



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Filter 56MHz SMD 13.3×6.5mm

TST Parts No.:TB0752A

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

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ Andy Yu *Andy Yu*

Approval by: \_\_\_\_\_ Francis Chen *Francis Chen*

Date: \_\_\_\_\_ 2009/4/20



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SAW Filter 56 MHz(BW=13MHz) SMD 13.3mmX6.5mm

MODEL NO.: TB0752A

REV.1.0

## A. MAXIMUM RATING:

1. Operating Temperature: -20 °C ~ +80 °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.	
<b>Center frequency</b> $F_c$ MHz	-	56.0	-	-
<b>Minimum Insertion loss</b> I.L. 49.5MHz ~ 62.5MHz dB	-	13.0	15.0	-
<b>Passband Ripple</b> 49.5MHz ~ 62.5MHz dB	-	1.0	1.5	-
<b>Attenuation</b> 10MHz ~ 45MHz dB 70MHz ~ 200MHz dB	40 40	46 43	- -	- -
<b>Substrate Material</b>	YZ-LiNbO3			-
<b>Temp Coefficient</b> 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>				

## D. FREQUENCY CHARACTERISTICS :

### 1.S21 Response: (span : 100MHz)

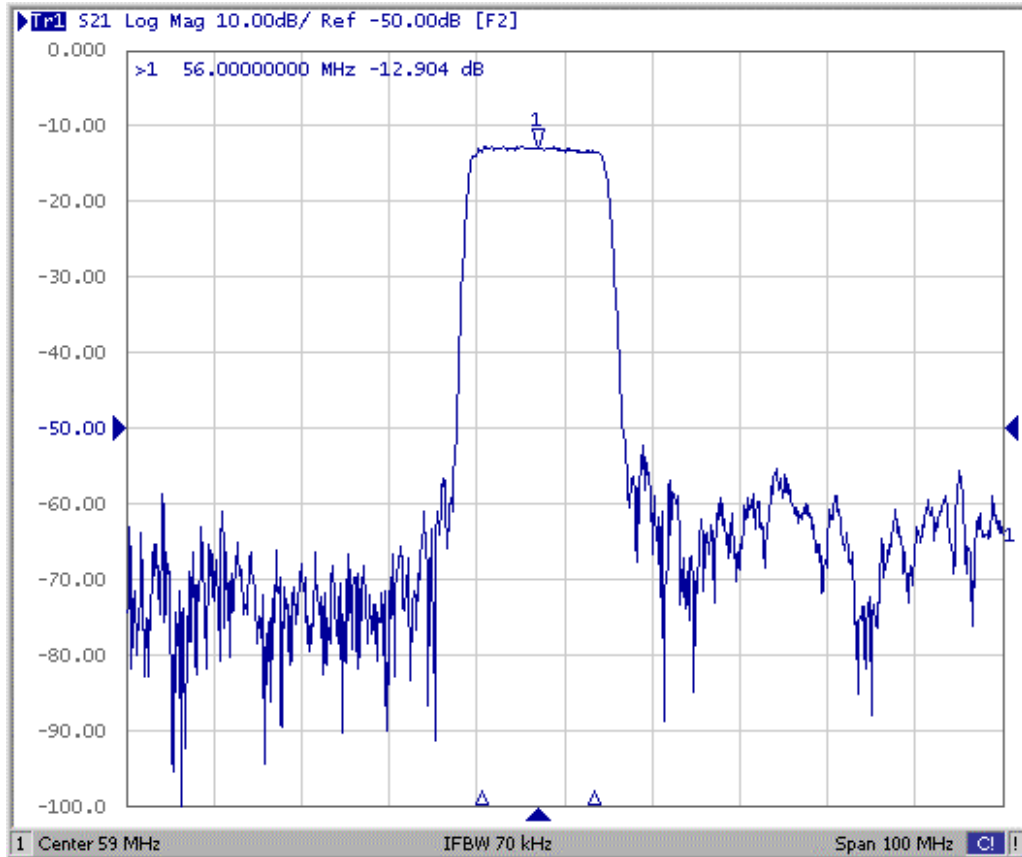


Fig1. Horizontal:10MHz/Div Vertical: 10dB/Div

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

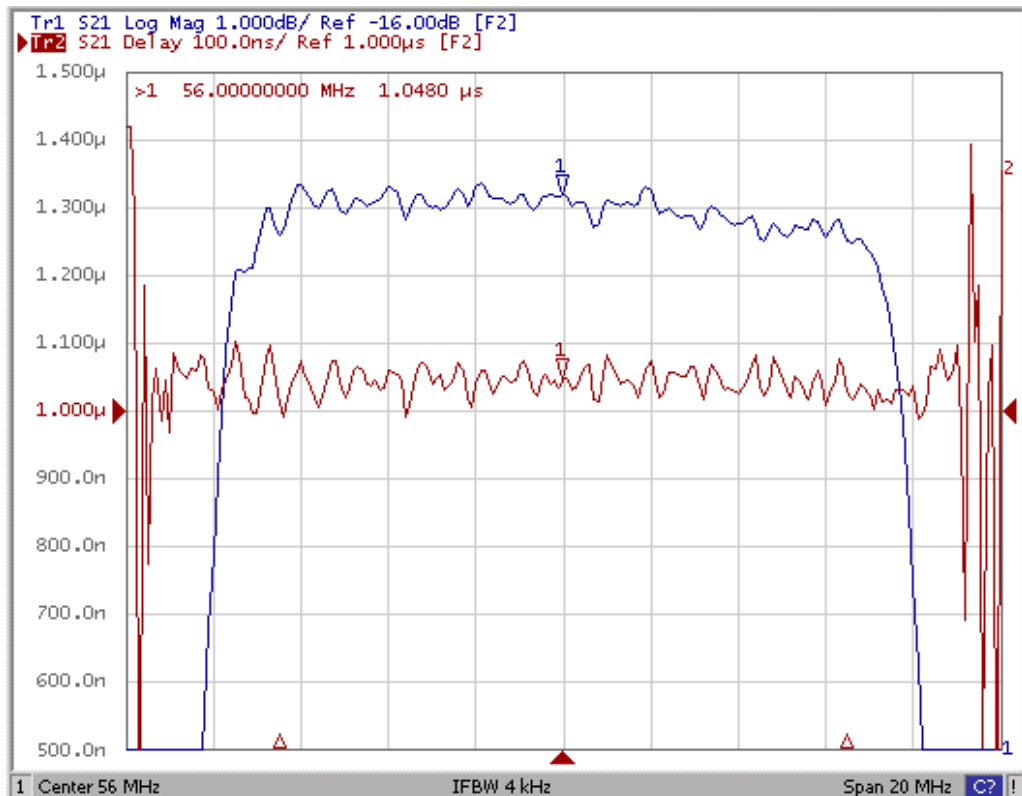
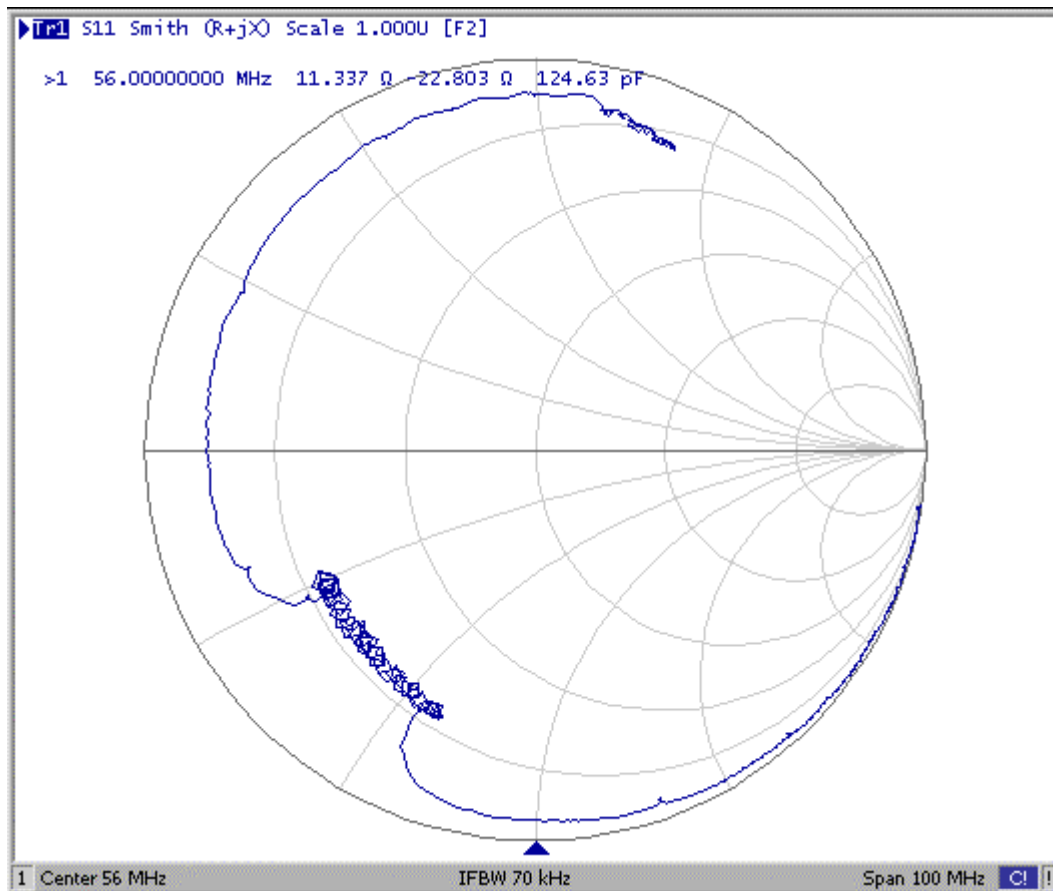
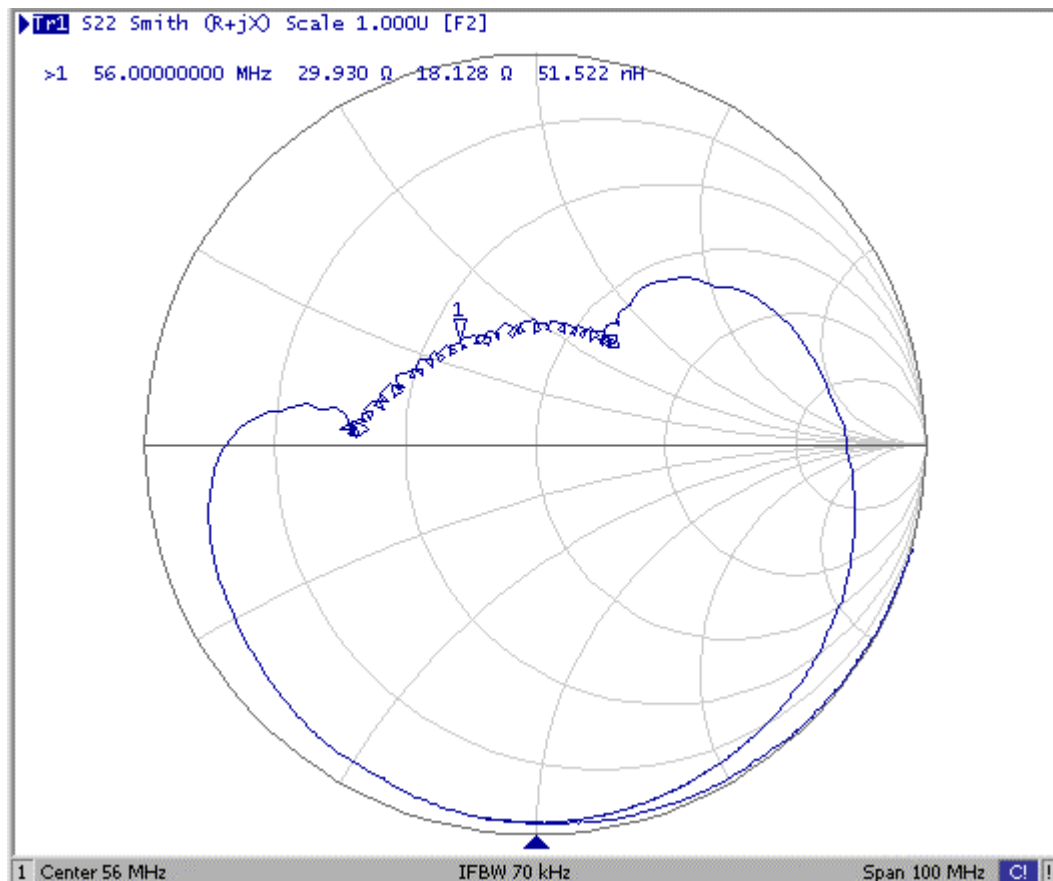


Fig2. Horizontal: 2.0MHz/Div Vertical: 100nec/Div

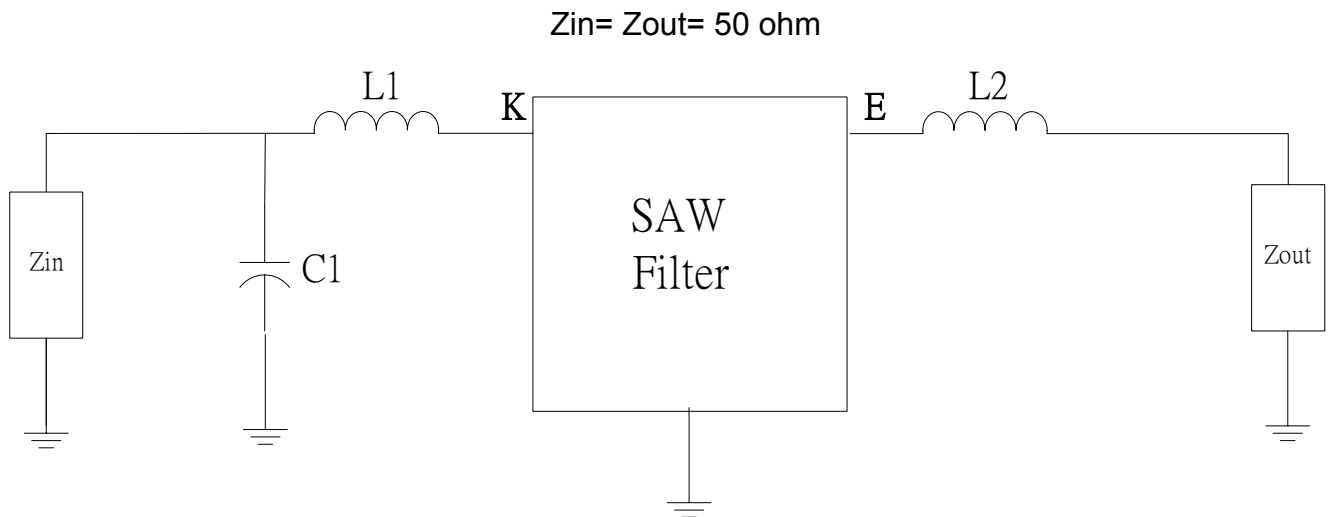
### 3. S11 Smith Chart: (span : 100MHz)



### 4. S22 Smith Chart (span : 100MHz)

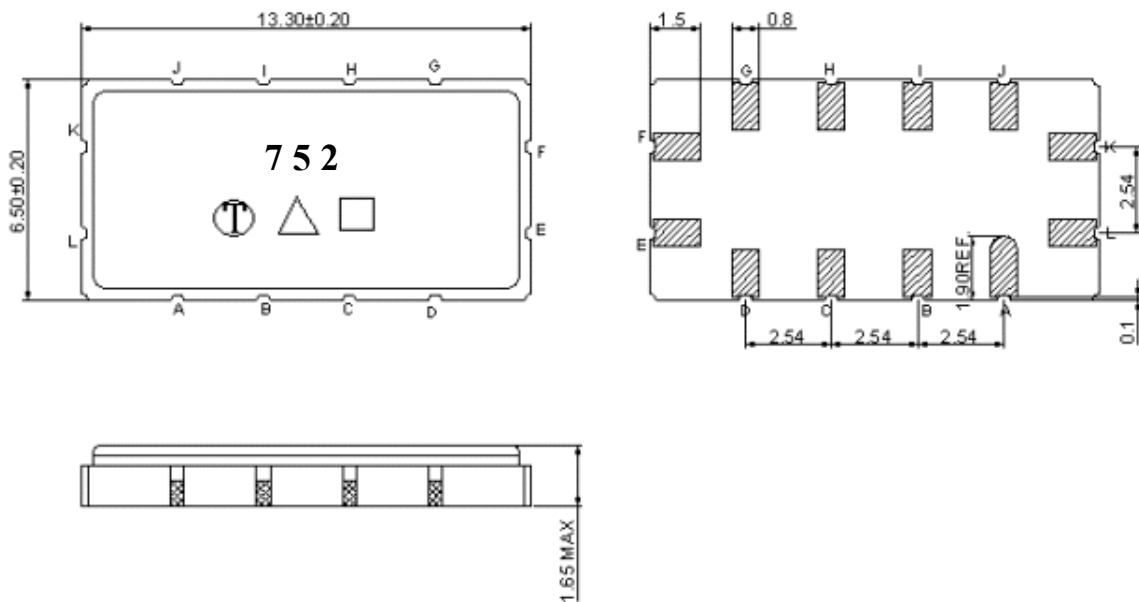


E. MEASUREMENT CIRCUIT



L1=300nH, C1=39pF, L2=150nH.

F.OUTLINE DRAWING:



Pin K: RF input

Pin E: RF output

Pin A, B, C, D, G, H, I, L, F J: To be Ground

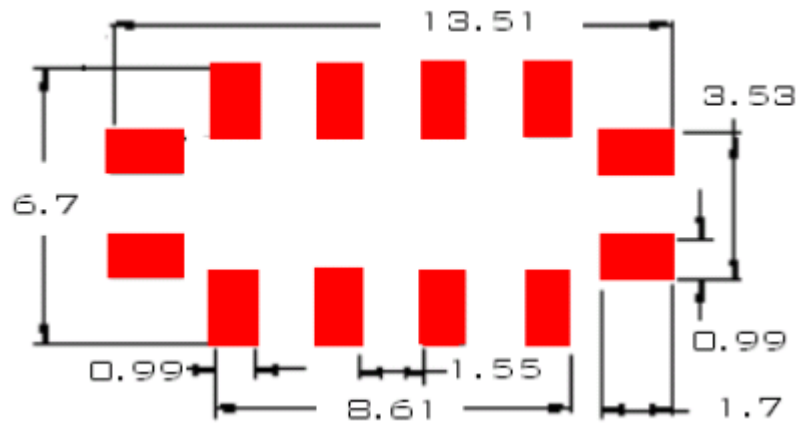
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

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

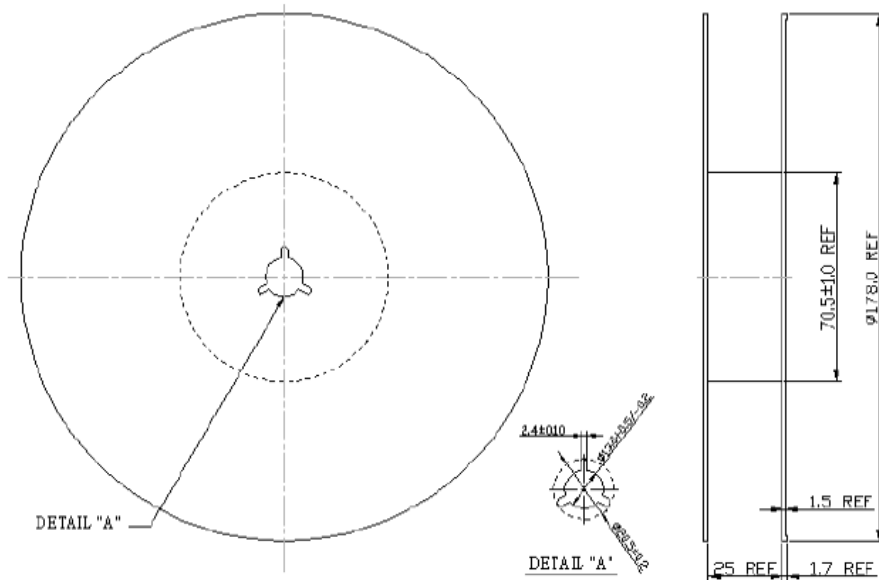
### G. PCB Footprint



Unit: mm

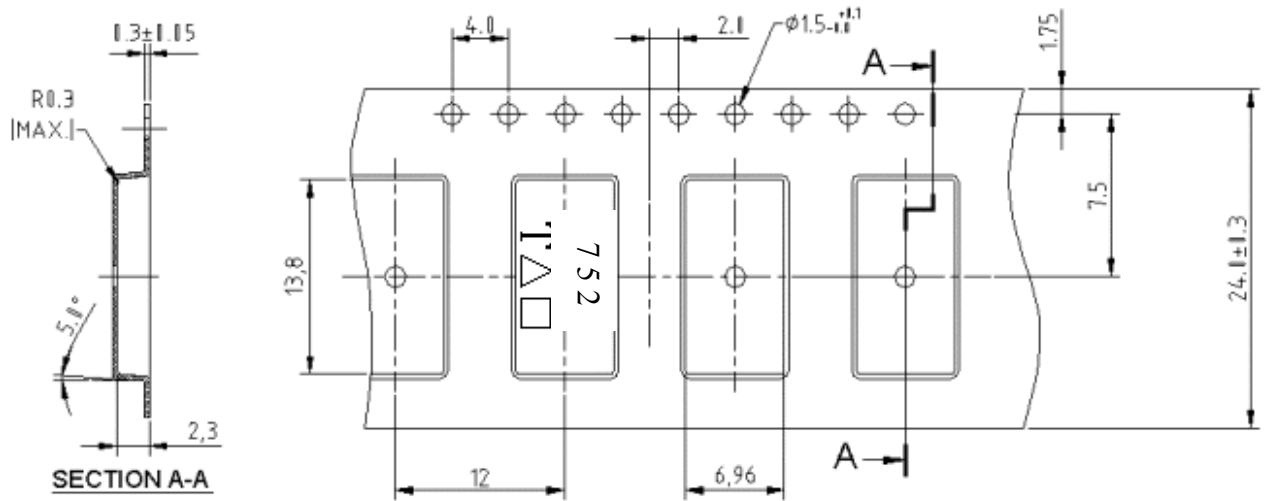
### H. PACKING:

#### 1. REEL DIMENSION



Unit: mm

## 2. TAPE DIMENSION



Unit: mm

## I. RECOMMENDED REFLOW PROFILE\_:

