



TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

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.: _____

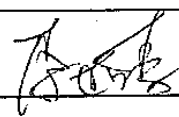
Customer signature required

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.

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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 ²	-	-0.036	-

C. Frequency Characteristics :

1. S21 Response

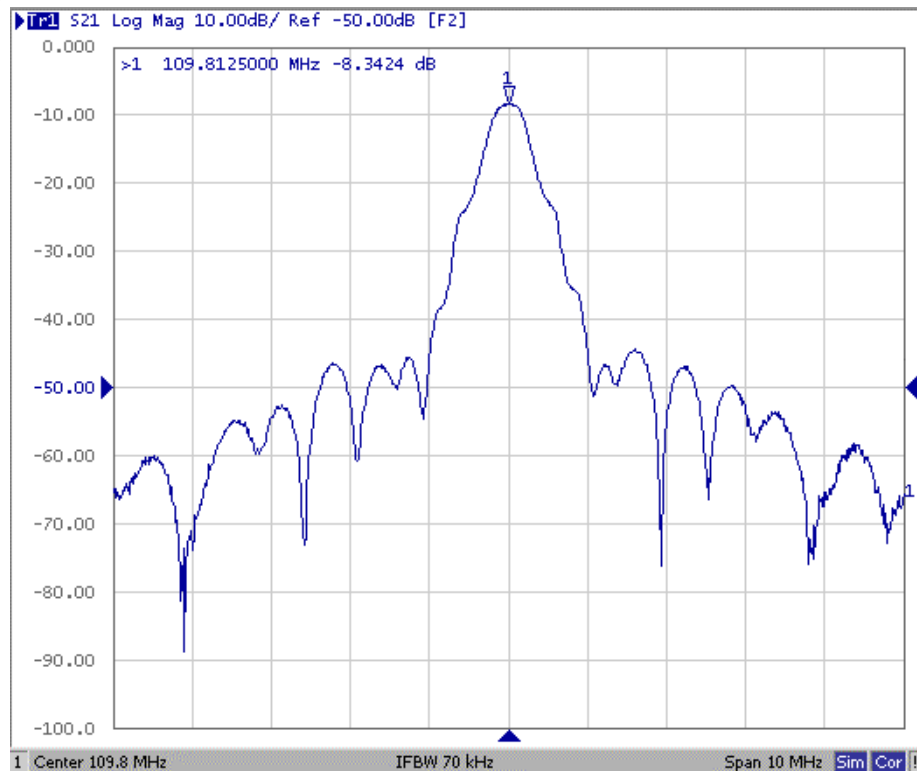


Fig1. Horizontal: 1.0MHz/Div Vertical: 10dB/Div

2. Passband Response and Group Delay Response

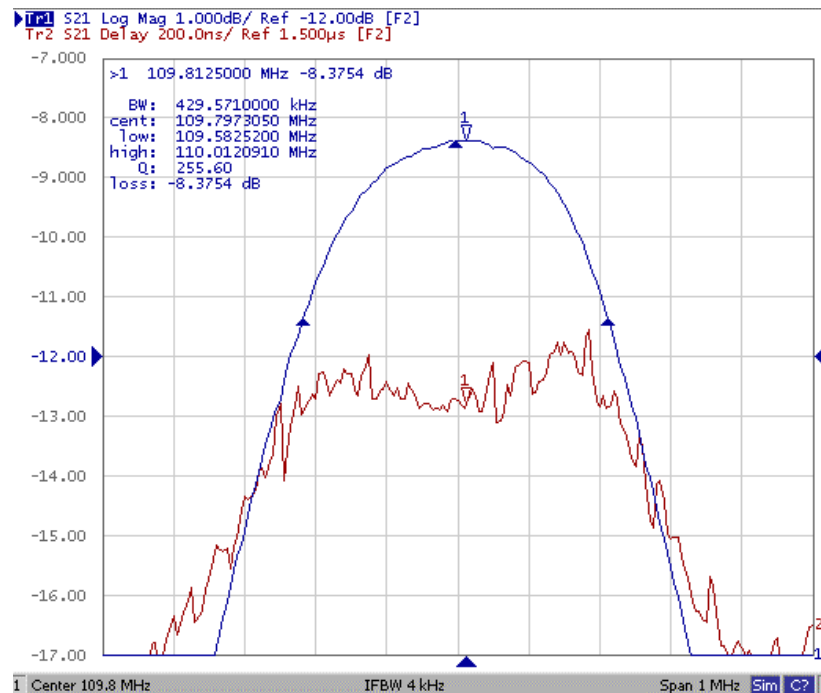
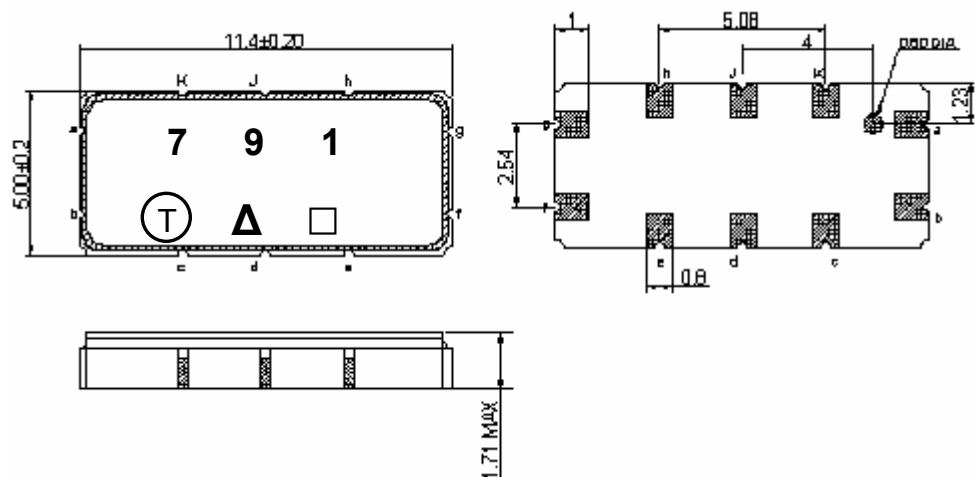


Fig2. Horizontal: 0.1MHz/Div Vertical 1: 1dB/Div
Vertical 2: 200nS/Div

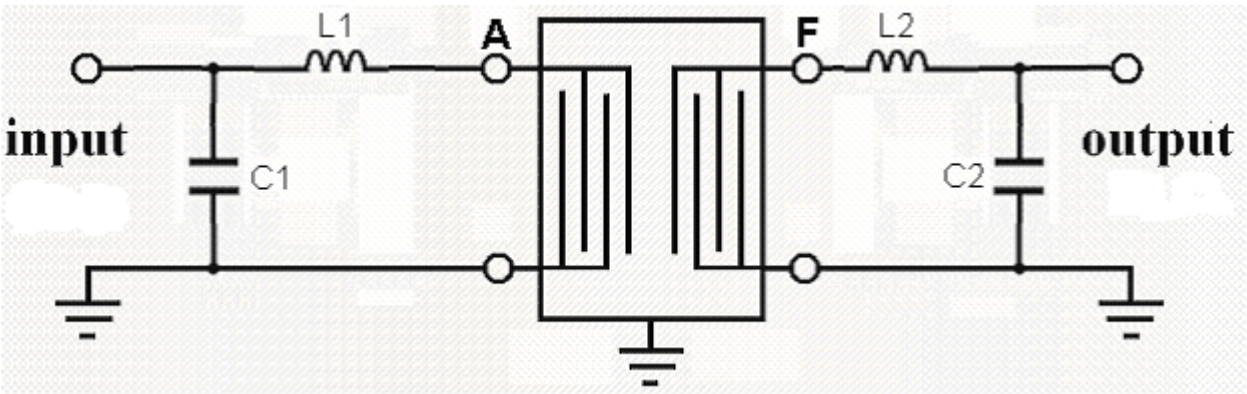
D. Outline Drawing:



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>

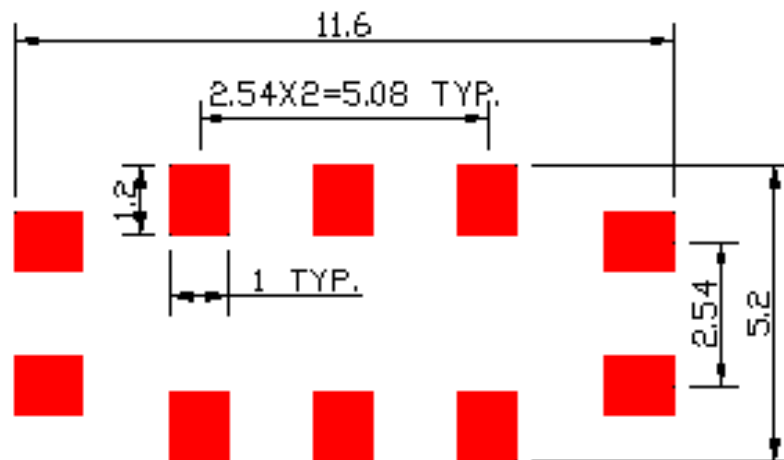
D. Matching Circuit:



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

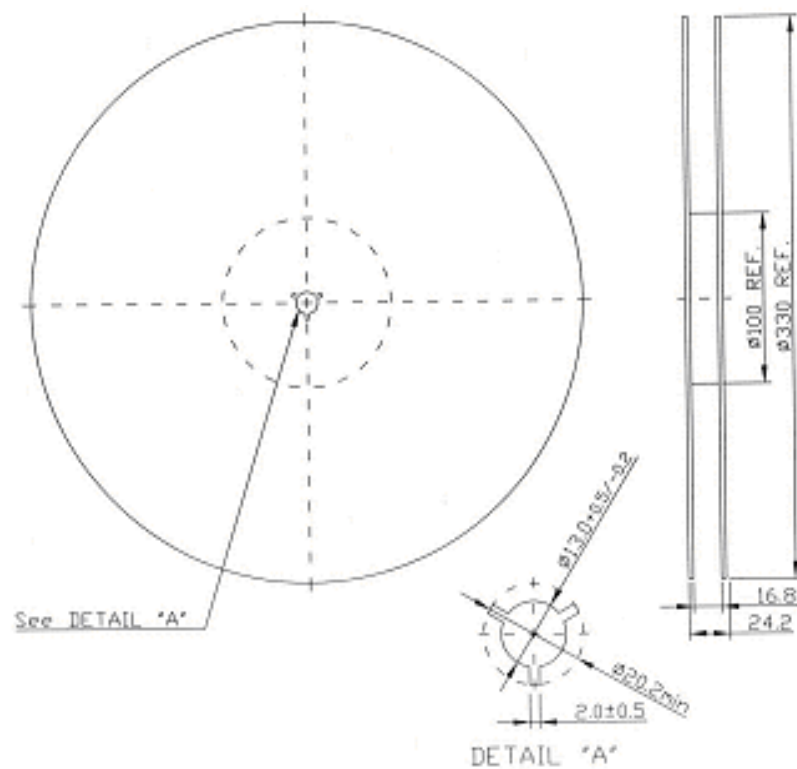
$$L1=270\text{nH} \quad L2=270\text{nH} \quad C1=12\text{pF} \quad C2=15\text{pF}$$

F. PCB Footprint:

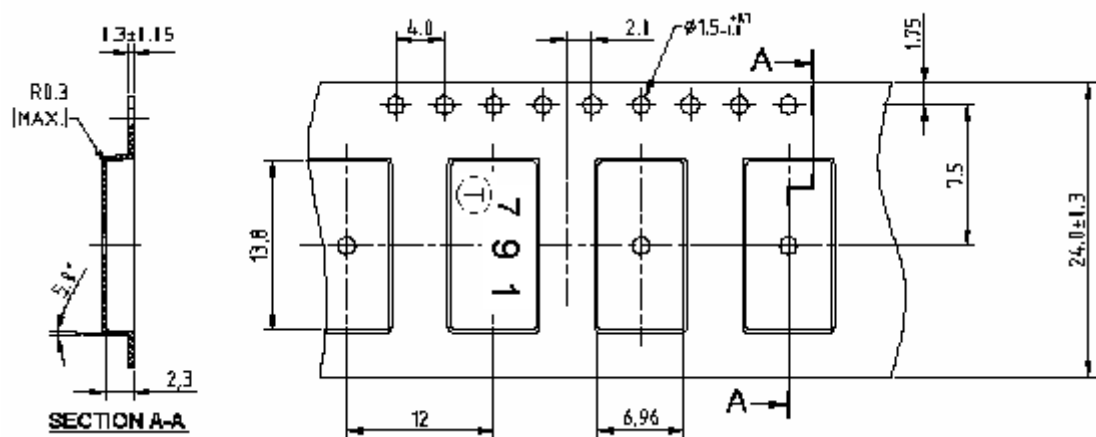


G. Packing:

1. Reel Dimension



2. Tape Dimension



H. RECOMMENDED REFLOW PROFILE :

