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

Approval Sheet For Product Specification

Issued Date:

Product Name: SAW IF Filter 138.24MHz

TST Parts No.: TB0713A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Kazuma Lee

Approval by: Francis Chen

Date: 2009/04/06

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SAW Filter 138.24MHz 76MHz BW (SMD 5×7 mm)
MODEL NO.: TB0713A Rev No.1

A. MAXIMUM RATING:

1. Operating temperature range: -10°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 :

Item	Unit	Min.	Type.	Max.
Center frequency, **Fc**	MHz	-	138.24	-
Insertion Loss, **IL**	dB	-	23.8	25
Upper -1dB frequency	MHz	176.24	177.3	-
Lower -1dB frequency	MHz	-	98.92	100.24
Upper –35dB frequency	MHz	-	183.00	186
Lower –35dB frequency	MHz	90	96.2	-
Passband Ripple Fc+/- 38MHz	dB	-	0.7	1.5
Attenuation (Reference level from minimum Insertion loss)				
190 MHz ~ 290 MHz	dB	30	35	
290 MHz ~ 390 MHz	dB	25	28	
390 MHz ~ 600 MHz	dB	35	39	
Temperature Coefficient	ppm/°C	-	-72	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

C. Frequency Characteristics :

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

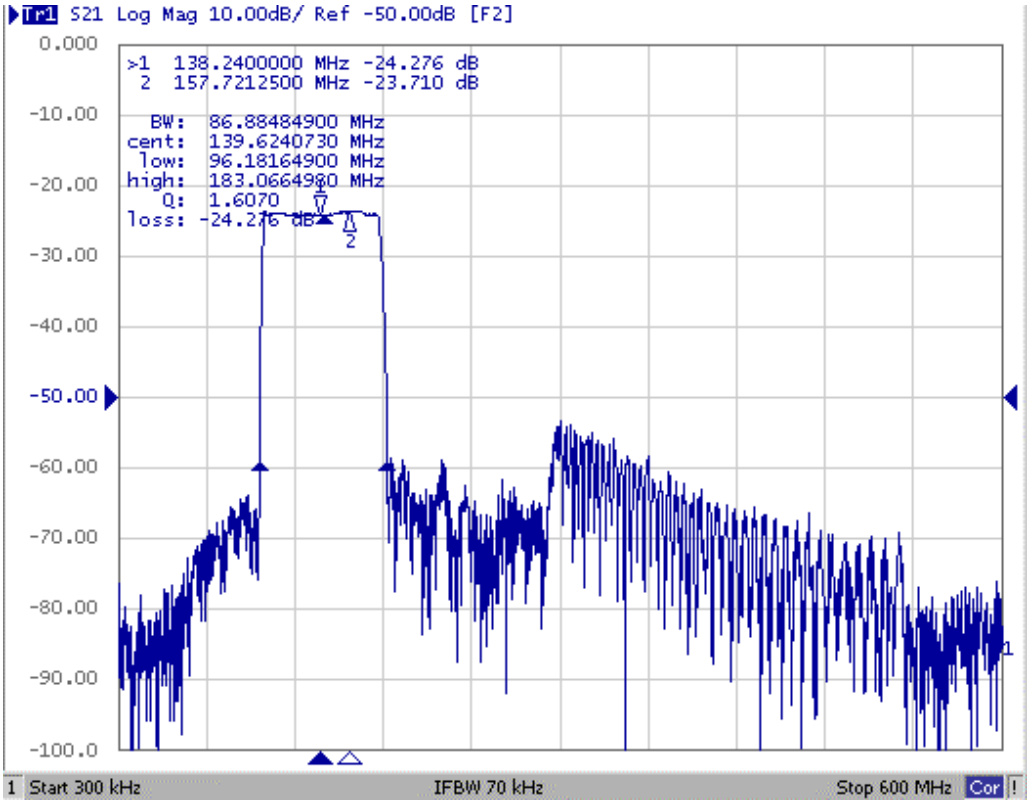


Fig1. Horizontal: 60MHz/Div Vertical: 10dB/Div

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

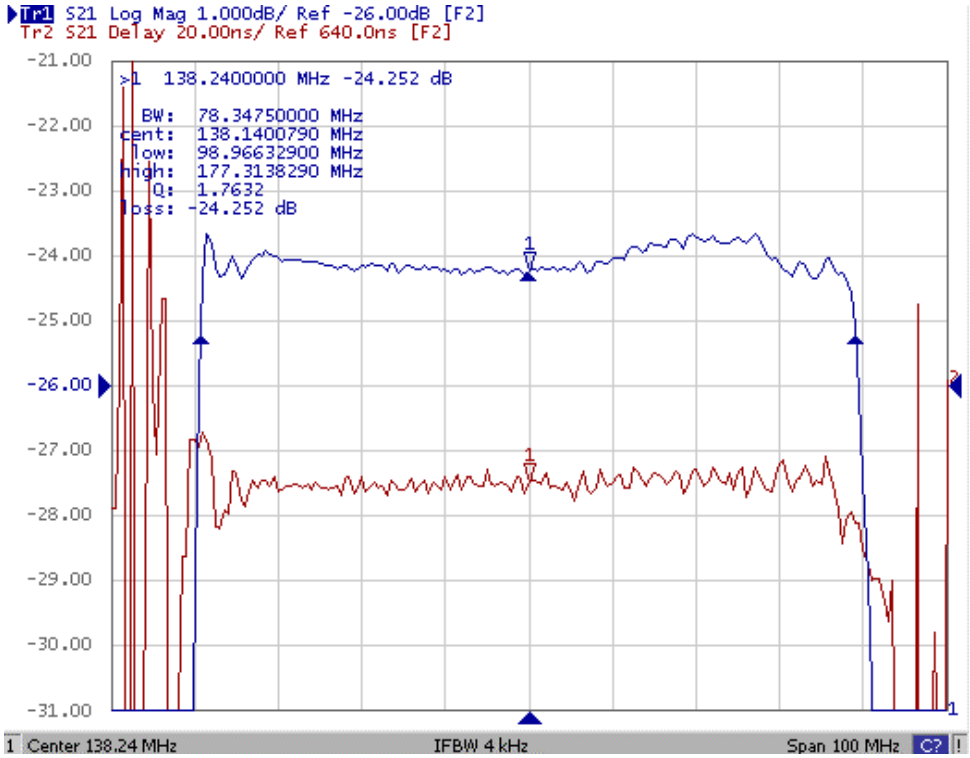
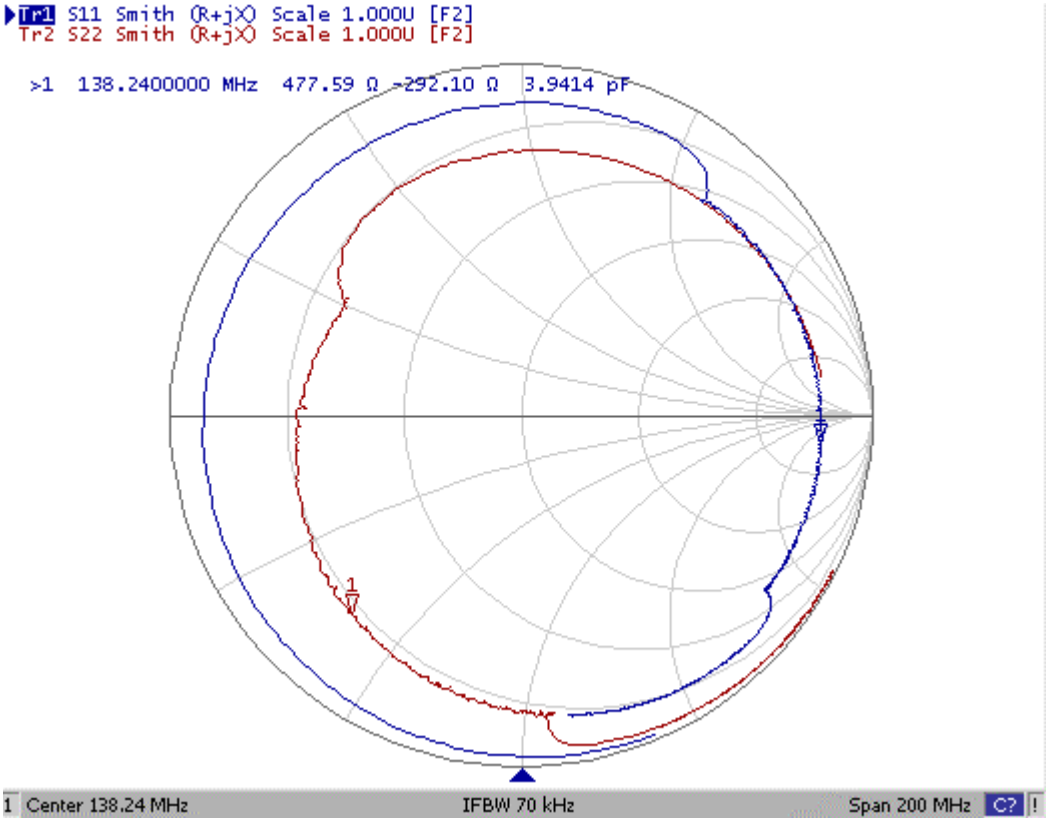
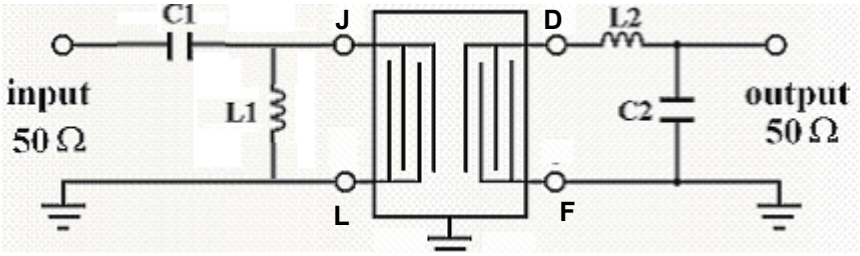


Fig2. Horizontal: 10MHz/Div Vertical: 1dB/Div
Vertical: 20ns/Div

(3) Smith Chart:



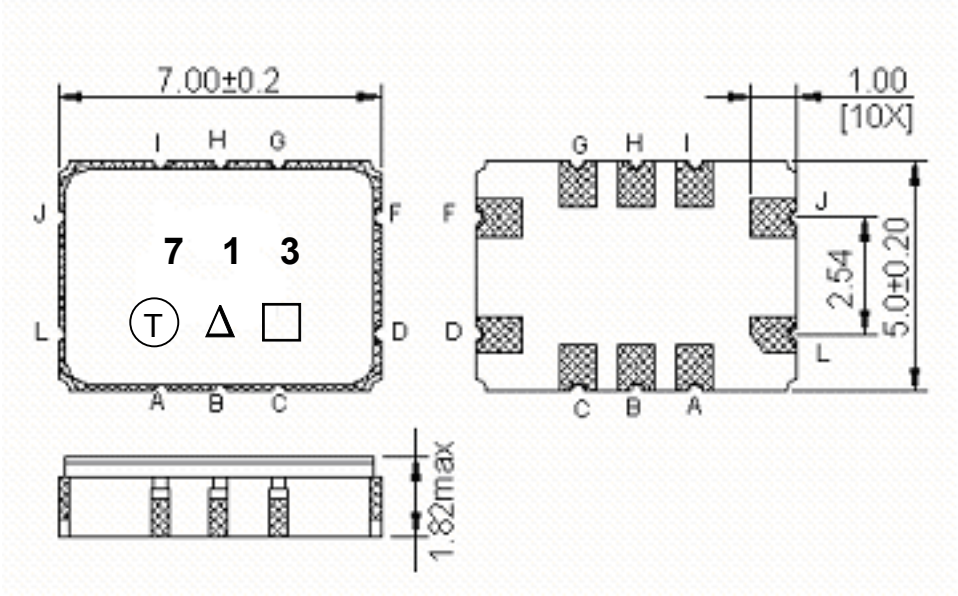
D. Matching Circuit:



L1=100nH L2=82nH C1=39pF C2=6pF

Zin=50ohm Zout=50ohm

E. Outline Drawing:



Pin J –RF input

Pin L –RF input ground

Pin D –RF output

Pin F –RF ontput ground

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

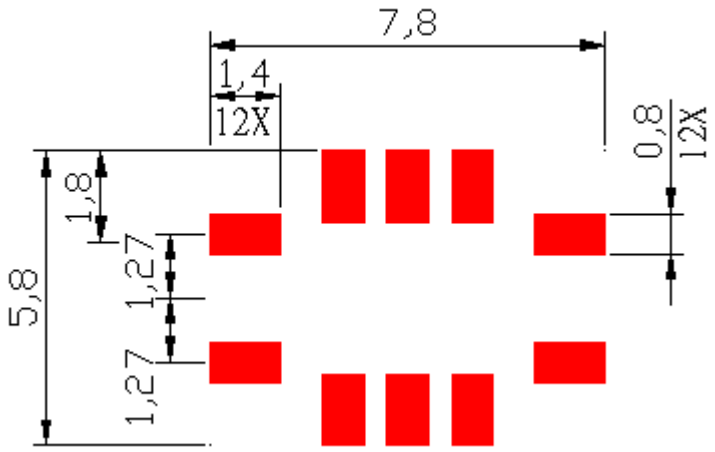
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

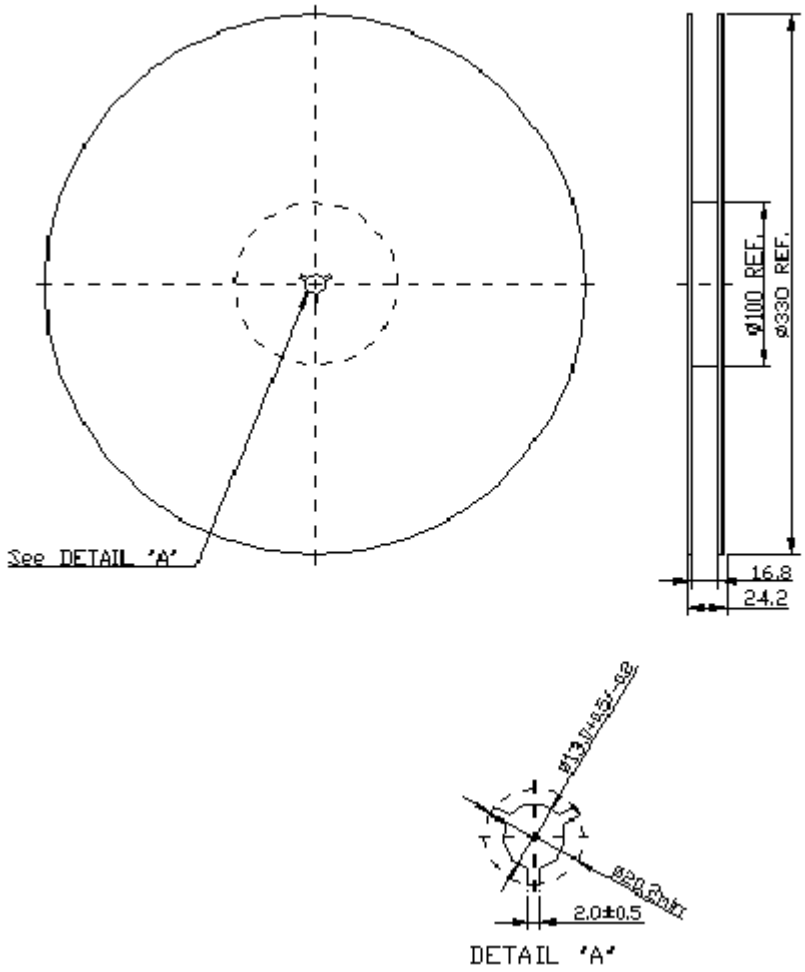
Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	B	b

F. PCB Footprint:

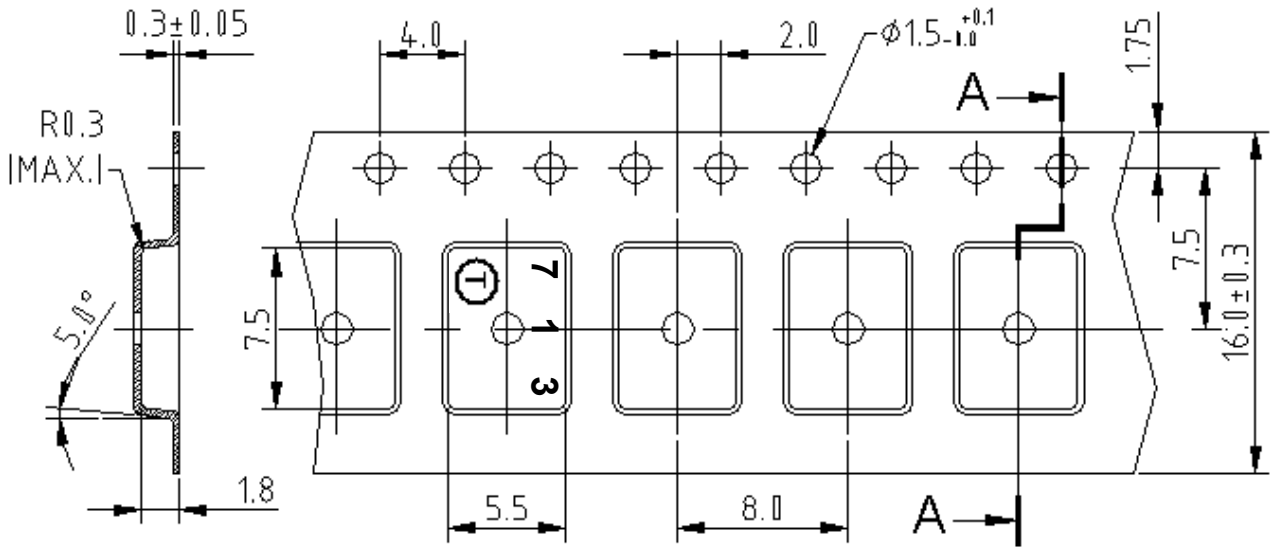


G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE :