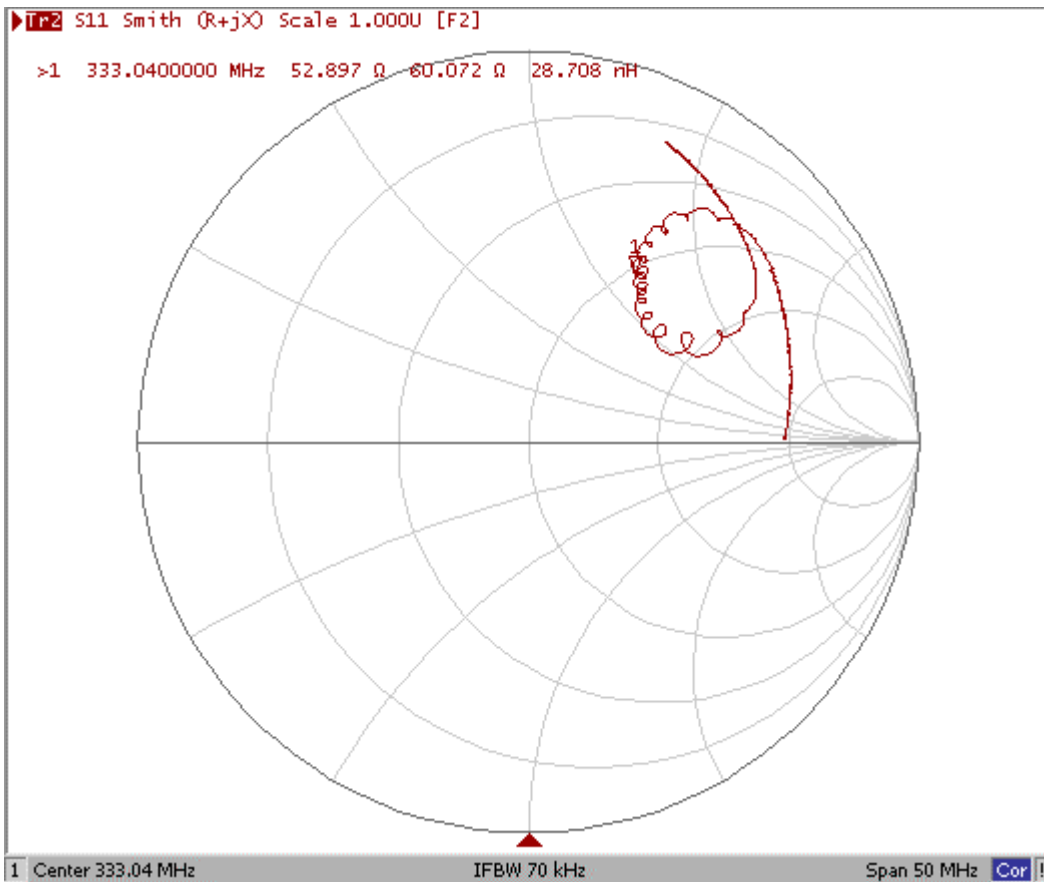
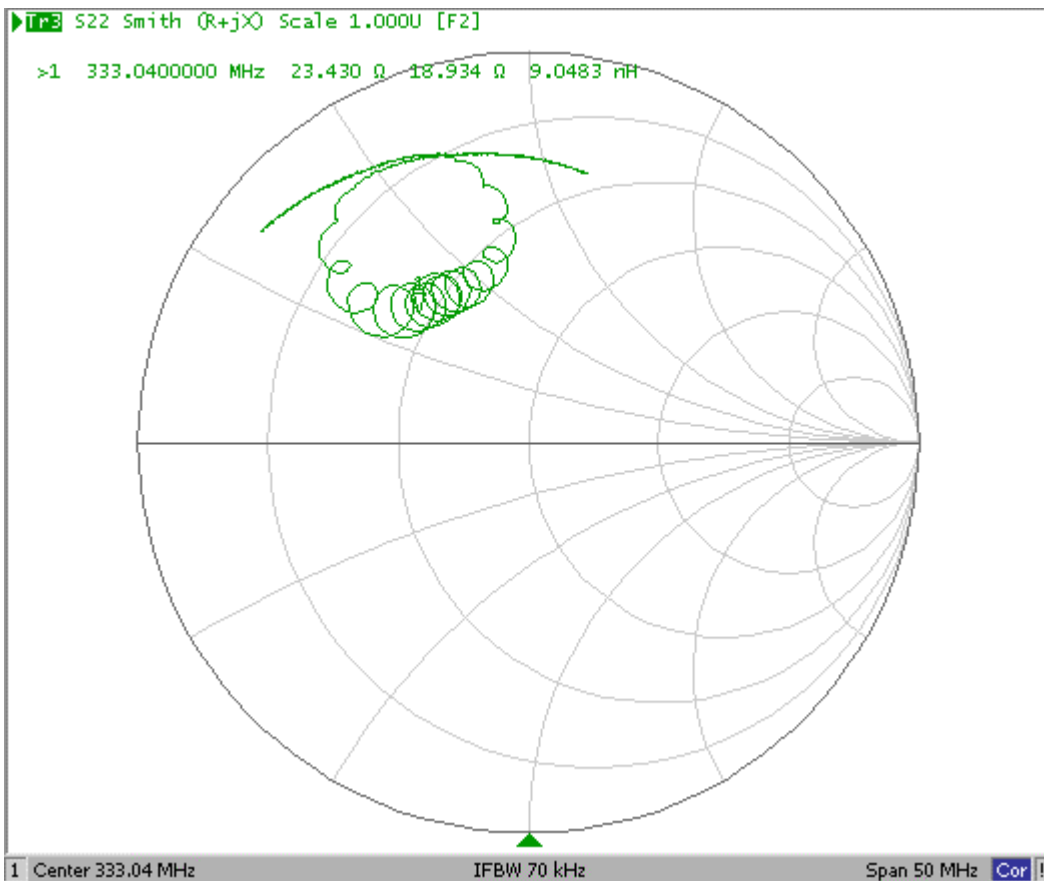


Fig2. Horizontal: 2.0MHz/Div Vertical: 100nec/Div

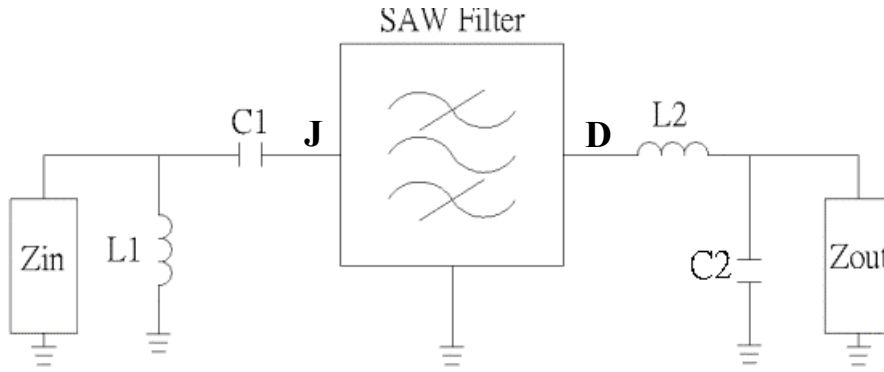
### 3. S11 Smith Chart: (span : 50MHz)



### 4. S22 Smith Chart (span : 50MHz)



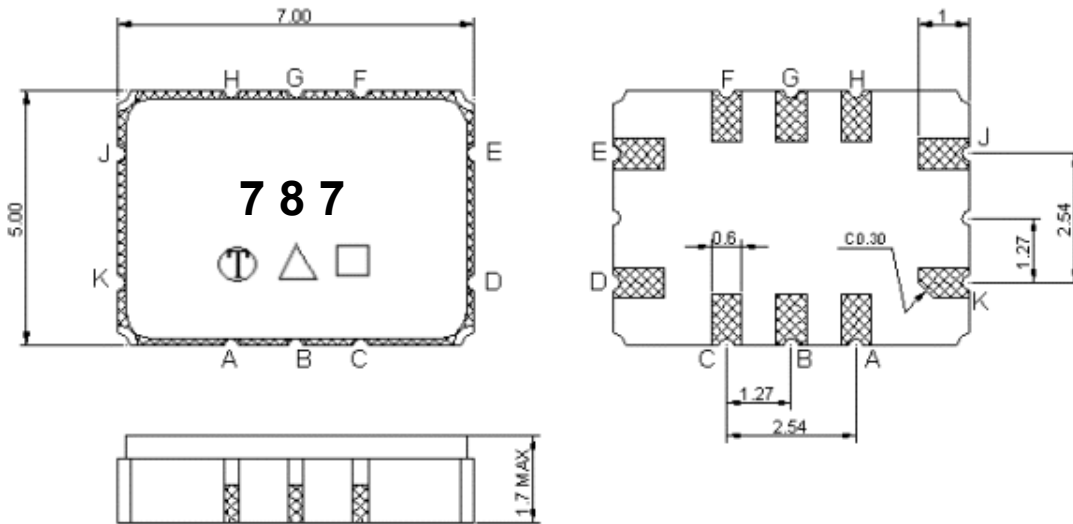
**D. Measurement Circuit:**



$Z_{in}$  and  $Z_{out}$  are  $50\ \Omega$ .

$L1=12\text{ nH}, C1=82\text{ pF}, L2=18\text{ nH}, C2=10\text{ pF}$

**E. Outline Drawing:**



Pin J: RF input

Pin D: RF output

Pin K,E: Case Ground

Pin A, B, C, F, G, H: Ground

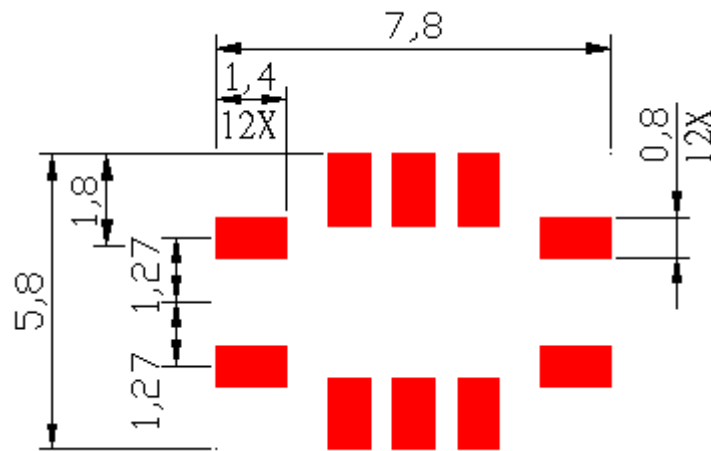
□ : Week Code (W01->A,W02->B,...W27->a,...,W52->z)

Unit : mm

△ : Product / Year Code

Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

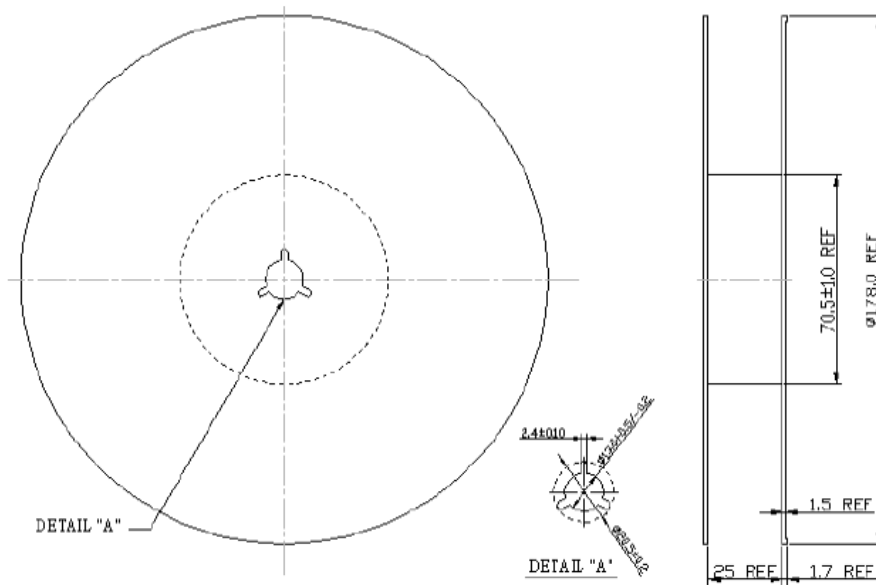
**F. PCB Footprint:**



Unit: mm

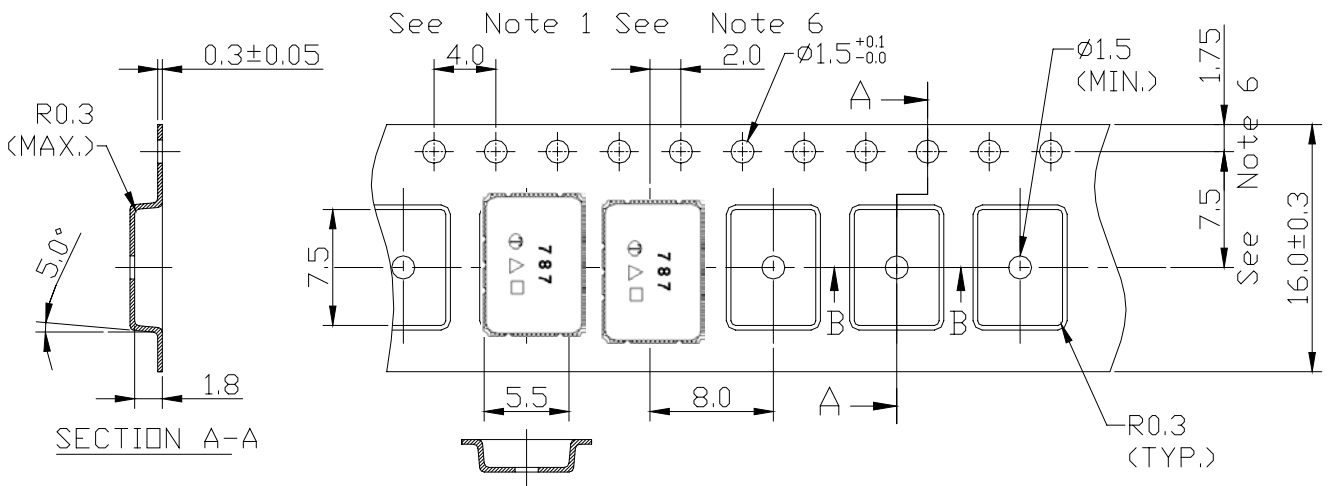
**H. PACKING:**

**1. REEL DIMENSION**



Unit: mm

## 2. TAPE DIMENSION



Unit: mm

## I. RECOMMENDED REFLOW PROFILE :

