



# 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

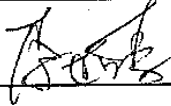
Issued Date:

Product Name: SAW IF Filter 109.8 MHz

TST Parts No.: TB0791A ( package 11.4mm x5.0 mm )

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

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

Checked by: \_\_\_\_\_ Kazuma Lee 

Approval by: \_\_\_\_\_ Andrew Lee 

Date: \_\_\_\_\_ 09 / 23 / 2009

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.

**TST DCC**  
Release document

FR-71S03-02



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IF SAW Filter 109.8MHz(BW=200KHz) SMD 11.4X5.0mm

MODEL NO.: TB0791A

REV. NO.1

## A. MAXIMUM RATING:

1. Operating Temperature: -10°C ~ 50°C
2. Storage Temperature: -40°C ~ +85°C
3. Input Power Level : 10 dBm

RoHS Compliant  
Lead free  
Lead-free soldering

## B. Characteristics :

1. Ambient Temperature: 25 oC

Characteristics			Value		
			Min.	Typ.	Max.
Center frequency	FC	MHz	-	109.8	-
Minimum Insertion loss	I.L.	dB	-	8.2	9.5
Amplitude Ripple (Fc ± 100KHz)		dB	-	0.6	1.0
1 dB Bandwidth		KHz	-	288	-
3 dB Bandwidth		KHz	200	430	-
Relative Rejection (Reference to Minimum Insertion loss)					
1) Fc ± 0.614MHz		dB	-	16	-
2) Fc -2.05MHz		dB	35	41	-
3) Fc -1.7 MHz		dB	30	39	-
4) Fc -1.25MHz		dB	30	37	
5) Fc -0.9MHz		dB	20	30	
6) Fc+0.9MHz		dB	20	28	
7) Fc +1.25MHz		dB	30	38	
8) Fc+1.7MHz		dB	30	37	
9) Fc+2.05MHz		dB	35	42	
10) Fc-2.5MHz		dB	36	49	
Temp Coefficient		ppm/K <sup>2</sup>	-	-0.036	-

## C. Frequency Characteristics :

### 1. S21 Response

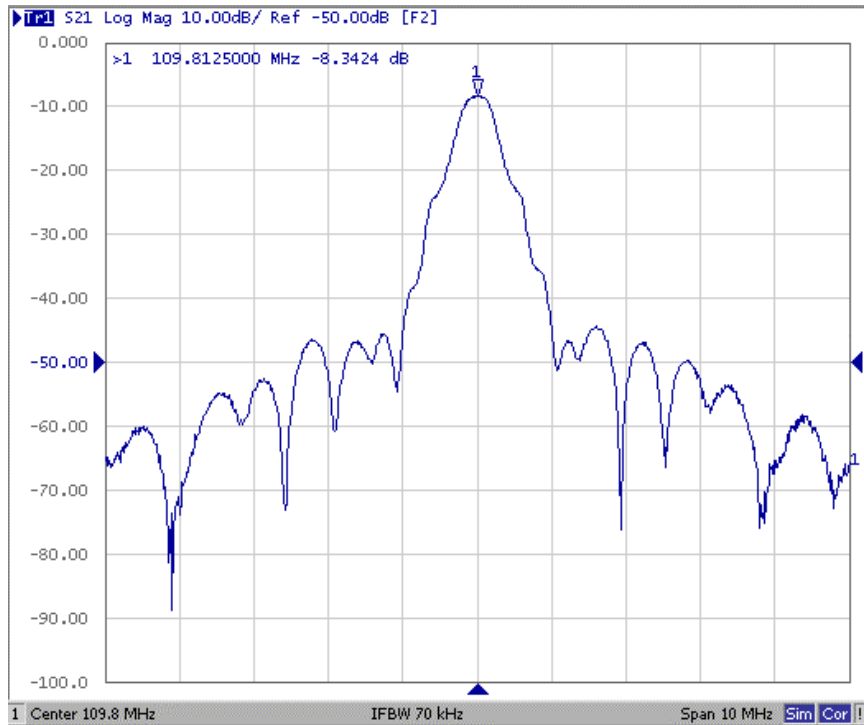


Fig1. Horizontal: 1.0MHz/Div Vertical: 10dB/Div

### 2. Passband Response and Group Delay Response

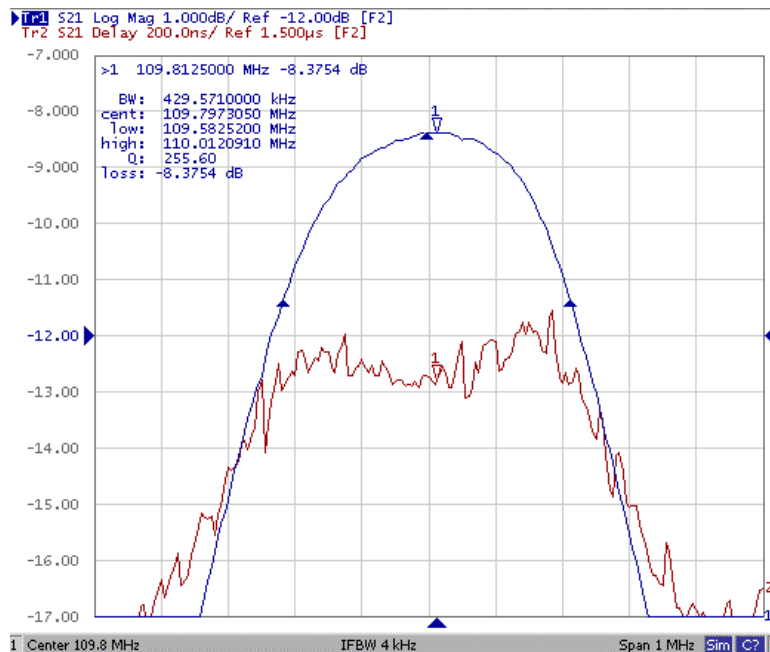
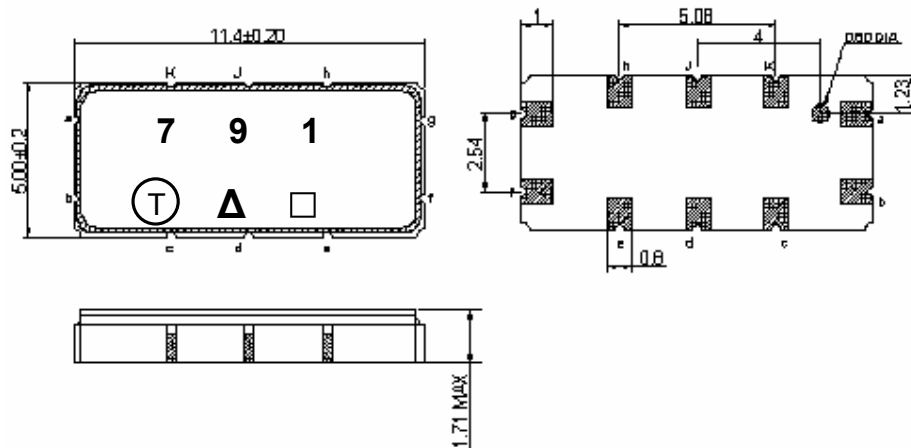


Fig2. Horizontal: 0.1MHz/Div Vertical 1: 1dB/Div  
Vertical 2: 200nS/Div

### D. Outline Drawing:



Pin a: RF Input

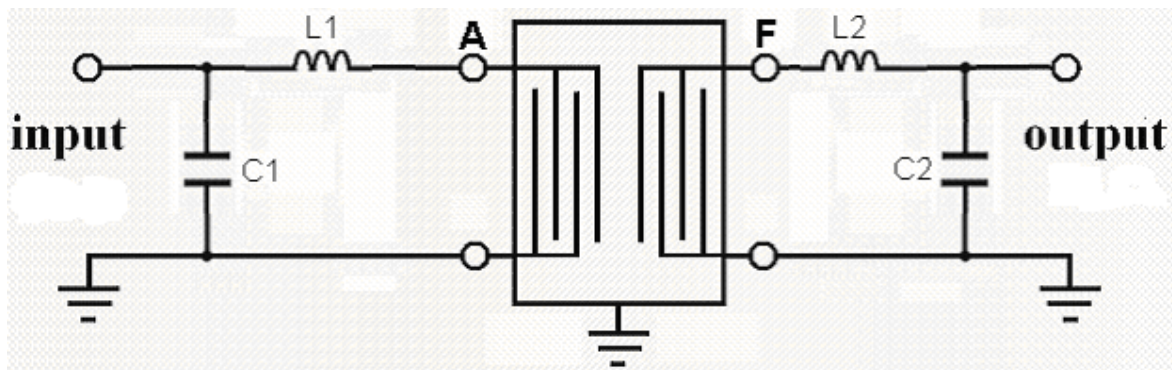
Pin f: RF Output

Pin b, c, d, e, g, h, j, k : To be ground

Unit : mm

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

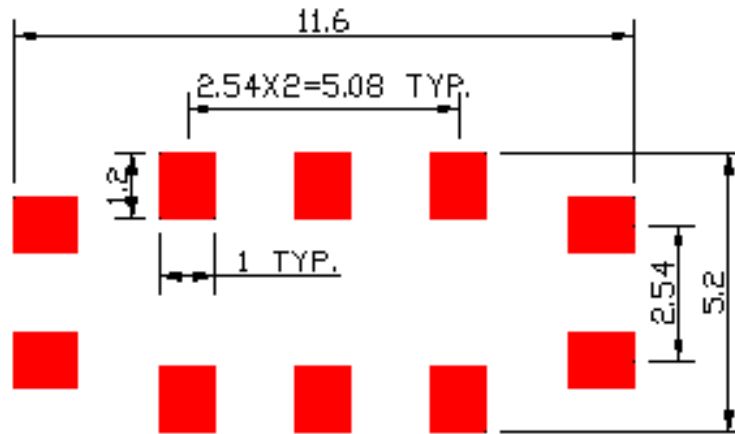
### D. Matching Circuit:



$$Z_{in} = Z_{out} = 470 \text{ ohm}$$

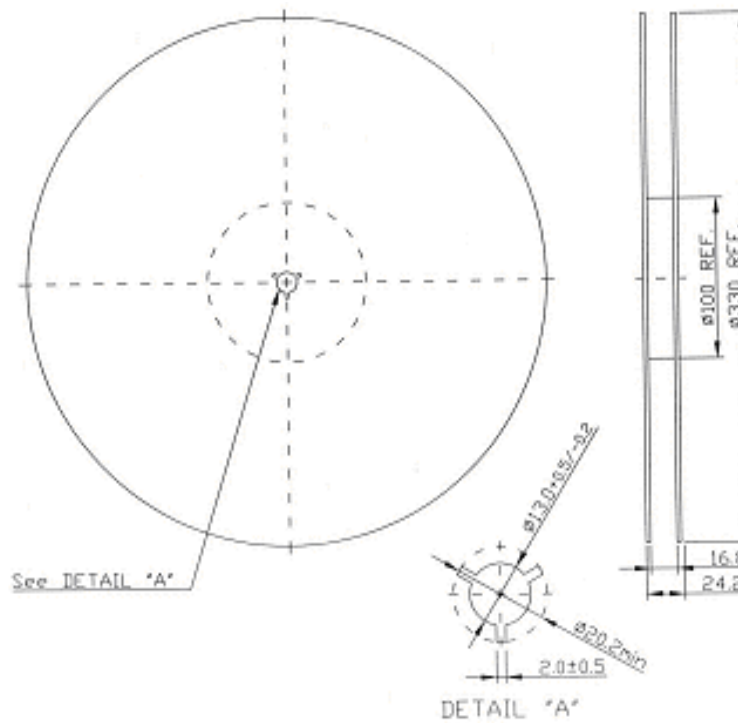
$$L1=270\text{nH} \quad L2=270\text{nH} \quad C1=12\text{pF} \quad C2=15\text{pF}$$

**F. PCB Footprint:**

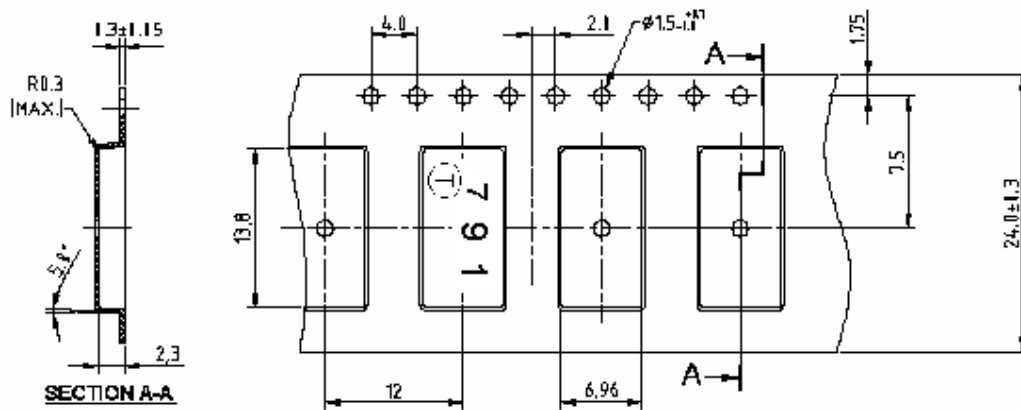


**G. Packing:**

1. Reel Dimension



## 2. Tape Dimension



## H. RECOMMENDED REFLOW PROFILE :

