



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Filter 104MHz SMD 13.3×6.5mm

TST Parts No.: TB0754A

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 104 MHz(BW=20MHz) SMD 13.3mmX6.5mm

MODEL NO.: TB0754A

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	-	104.0	-	-
<b>Minimum Insertion loss</b> I.L. 93.2MHz ~ 113.2MHz dB	-	10.8	15.0	-
<b>Passband Ripple</b> 93.2MHz ~ 113.2MHz dB	-	0.6	1.5	-
<b>Attenuation</b> 10MHz ~ 86MHz dB 122MHz ~ 200MHz dB	40 40	52 45	- -	- -
<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 : 200MHz)

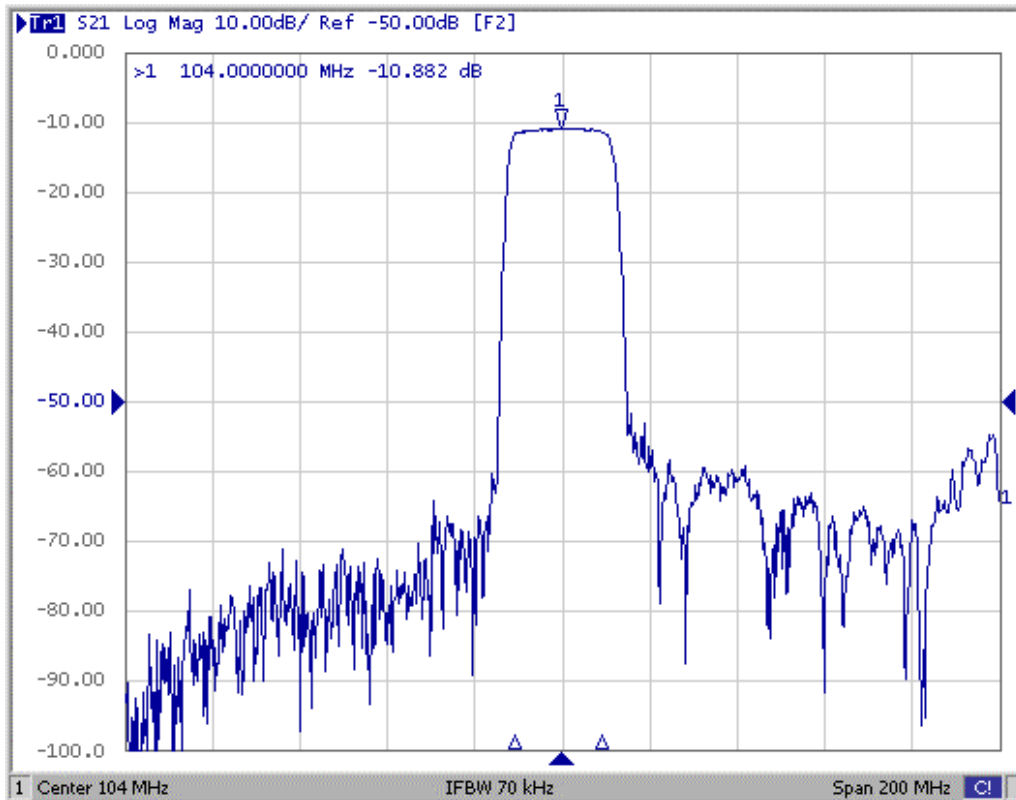


Fig1. Horizontal:20MHz/Div Vertical: 10dB/Div

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

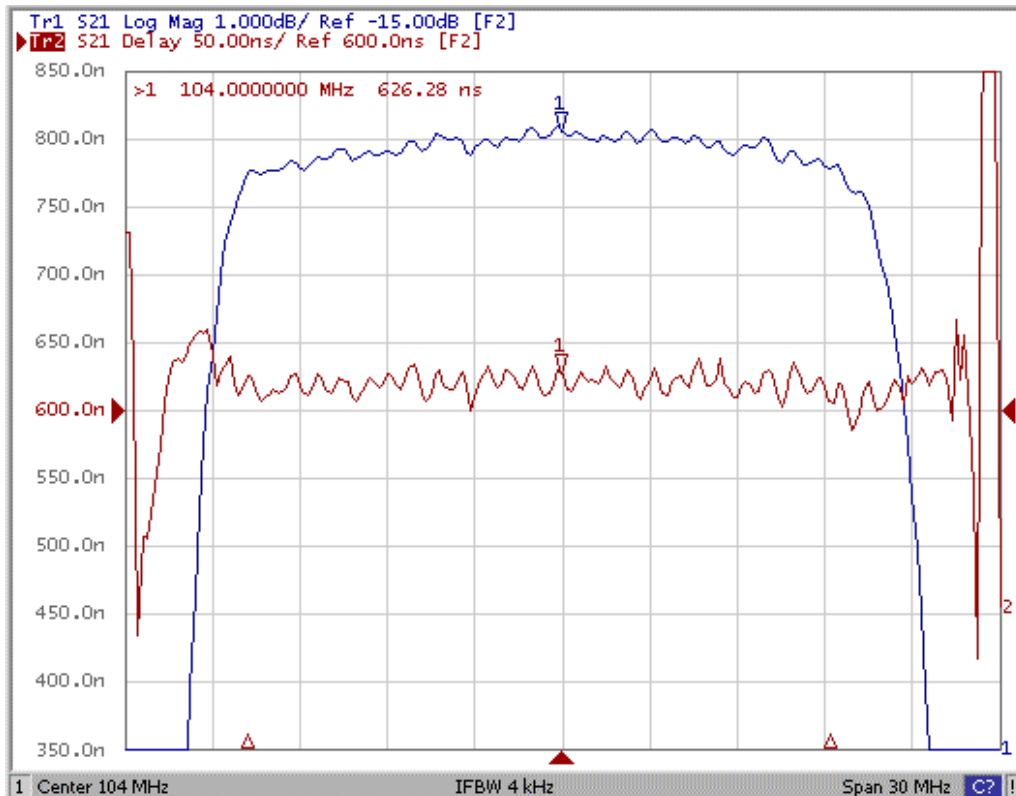
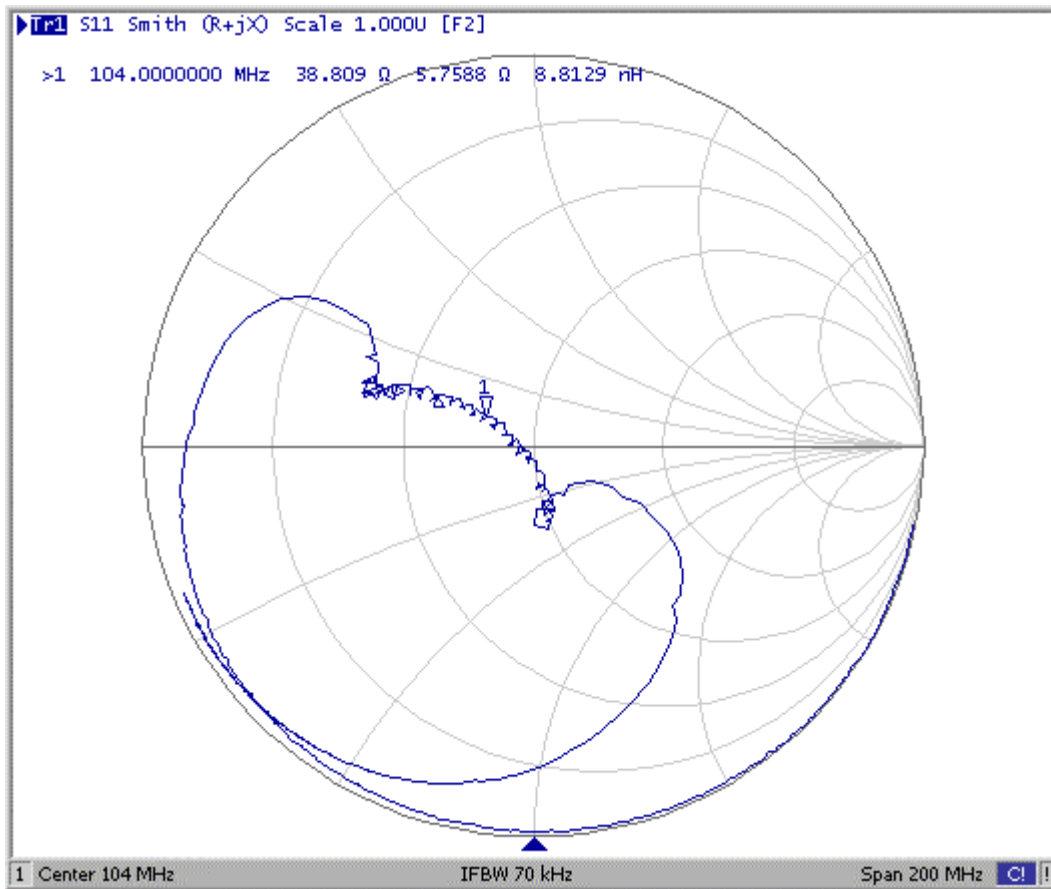
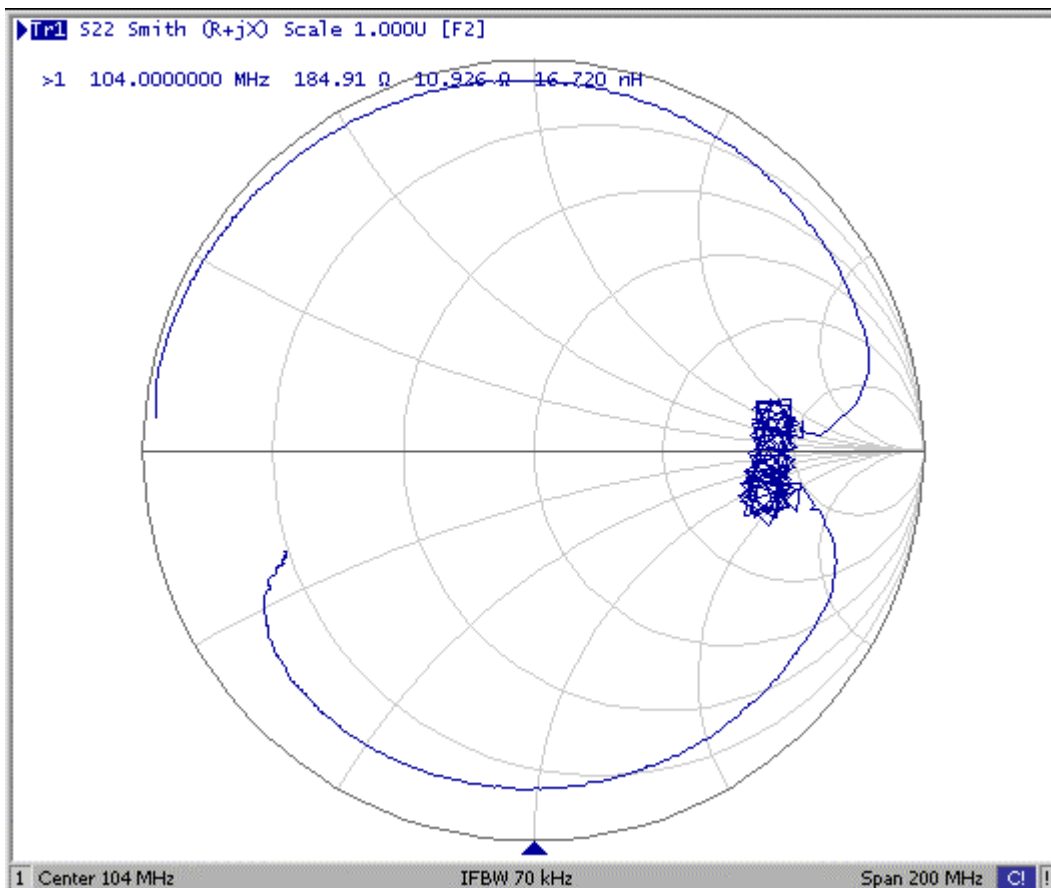


Fig2. Horizontal: 3.0MHz/Div Vertical: 50nec/Div

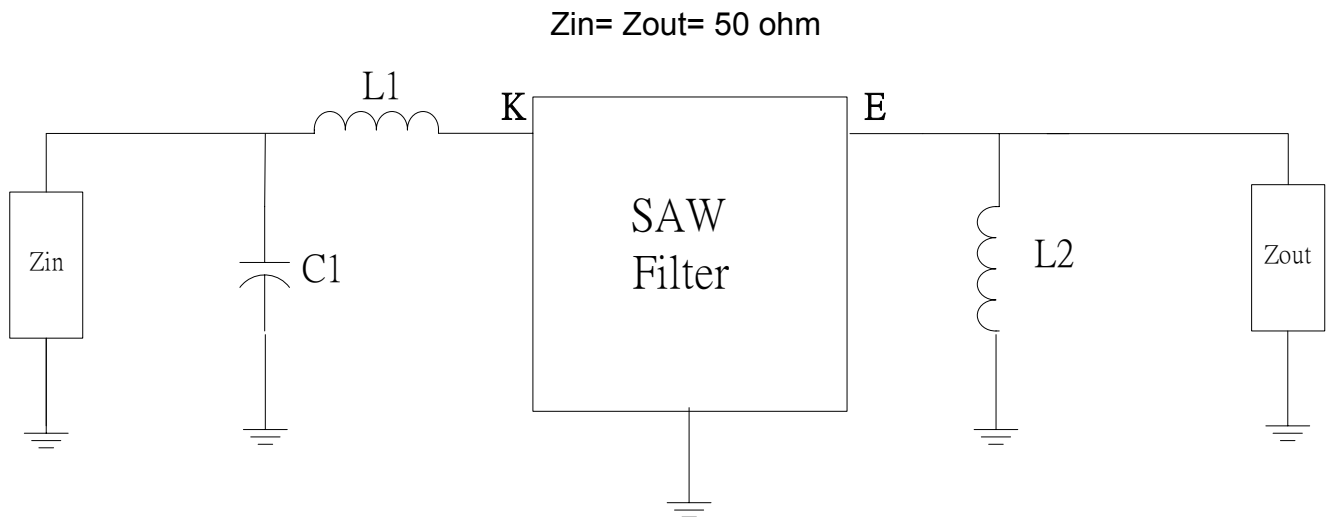
### 3. S11 Smith Chart: (span : 200MHz)



### 4. S22 Smith Chart (span : 200MHz)



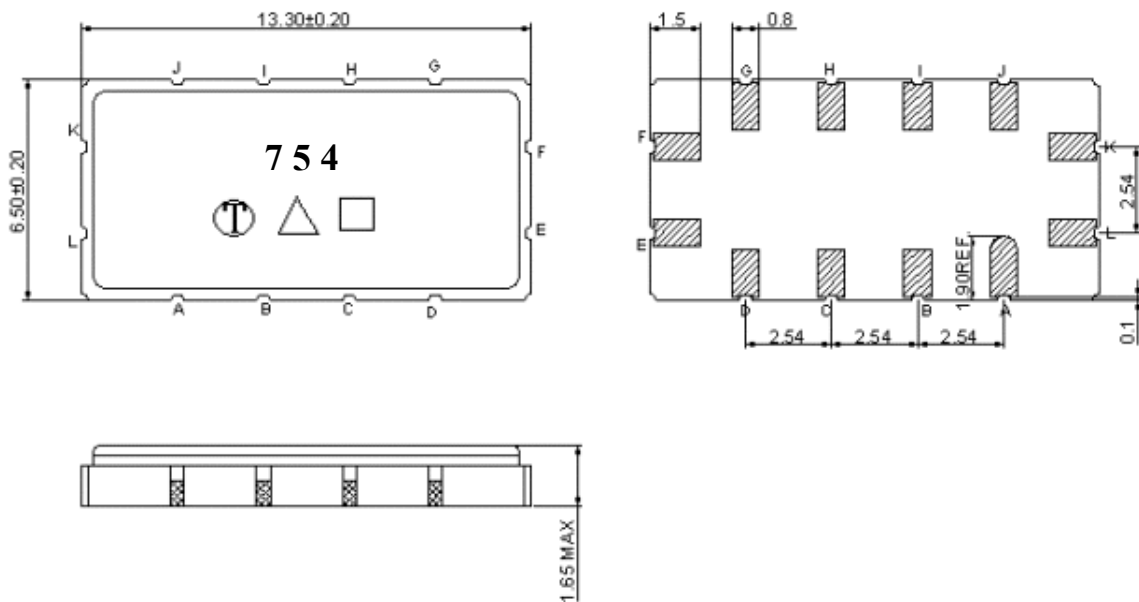
E. MEASUREMENT CIRCUIT



$Z_{in} = Z_{out} = 50 \text{ ohm}$

$L1 = 100 \text{ nH}, C1 = 56 \text{ pF}, L2 = 82 \text{ nH}$ .

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)

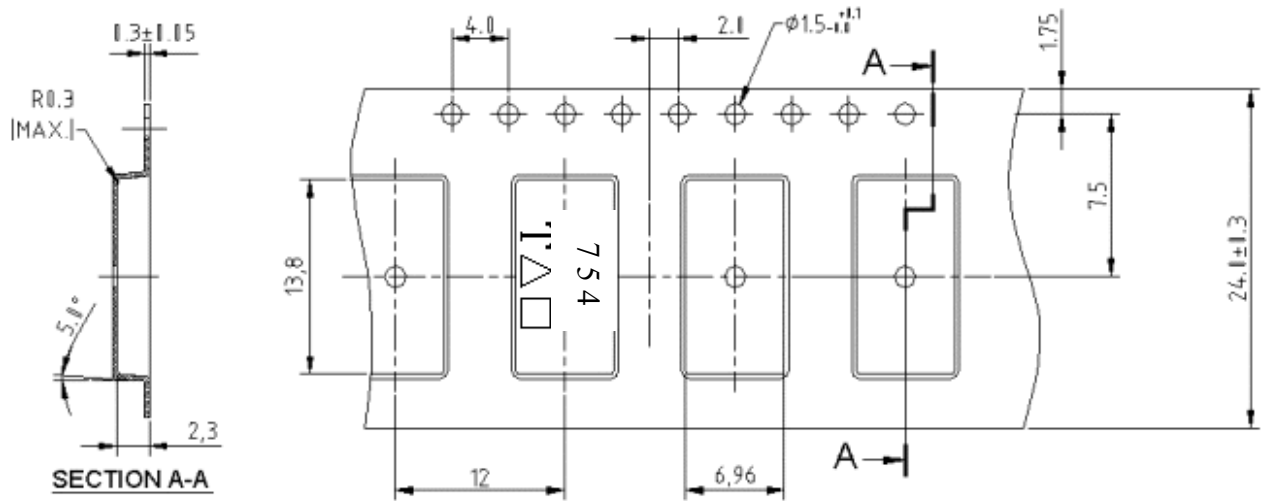
Unit : mm

△ : Product / Year Code

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



## 2. TAPE DIMENSION



Unit: mm

## I. RECOMMENDED REFLOW PROFILE\_:

