



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

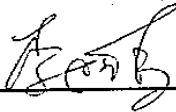
Issued Date:

Product Name: SAW IF Filter 70MHz

TST Parts No.: TB0691A

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

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

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

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

Date: \_\_\_\_\_ 2009/02/05



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SAW Filter 70MHz 1.3MHz BW (SMD 13.3×6.5 mm)

MODEL NO.: TB0691A

Rev No.1

## A. MAXIMUM RATING:

1. Operating temperature range: -40°C to 80°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant  
Lead free  
Lead-free soldering

## B. Characteristics :

ELECTRICAL PARAMETERS			VALUE		
Parameter	Sign	Units	MIN	TYP	MAX
Center Frequency	F <sub>0</sub>	MHz	69.9	70	70.1
Insertion Loss	IL	dB	-	9.8	12
-1 dB Pass Bandwidth	BW1	MHz	-	1.0	-
-3 dB Pass Bandwidth	BW3	MHz	1.26	1.32	-
-40 dB Pass Bandwidth	BW40	MHz	-	2.84	2.9
Amplitude Ripple Fc±/ 0.35MHZ	AR	dB	-	0.3	1.0
Group Delay Time Deviation in Pass Band Fc±/ 0.35MHZ	GDV	nsec	-	160	280
Relative Attenuation					
DC ~ 65MHz	dB	UR	45	55	-
75MHz ~ 200MHz	dB	UR	45	55	-
Source and Load Impedances	RS/RL	Ohm	50		

### C. Frequency Characteristics :

(1) Wide band Response:(span 10MHz)

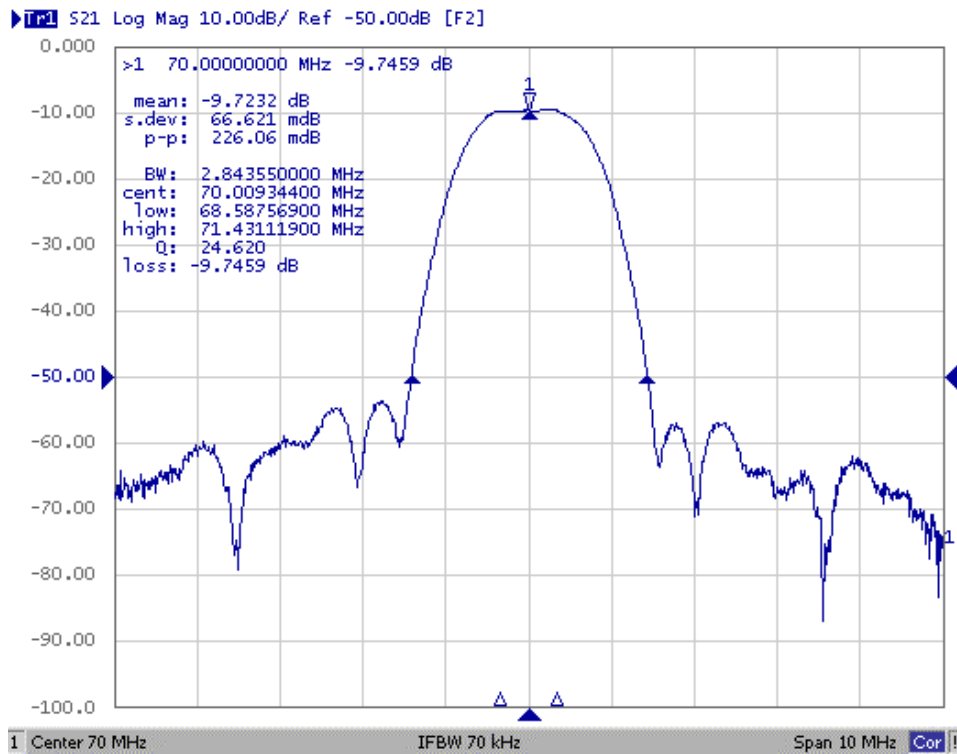


Fig1. Horizontal: 1MHz/Div Vertical: 10dB/Div

(2) Pass band Response and Group Time Delay response:

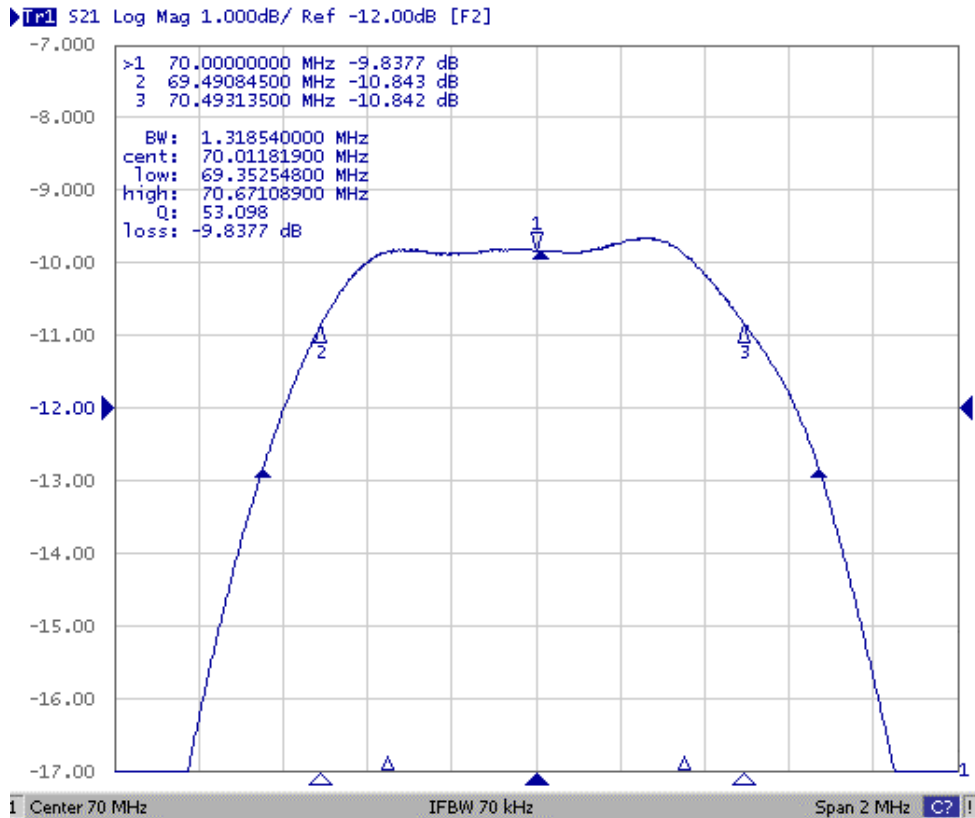


Fig2. Horizontal: 0.2MHz/Div Vertical: 1dB/Div

(3) Group Time Delay response:

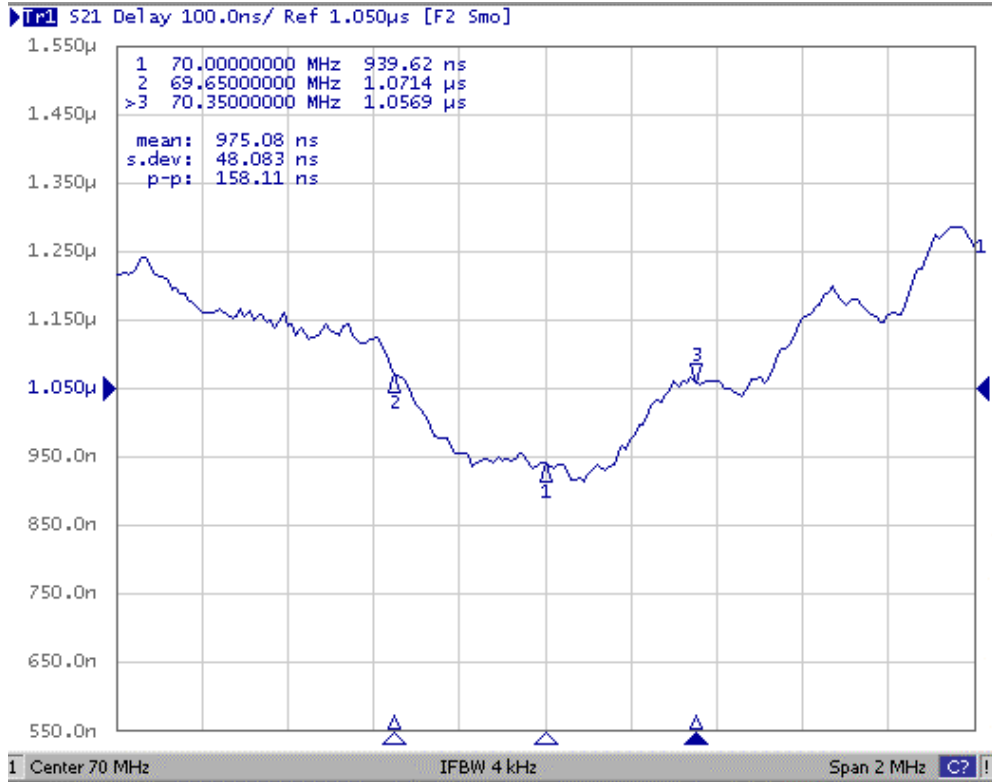
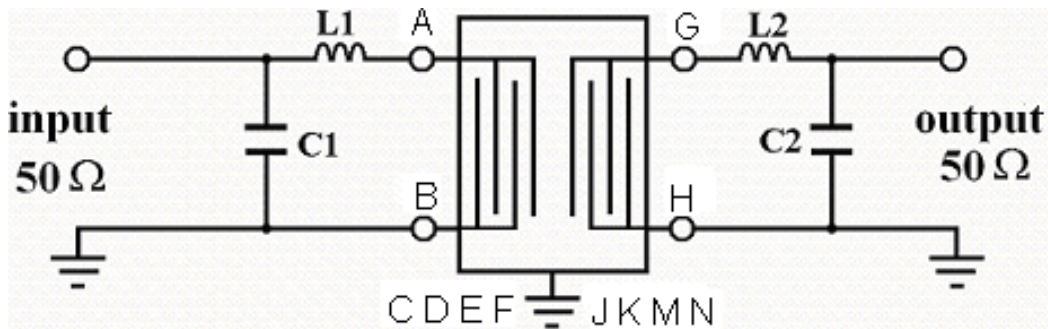


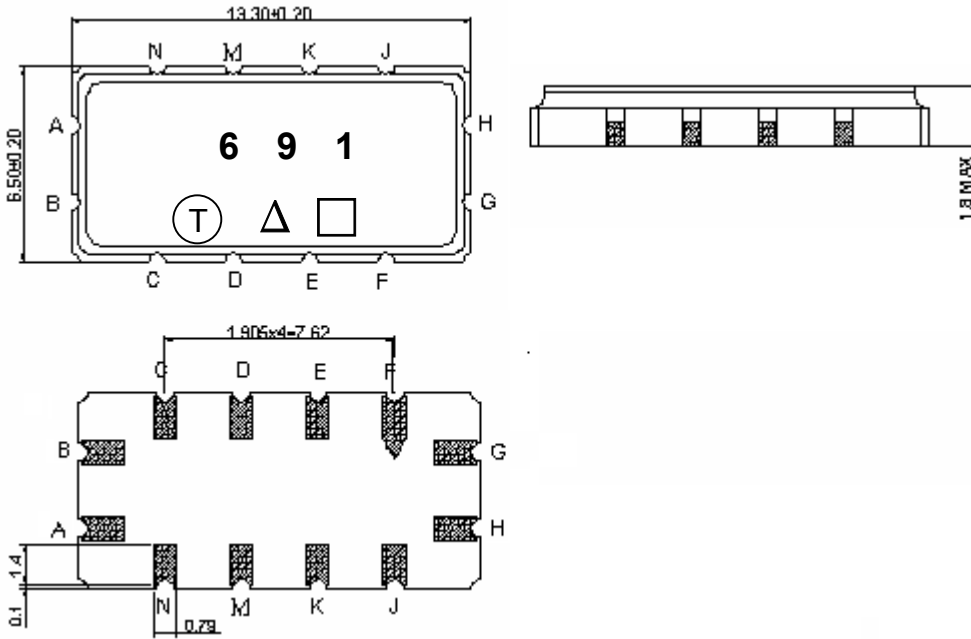
Fig3. Horizontal: 0.2MHz/Div Vertical: 100ns/Div

D. Matching Circuit:



$L1 = 330\sim 480\text{ nH}$ ,  $C1 = 82\text{ pF}$        $L2 = 330\sim 480\text{ nH}$ ,  $C2 = 82\text{ pF}$   
 $Z_{in}=50\text{ohm}$   $Z_{out}=50\text{ohm}$

**E. Outline Drawing:**



Pin A –RF input

Pin B –RF input ground

Pin G –RF output

Pin H –RF output ground

Pin C, D, E, F, J, K, M, N - Ground

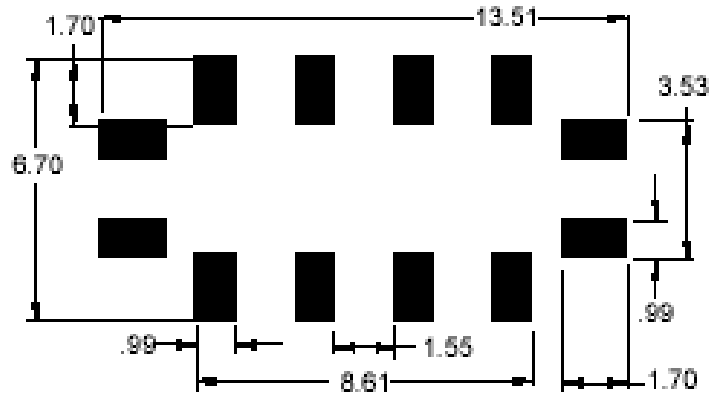
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

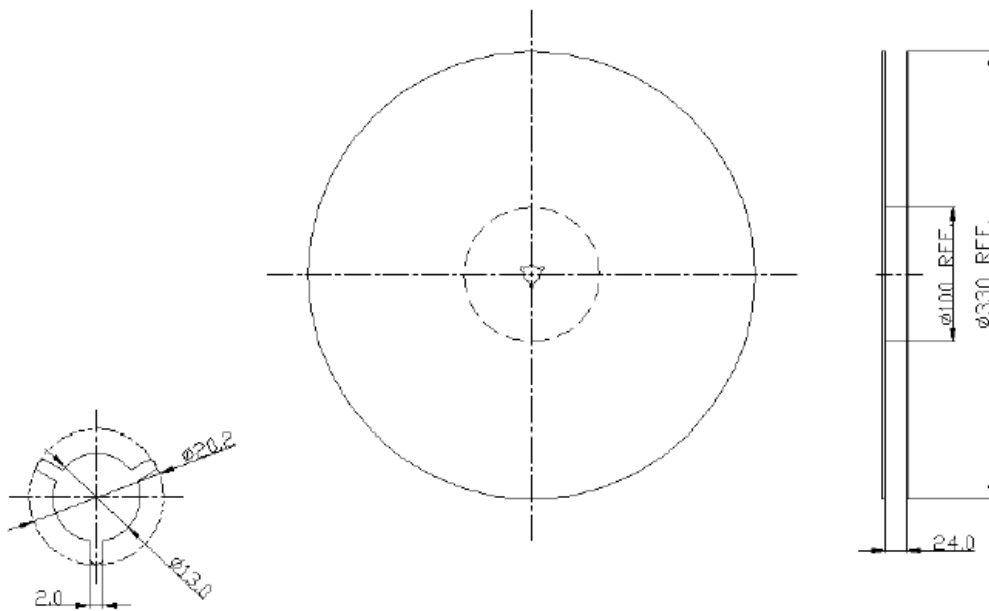
Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

**F. PCB Footprint:**



**G. PACKING:**

**1. REEL DIMENSION**



Unit: mm

