



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date:

Product Name: 140MHz IF SAW Filter (BW=32MHz)

TST Parts No.: TB0746A

Customer Parts No.: _____

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

Checked by: Andy Yu *Andy*

Approval by: Francis Chen *[Signature]*

Date: 2009/03/10



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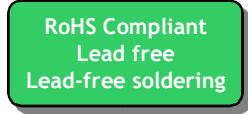
SAW Filter 140MHz (SMD 13.3×6.5×1.65 mm)

Model No.: TB0746A

Rev. No.:1.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. Operating Temperature: -20°C to +80°C
3. Storage Temperature: -40°C to +85°C



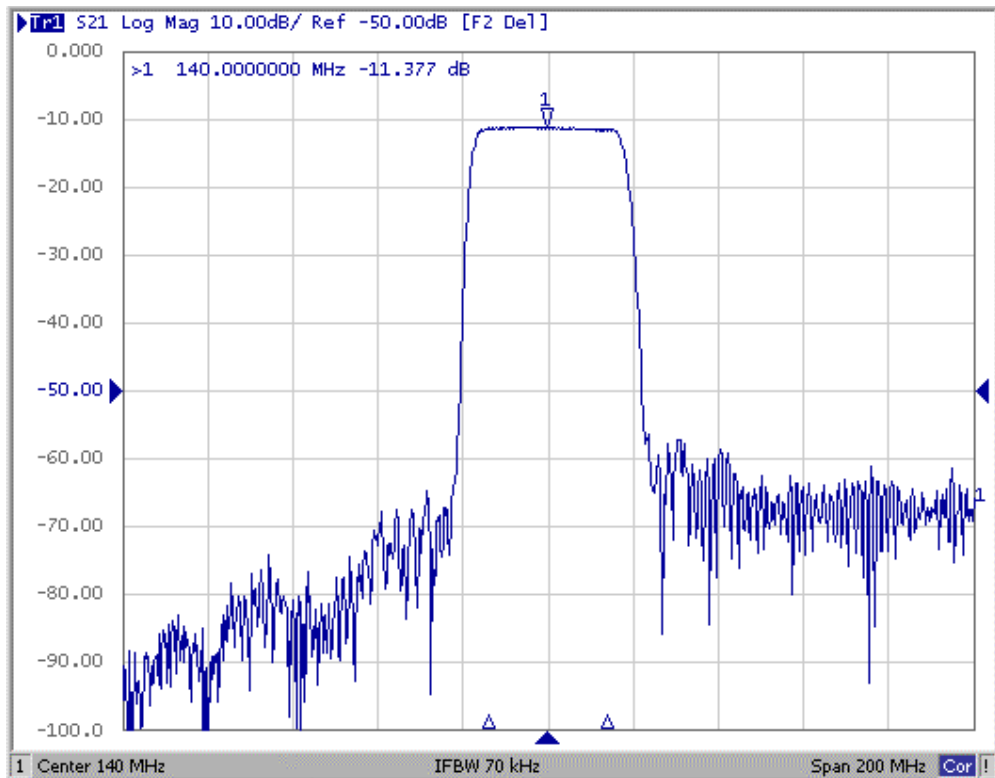
B. Characteristics :

Ambient Temperature: 25 °C

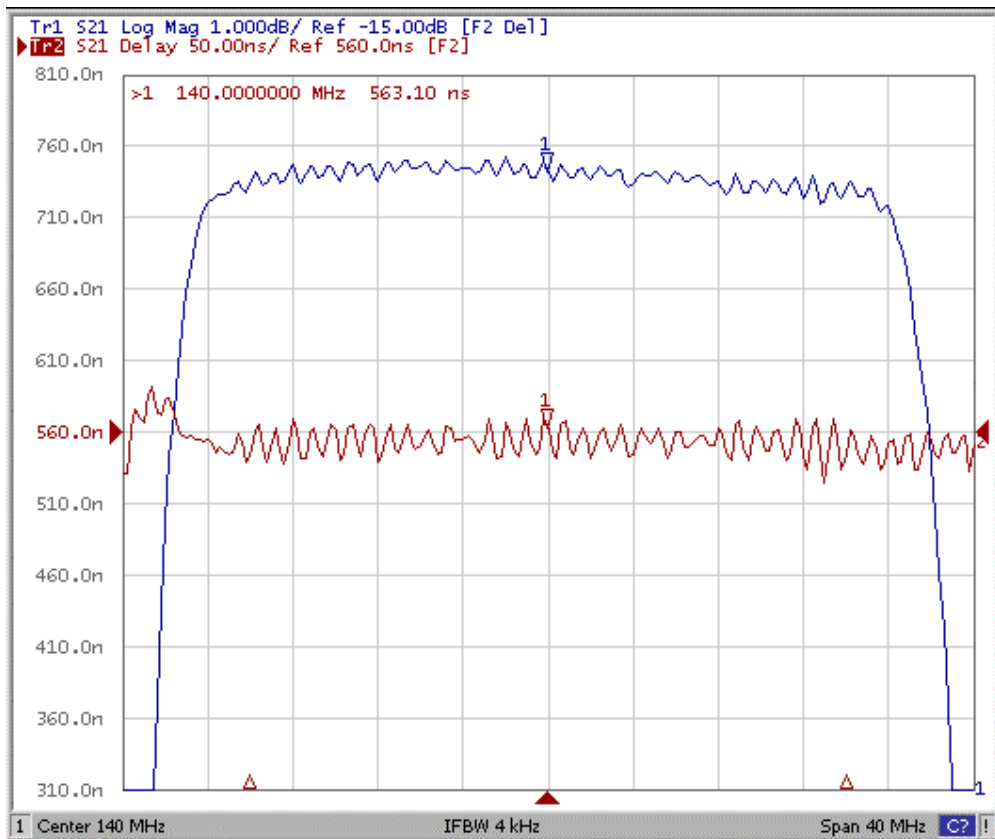
Characteristics		Value			Note
		Min.	Typ.	Max.	
Center frequency F_c	MHz	-	140.0	-	-
Minimum Insertion loss I.L.	dB	-	11.3	13.0	-
1dB BW	MHz	30.0	33.0	-	-
3dB BW	MHz	32.0	35.0	-	-
35dB BW	MHz	-	42.4	44.0	-
Passband Ripple (80% of 3dB BW)	dB	-	0.6	1.2	-
Phase Linearity (80% of 3dB BW)	deg	-	5.0	14	-
Delay Variation (80% of 3dB BW)	nsec	-	50	120	-
Absolute Delay	usec	-	0.55	-	-
Substrate Material		YZ-LiNbO3			-
Temp Coefficient	ppm/K	-	-94	-	-
Matching:					
1. The input of the filter will be matched to <u>50 ohm</u>					
2. The output of the filter will be matched to <u>50 ohm</u>					

C. Frequency Characteristics :

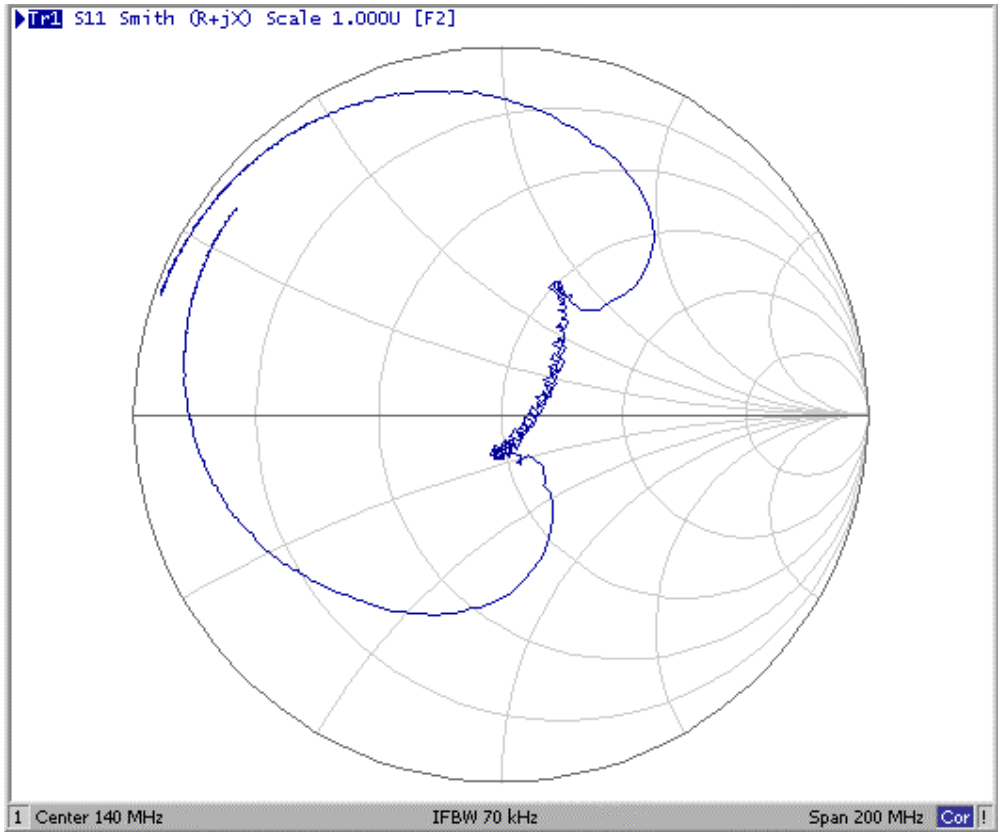
(1) wide band Response:(span 200MHz)



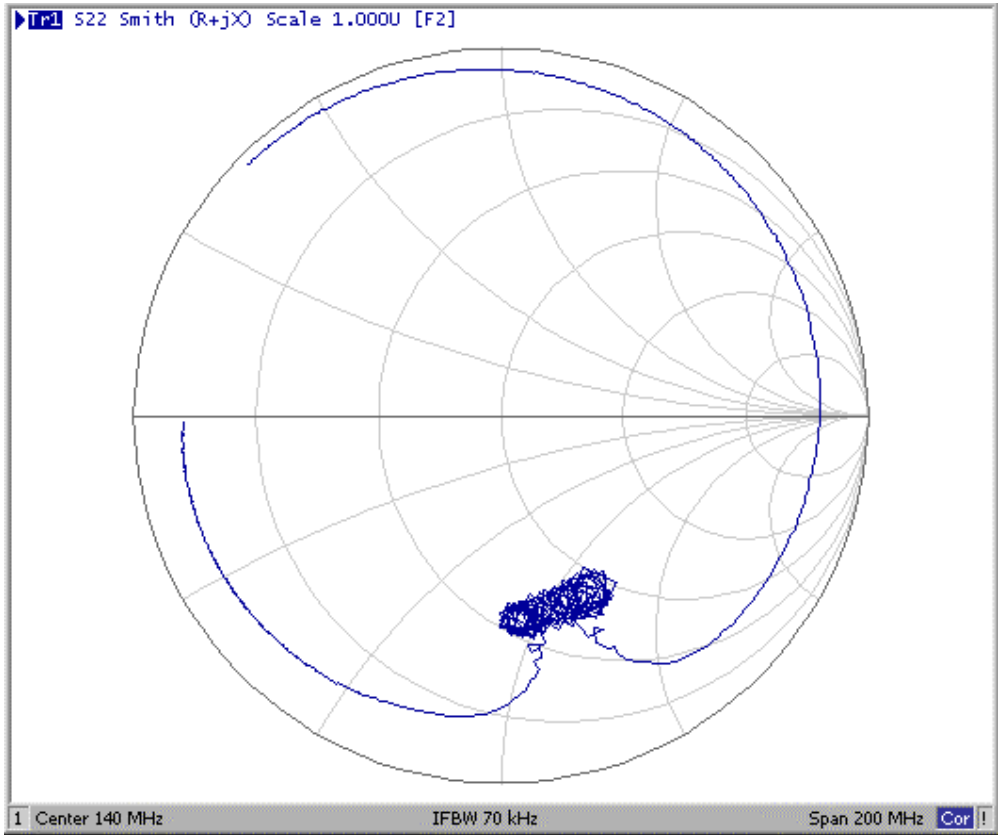
(2) Pass band Response and Group Delay Variation: (span 40MHz)



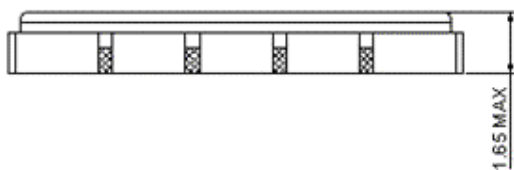
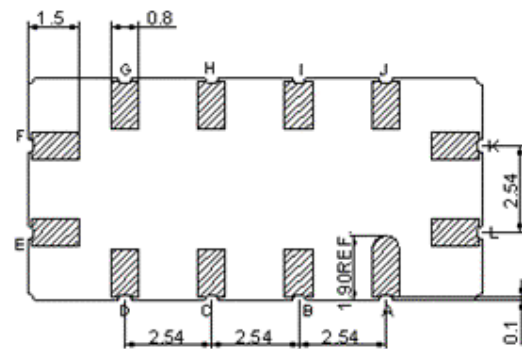
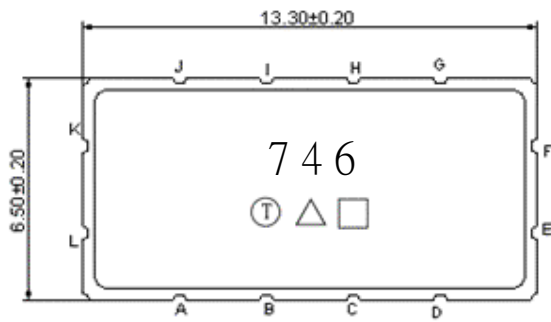
(3) S11 Smith-Chart: (span 200MHz)



(4) S22 Smith-Chart: (span 200MHz)



D. Outline Drawing:



Pin K : RF Input

Pin E : RF Output

Pin A,B,C,D,F,G,H,I,J,L : Ground

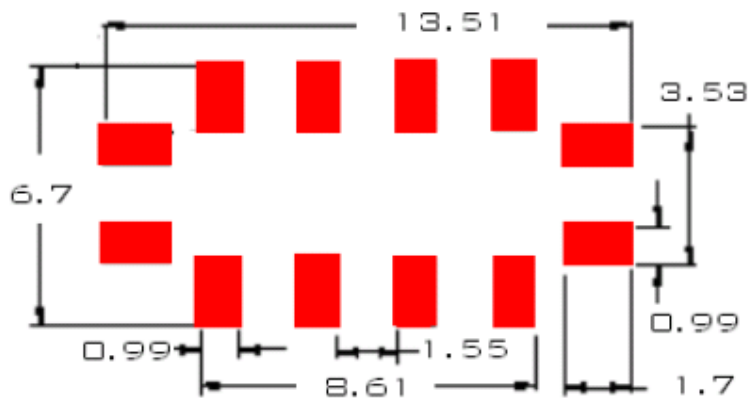
Unit: mm

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

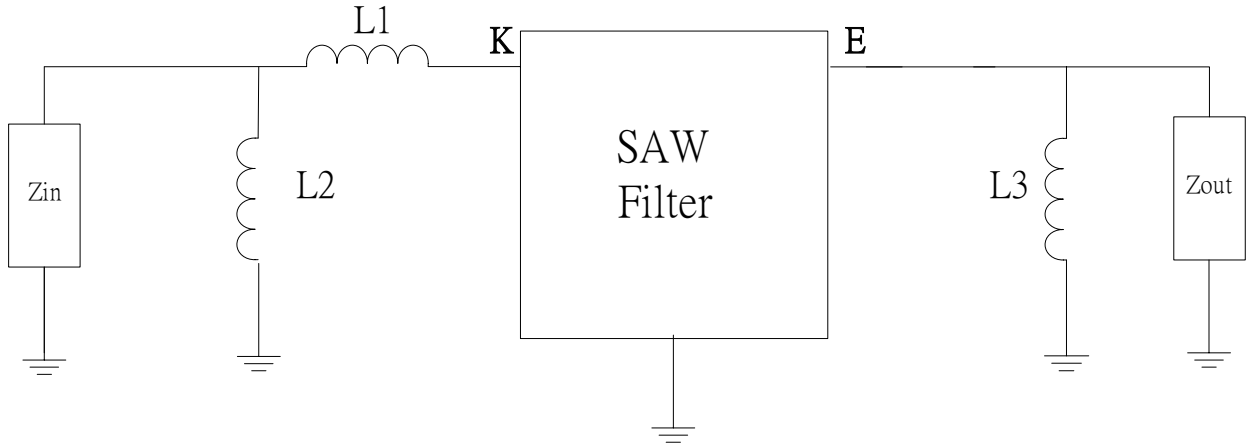
△ : Product / Year Code

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

E. PCB Footprint:



F. Matching Circuit:

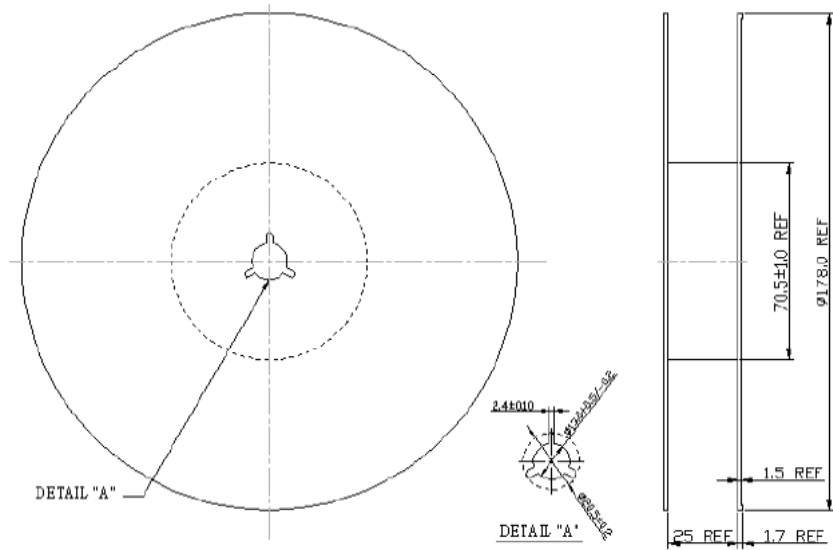


$$Z_{in} = Z_{out} = 50 \text{ ohm}$$

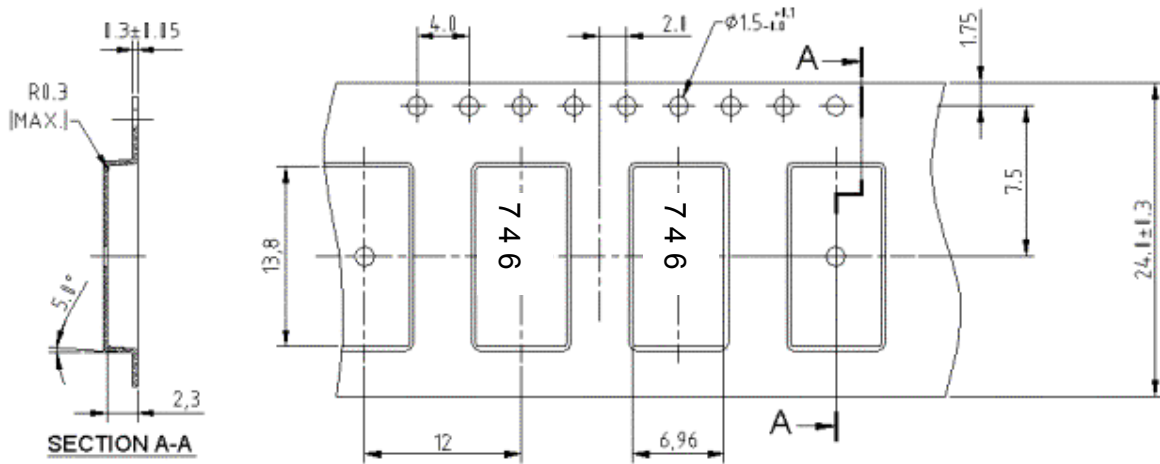
$$L1 = 10\text{nH}, L2 = 27\text{nH}, L3 = 68\text{nH}$$

G. Packing:

(1). REEL DIMENSION:



(2). TYPE DIMENSION:



H. Recommended Reflow Profile:

