



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Name: SAW IF Filter 140 MHz 15MHz BW (SMD 5.0mm x 7.0 mm)

TST Parts No.: TB0963A

Customer Parts No.: _____

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

Checked by: _____ Kazuma Lee

Approval by: _____ Francis Chen

Date: _____ 03 / 02 / 2011

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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SAW Filter 140MHz 15MHz BW (SMD 5.0×7.0 mm)

MODEL NO.: TB0963A

REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -35°C to 85°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 :

Item	Unit	Min.	Type.	Max.
Center frequency, Fc	MHz	-	140	-
Insertion Loss, IL	dB	-	10.9	14
Amplitude Ripple Fc+/-7.5MHz	dB	-	0.65	1.0
Group Delay Ripple Fc+/-7.5MHz	ns	-	65	100
Absolute Group Delay at Fc	us	-	0.8	-
Phase Linearity Fc+/-7.5MHz	P-P deg	-	5	15
Triple Transit Suppression	dB	40	45	-
In/Output Return Loss Fc+/-7.5MHz	dB	-	9.3/7.5	-
Attenuation (Reference level from minimum Insertion loss)				
DC ~ 110 MHz	dB	40	60	-
110MHz ~ 125MHz	dB	30	50	-
155 MHz ~ 170 MHz	dB	30	39	-
170MHz ~ 250 MHz	dB	40	50	-
250 MHz ~ 425 MHz	dB	20	32	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	200	-
Load Impedance	Ohm	-	200	-

C. Frequency Characteristics :

(1) Wide band Response:(span 100MHz)

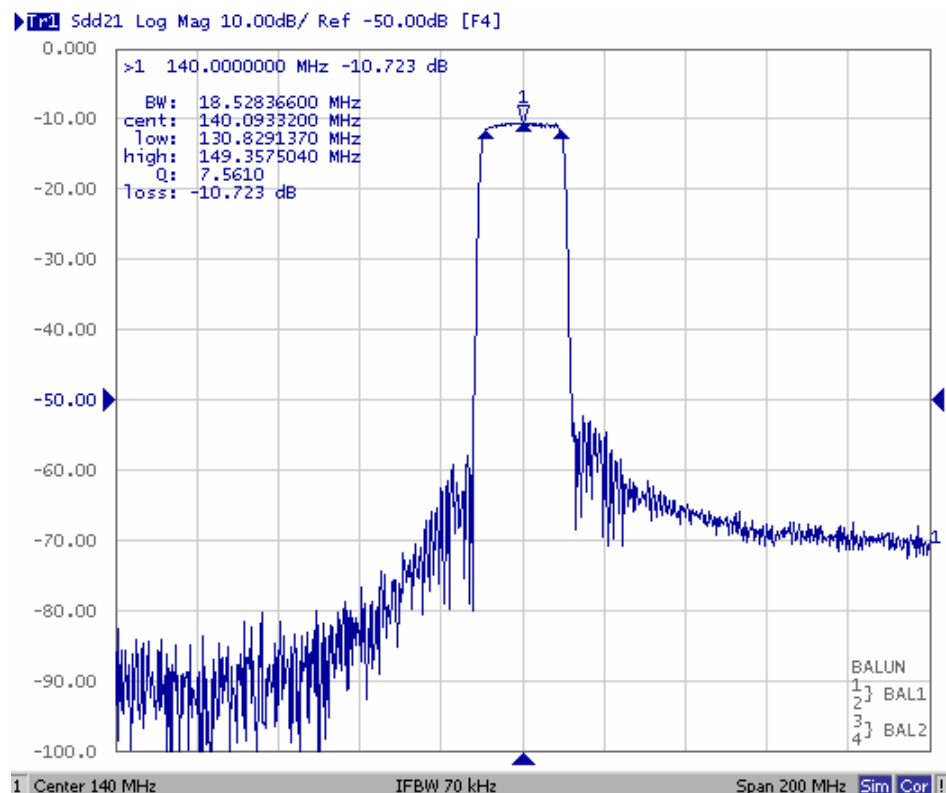


Fig1. Horizontal: 20MHz/Div Vertical: 10dB/Div

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

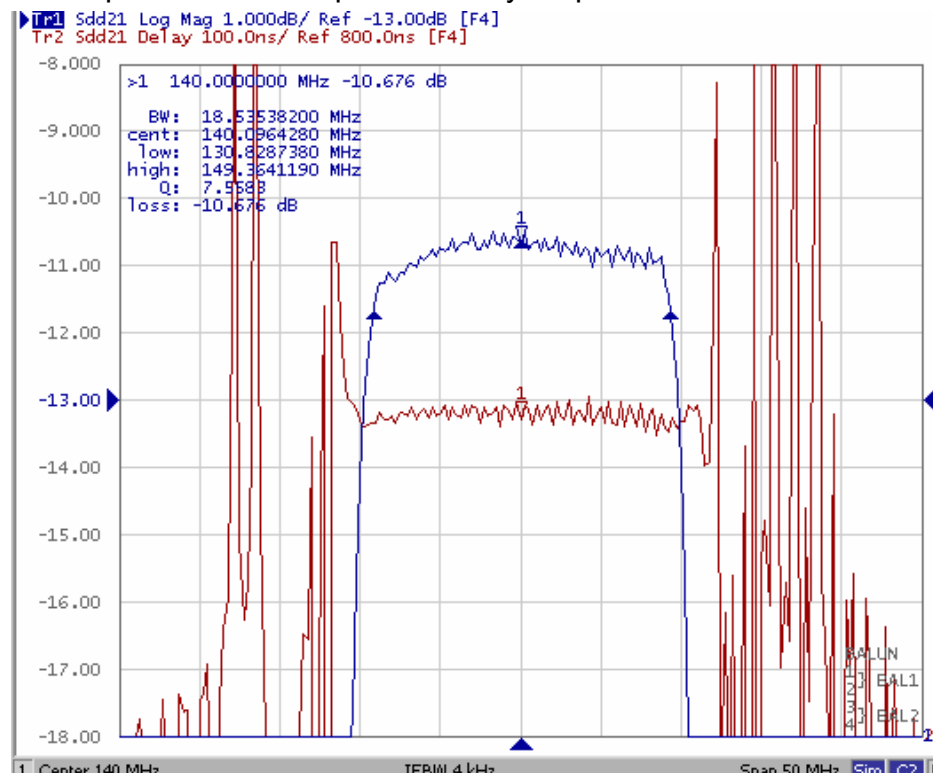
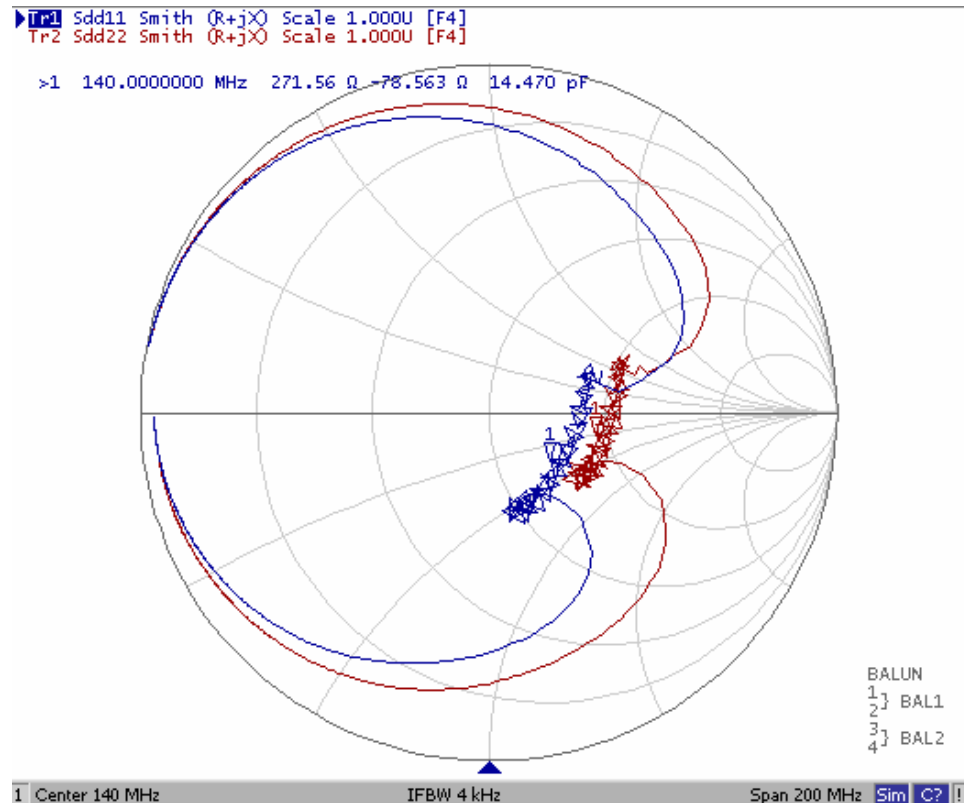


Fig2. Horizontal: 5MHz/Div Vertical: 1dB/Div

Vertical: 100ns/Div

(3) Smith Chart:



(4) Wide Band:

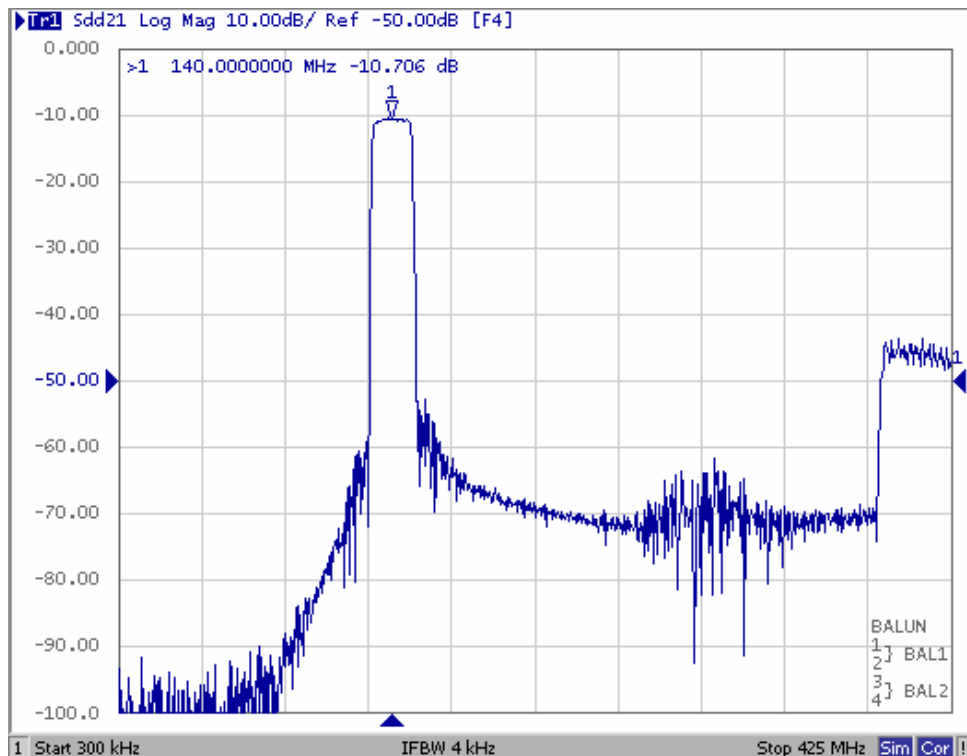
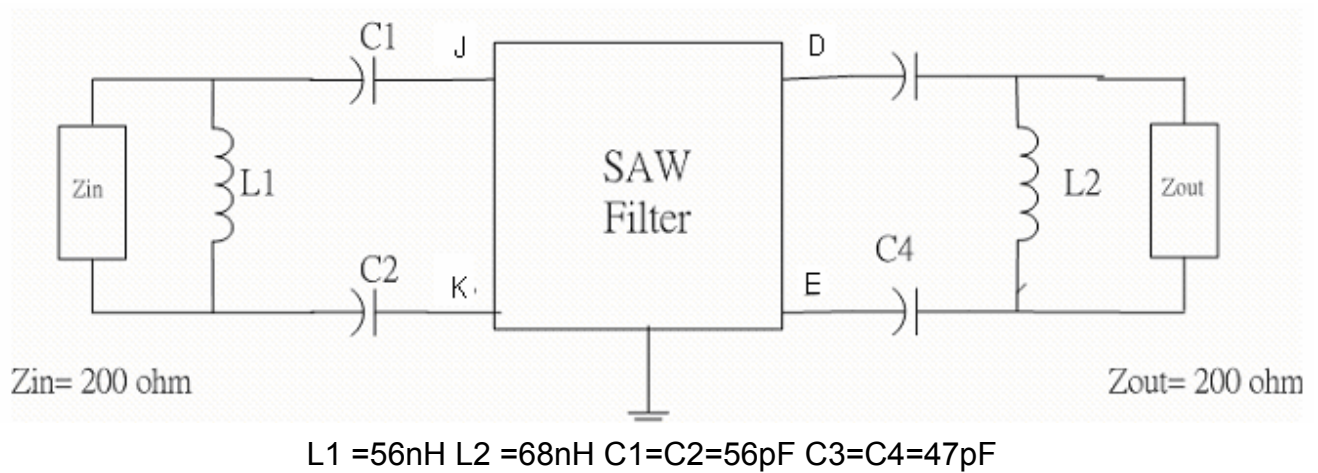


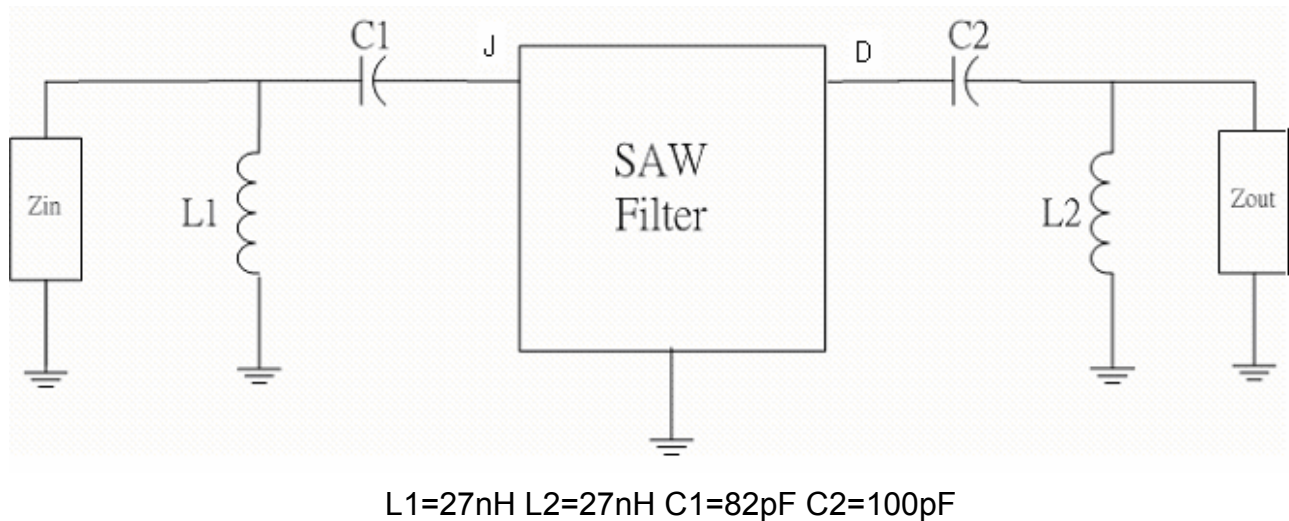
Fig4. Horizontal: 100MHz/Div Vertical: 10dB/Div

D. Matching Circuit:

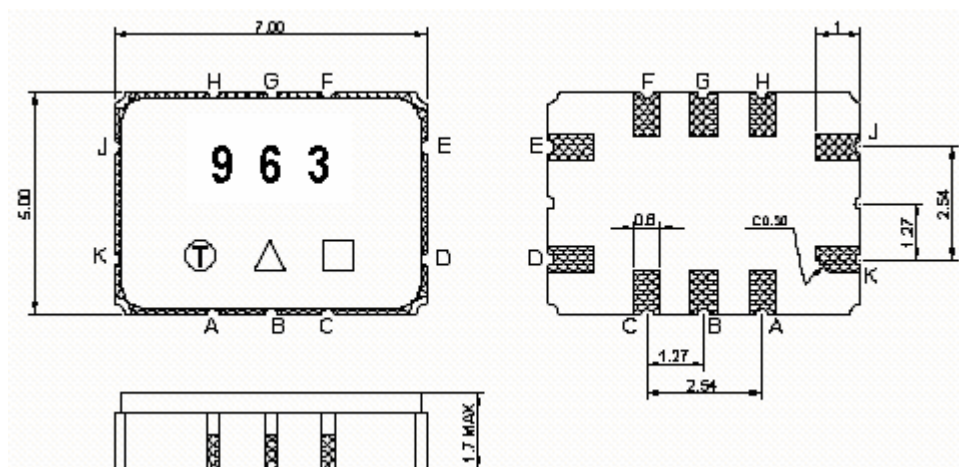
200ohm balance in/out



50ohm single in/out



E. Outline Drawing:



Pin J –RF input

Pin K –RF balance input or to be ground

Pin D –RF output

Pin E –RF balance output or to be ground

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

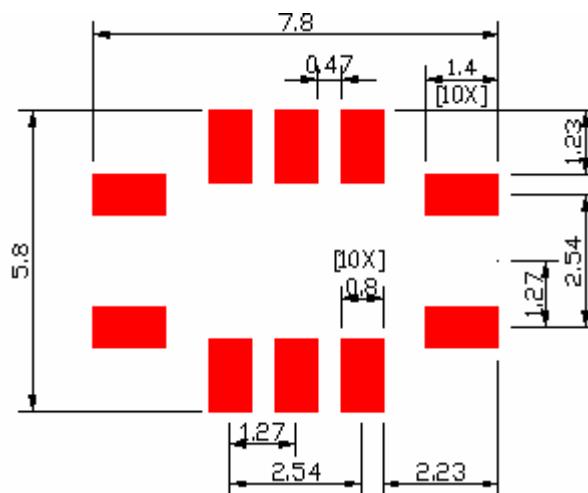
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

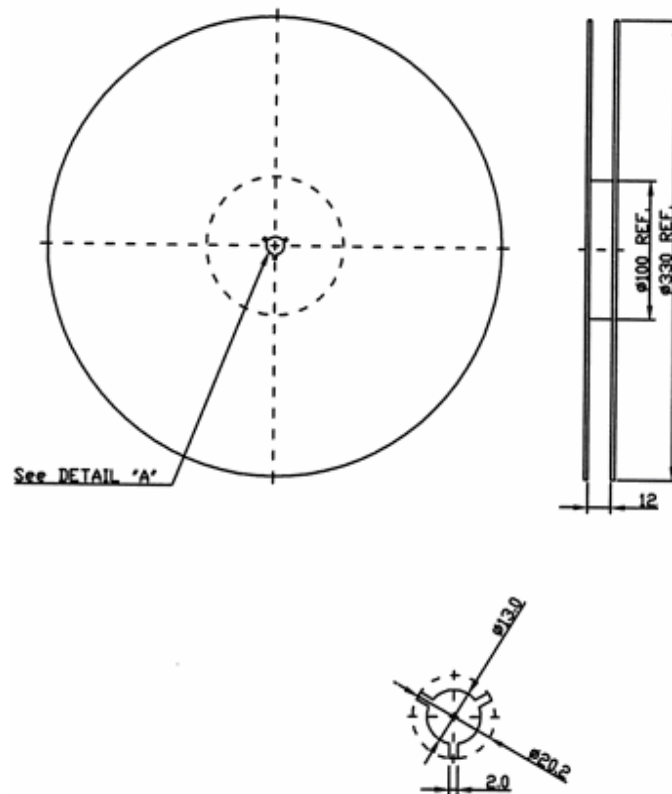
Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	B	b	<u>B</u>	<u>b</u>

F. PCB Footprint:

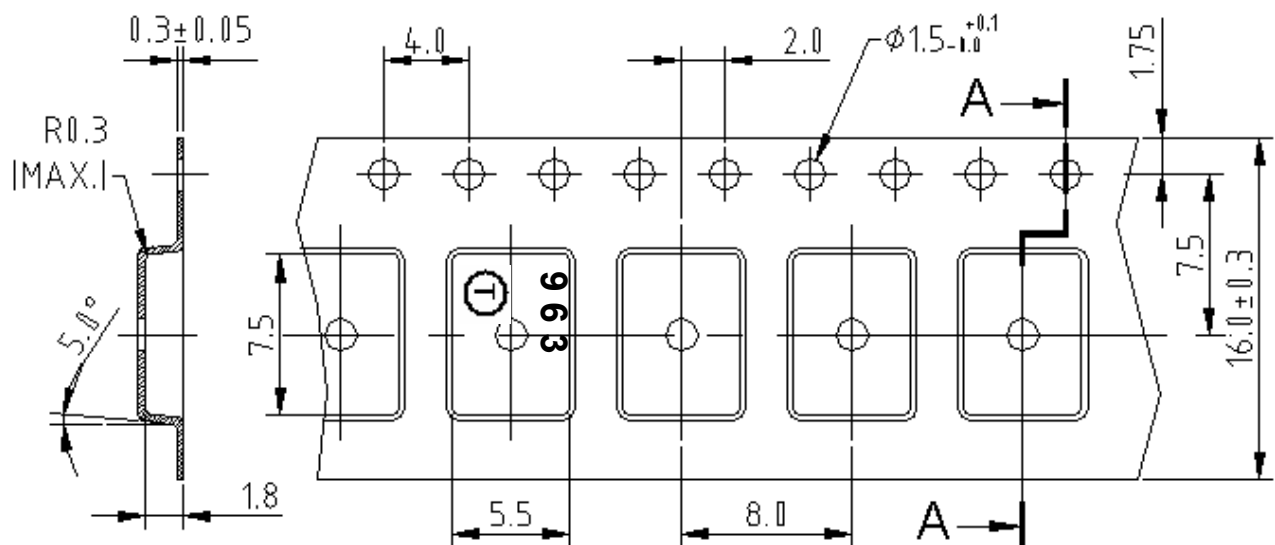


G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

