



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date:

Product Name: SAW IF Filter 138MHz

TST Parts No.: TB0614A

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee

Approval by: _____ Francis Chen

Date: _____ 2008/05/07



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SAW Filter 138MHz 70.6MHz BW (SMD 5×7 mm)

MODEL NO.: TB0614A

Rev No.1

A. MAXIMUM RATING:

1. Operating temperature range: -10°C to 80°C
2. Storage temperature range: -40°C to 85°C

RoHS Compliant
Lead free
Lead-free soldering

B. Characteristics :

Item	Unit	Min.	Type.	Max.
Center frequency, F_c	MHz	-	138	-
Insertion Loss, IL	dB	-	21.6	24
Upper -1dB frequency	MHz	173.6	174.8	-
Lower -1dB frequency	MHz	-	99.5	102.7
Upper -40dB frequency	MHz	-	182.8	184
Lower -40dB frequency	MHz	92	94.2	-
Ultimate rejection	dB	35	39	
Passband Ripple in 1.25 MHz BW	dB	-	0.35	0.5
Passband Ripple to 1dB frequencies	dB	-	1.0	1.5
Temperature Coefficient	ppm/°C	-	-72	-
Source Impedance (Balanced)	Ohm	-	50	-
Load Impedance (Balanced)	Ohm	-	50	-

C. Frequency Characteristics :

(1) Narrow band Response:(span 200MHz)

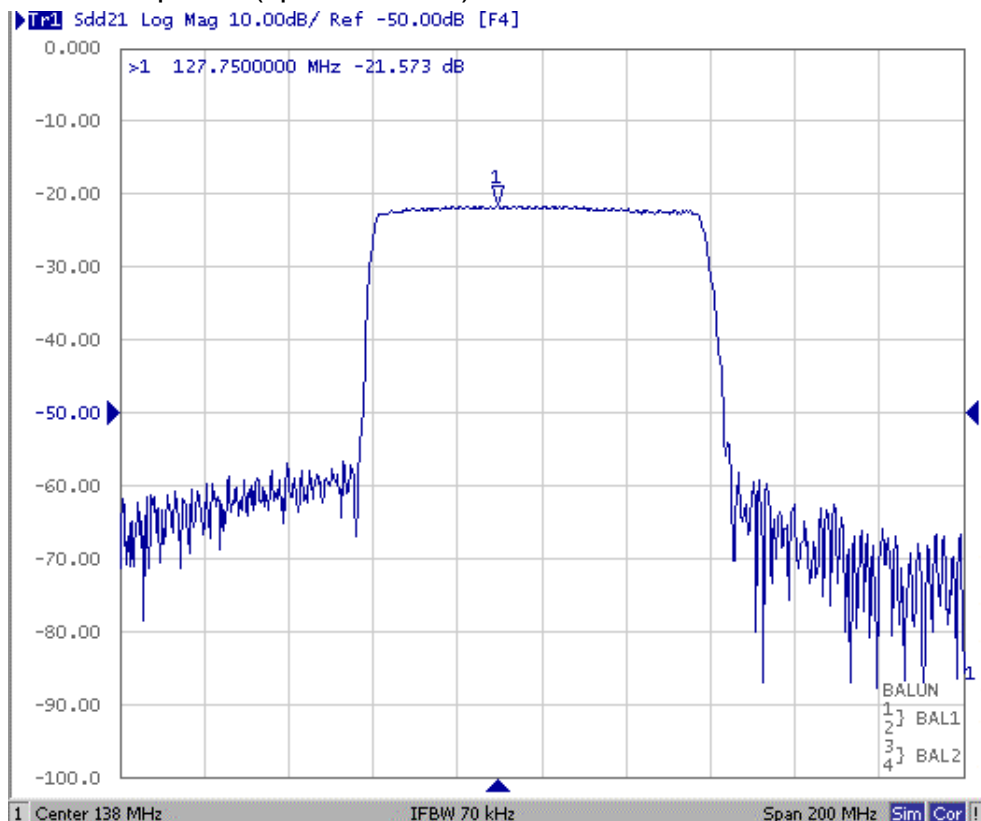


Fig1. Horizontal: 20MHz/Div Vertical: 10dB/Div

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

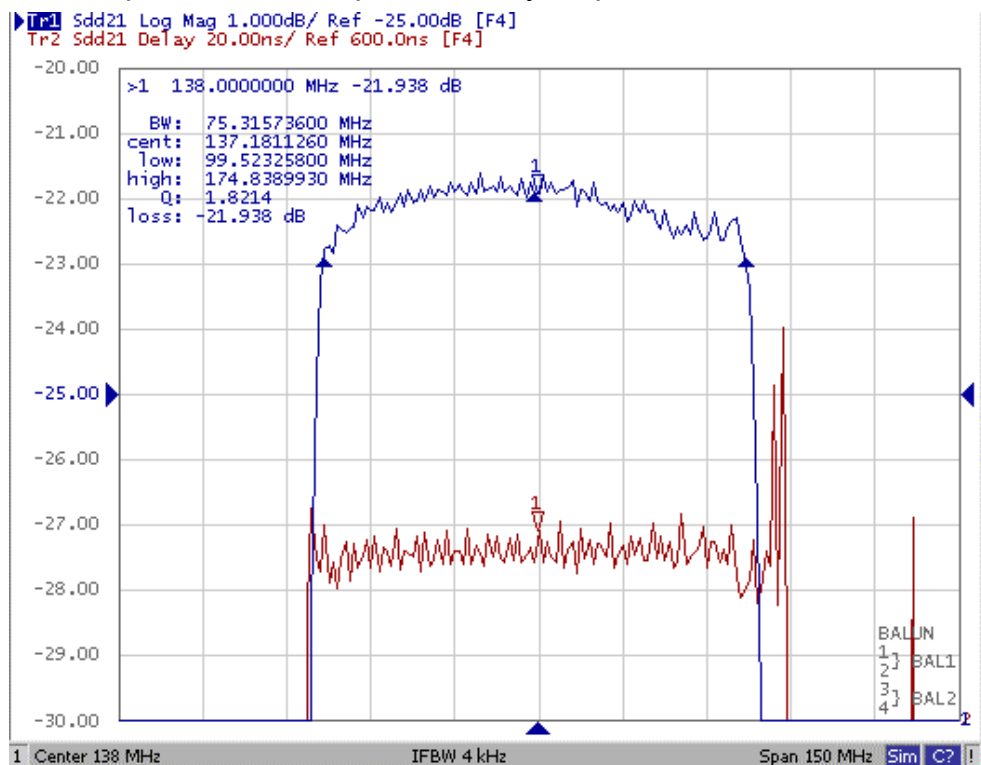


Fig2. Horizontal: 15MHz/Div Vertical: 1dB/Div
Vertical: 20ns/Div

(3) Wide band Response:(span 600MHz)

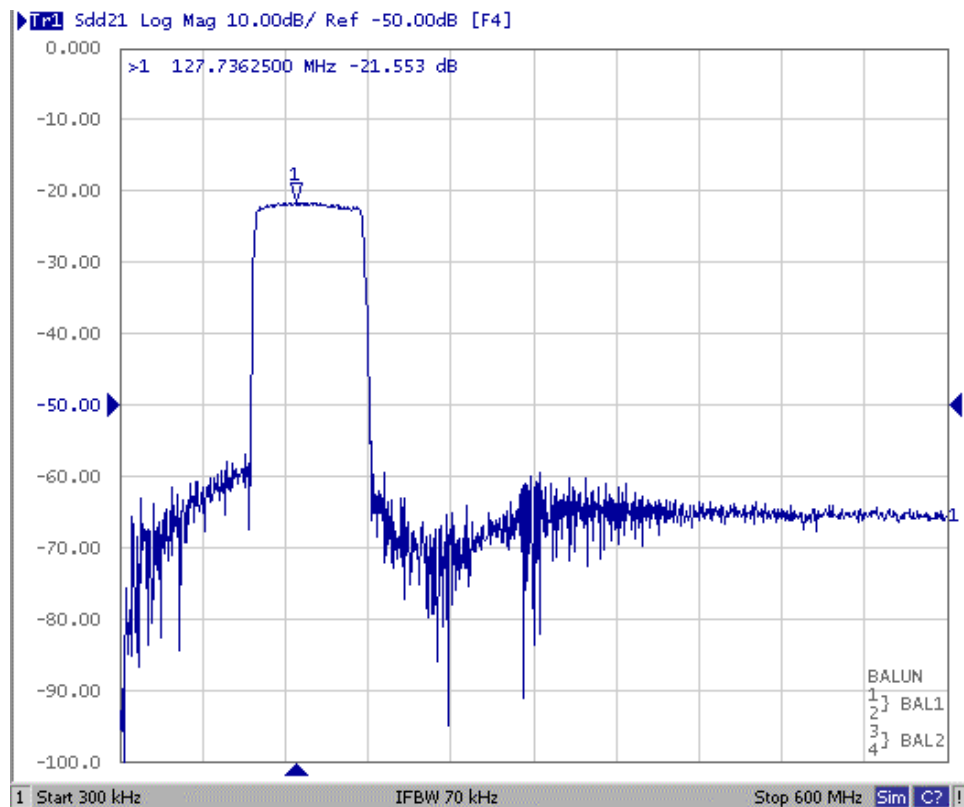


Fig3. Horizontal: 60MHz/Div Vertical: 10dB/Div

(4) Return Loss Response:(span 200MHz)

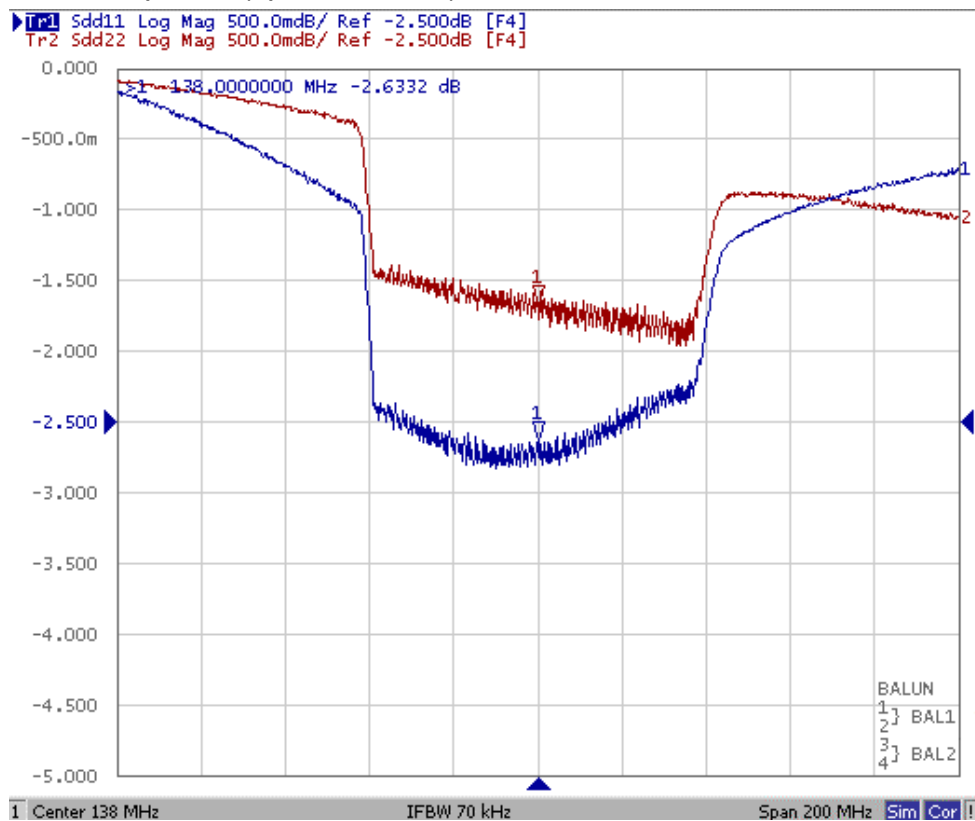
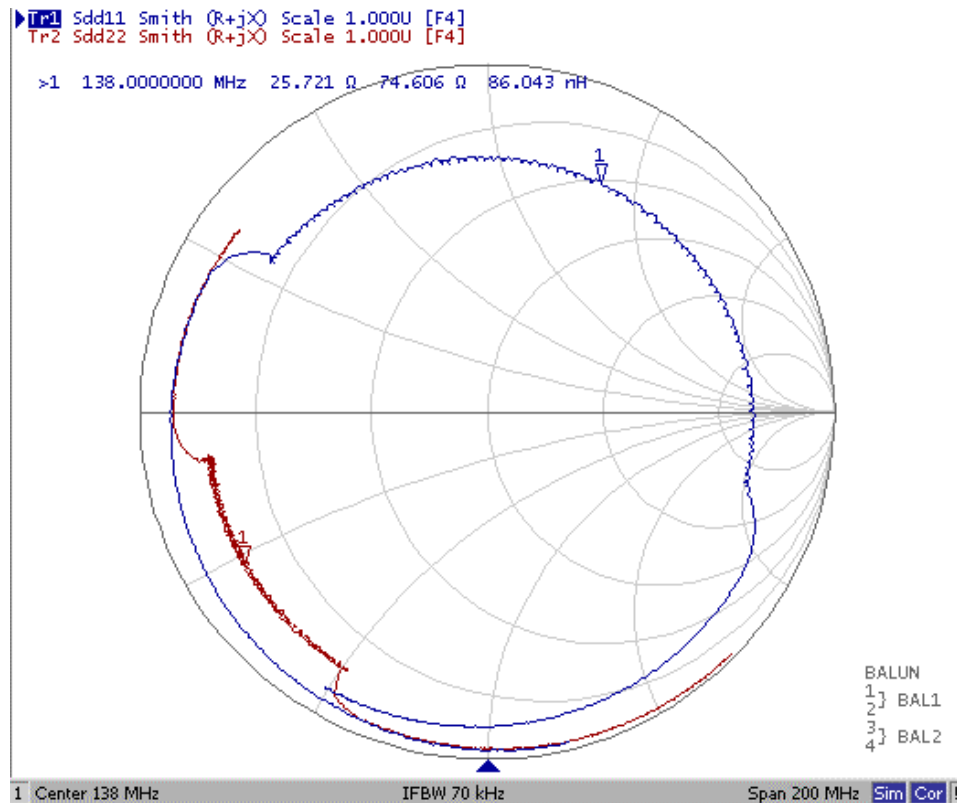
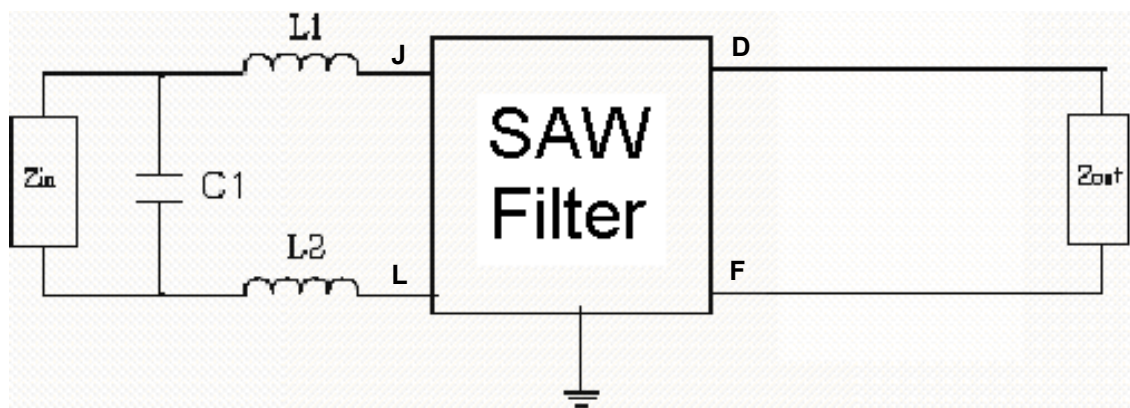


Fig4. Horizontal: 20MHz/Div Vertical: 0.5dB/Div

(5) Smith Chart:



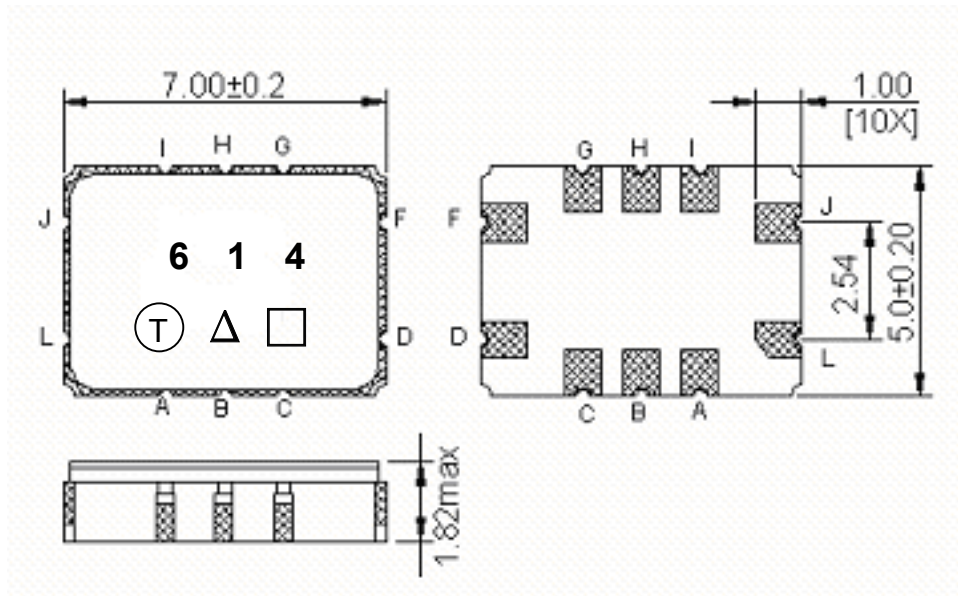
D. Matching Circuit:



$$L1=L2=27\text{nH} \quad C1=18\text{pF}$$

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

E. Outline Drawing:



Pin J –RF input

Pin L –RF balance input or to be ground

Pin D –RF output

Pin F –RF balance output or to be ground

Pin A,B,C,G,H,I - Ground

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

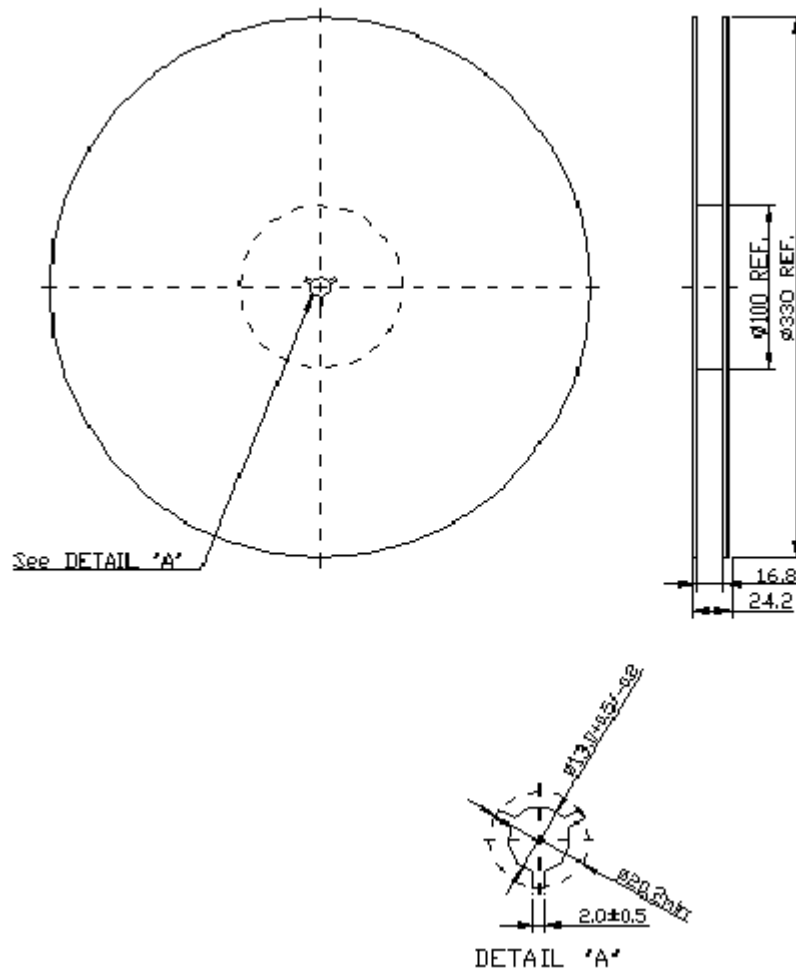
Unit : mm

△ : Product / Year Code

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

F. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

