



# 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 153.6MHz SMD 5.0×7.0mm

TST Part No.: TB0772A

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

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

Checked by: \_\_\_\_\_ Ricky Lee *Ricky*

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

Date: \_\_\_\_\_ 2009/08/12

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.



# TAI-SAW TECHNOLOGY CO., LTD.

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## IF SAW Filter 153.6MHz(BW=20MHz) SMD 5.0X7.0mm

MODEL NO.: TB0772A

REV.1.0

### A. MAXIMUM RATING:

1. Operating Temperature: -0 °C ~ +70 °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

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency $F_c$ MHz	-	153.6	-	-
Minimum Insertion loss I.L. dB	-	9.5	13.0	-
1dB BW MHz	20	23.18	-	-
Passband Ripple ( $F_c \pm 10.0\text{MH}$ ) dB	-	0.45	1.0	-
<b>Attenuation</b> (Reference to Minimum Insertion loss)				
139.6MHz dB	10	19.5	-	-
168.6MHz dB	10	26	-	-
Temp Coefficient ppm/K	-	-94	-	-
<b>Matching:</b>				
1.The input of the filter will be matched to <u>50 ohm</u>				
2.The output of the filter will be matched to <u>50 ohm</u>				

### C. Frequency Characteristics :

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

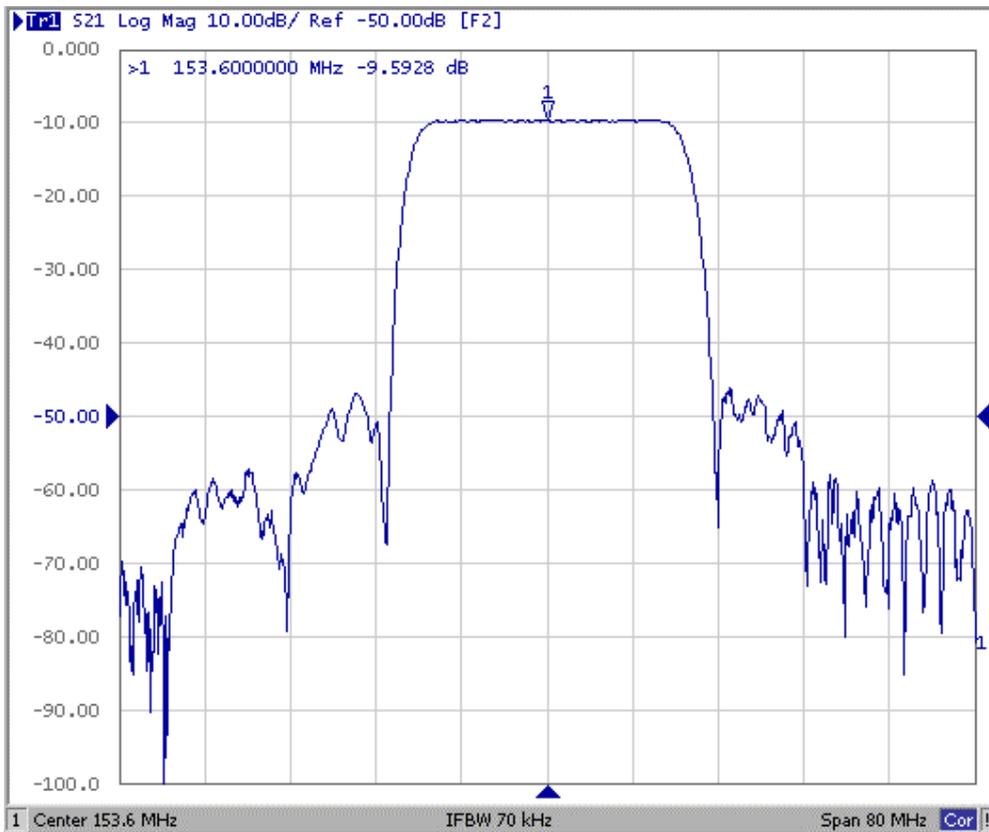


Fig1. Horizontal: 8MHz/Div Vertical: 10dB/Div

#### 2. Group-Delay Ripple: (span : 40MHz)

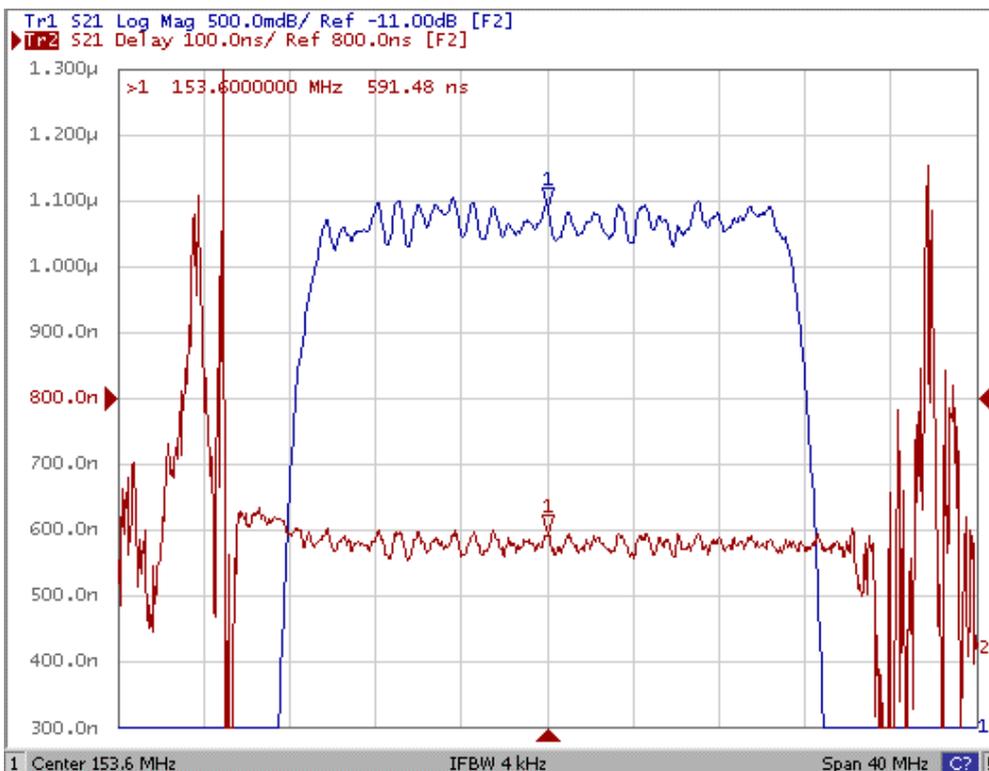
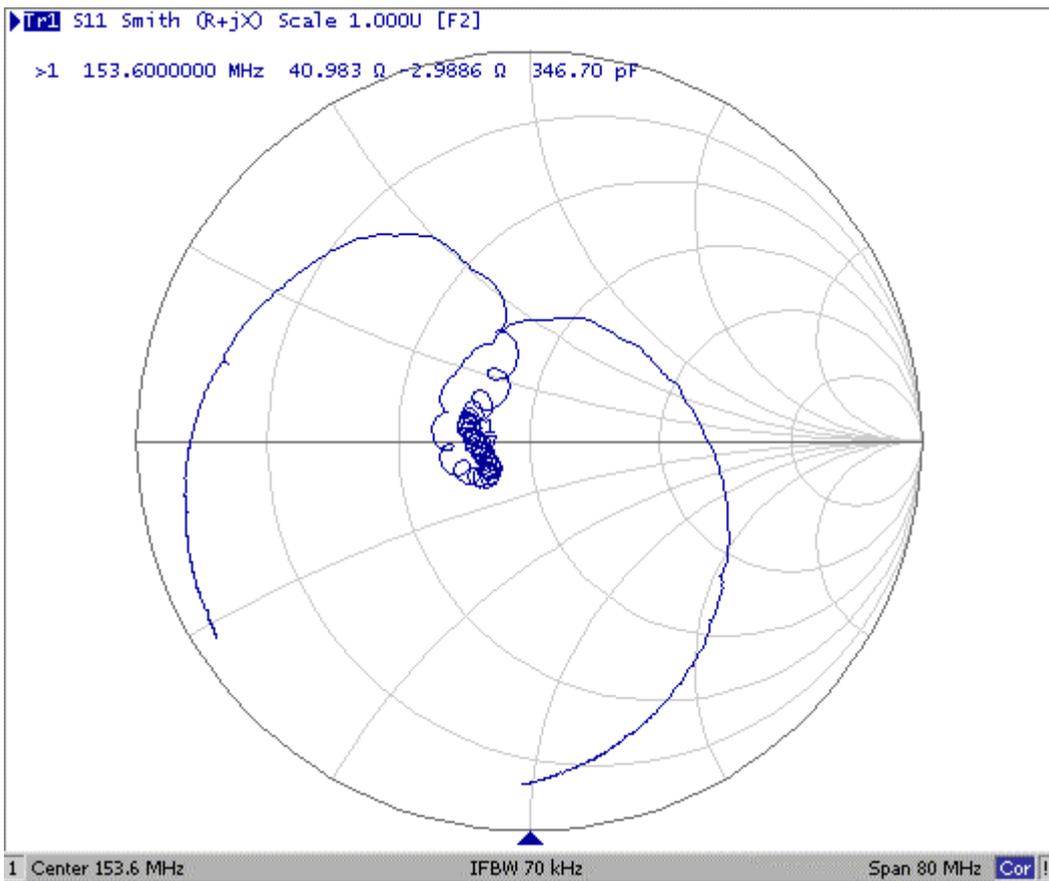
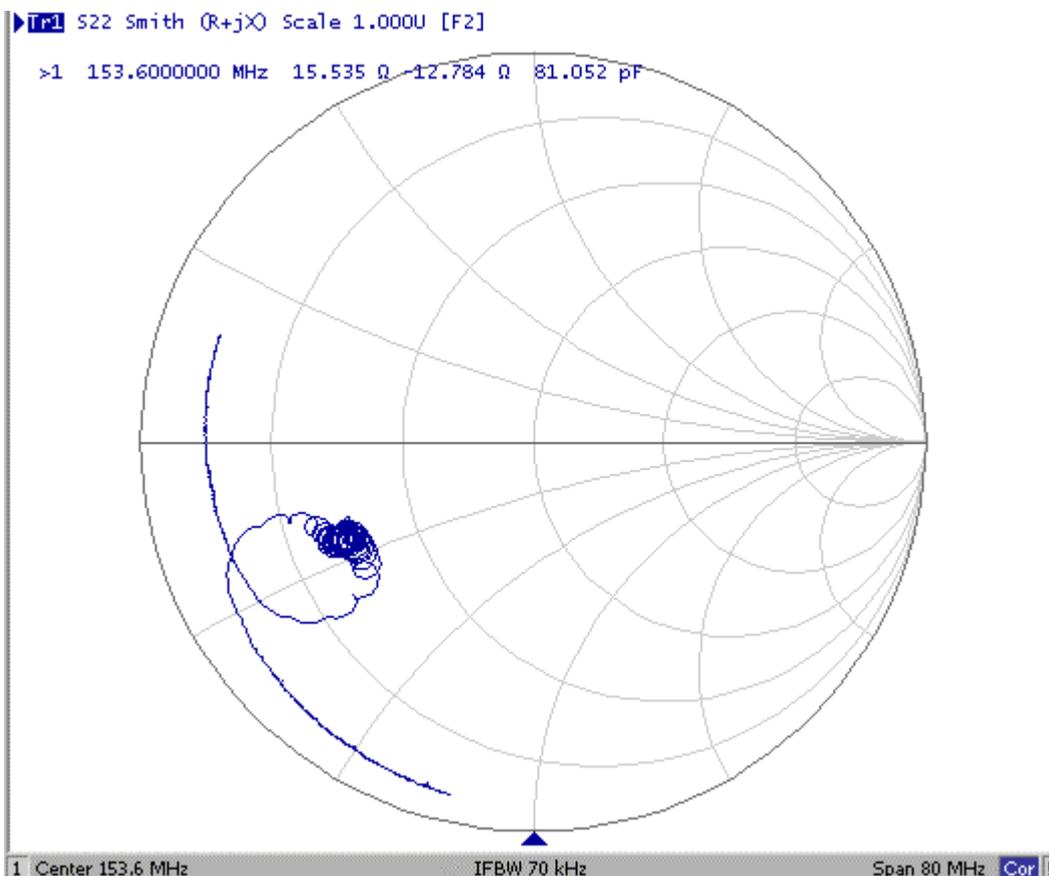


Fig2. Horizontal: 4MHz/Div Vertical: 100nec/Div

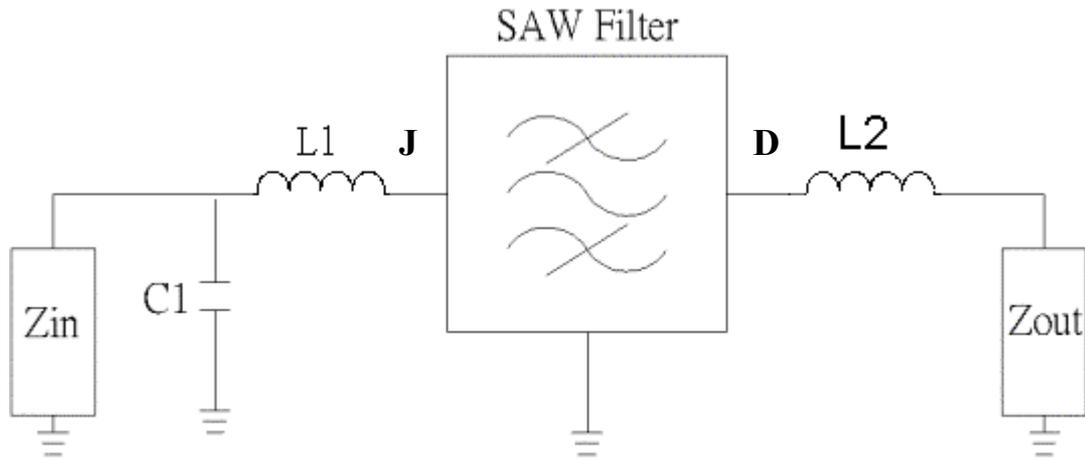
### 3. S11 Smith Chart: (span : 80MHz)



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

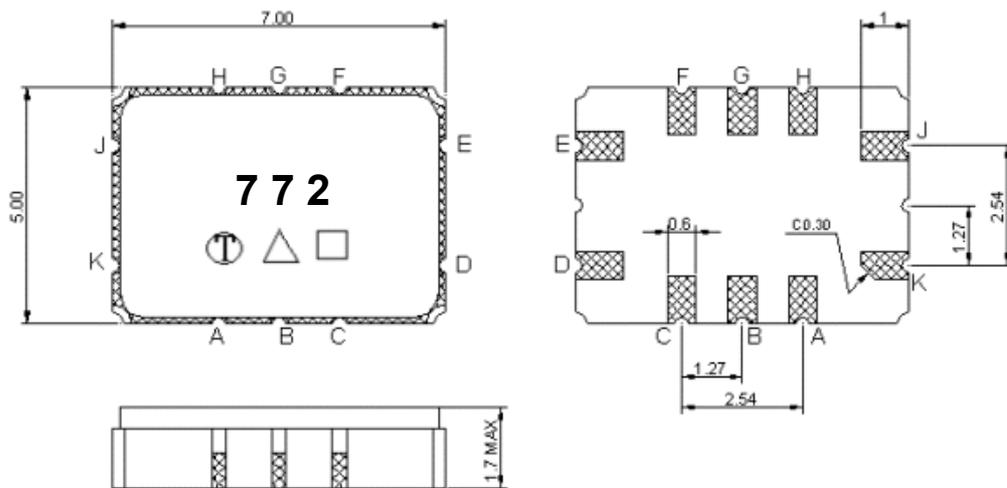


**D. Measurement Circuit:**



Zin and Zout are  $50\ \Omega$ .  
 $L1=82\text{nH}$ ,  $C1=27\text{pF}$ ,  $L2=33\text{nH}$

**E. Outline Drawing:**



Pin J: RF input

Pin D: RF output

Pin K,E: Case Ground

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

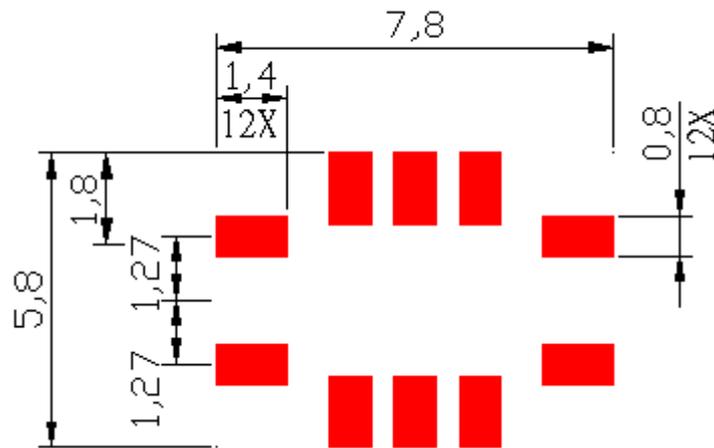
□ : Week Code (W01->A,W02->B,...W27->a,...,W52->z)

Unit : mm

△ : Product / Year Code

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

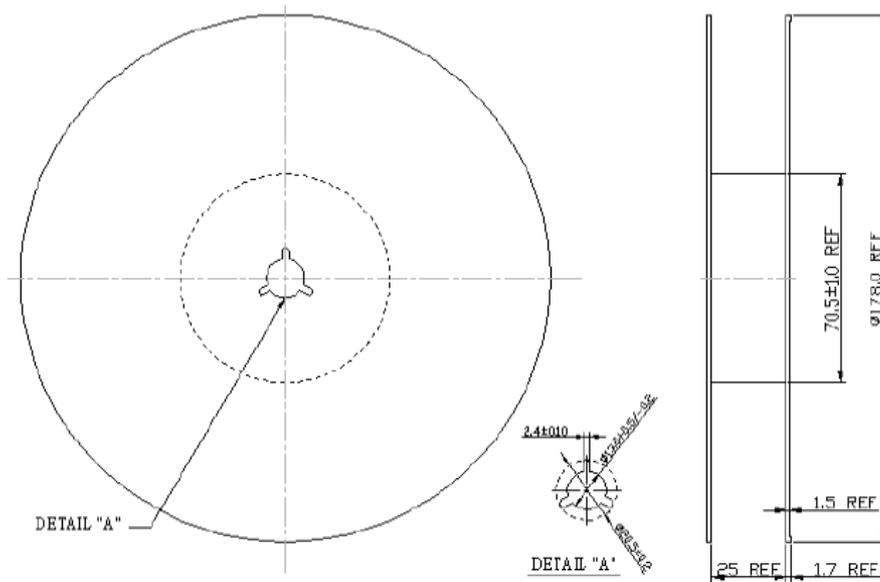
**F. PCB Footprint:**



Unit: mm

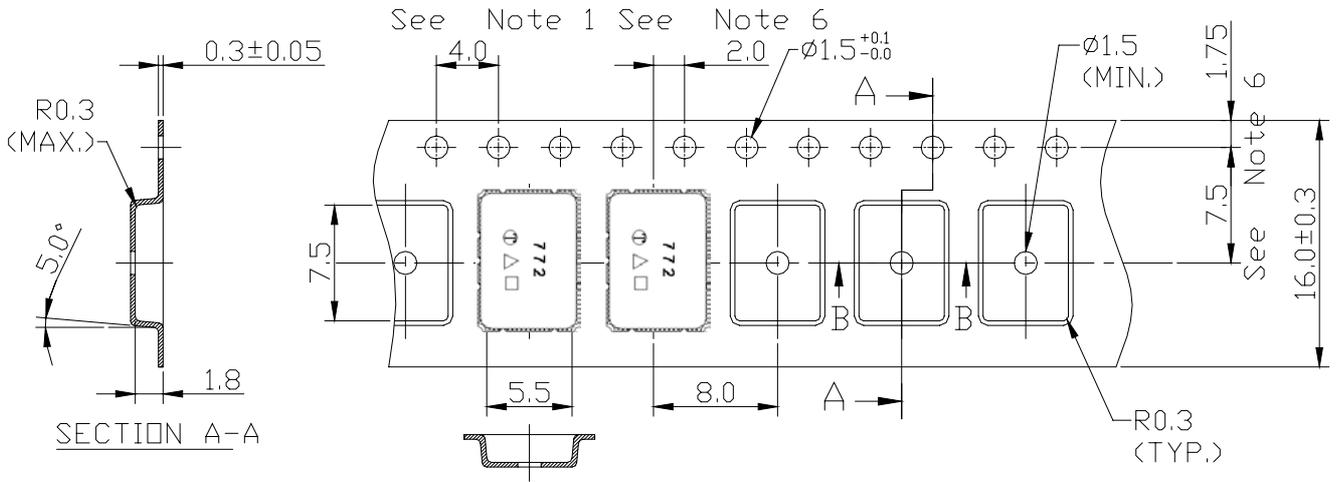
**H. PACKING:**

**1. REEL DIMENSION**



Unit: mm

## 2. TAPE DIMENSION



Unit: mm

## I. RECOMMENDED REFLOW PROFILE:

