



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: SAW Filter 638.14MHz SMD 5x5mm.

TST Part No.: TB0724A

Customer Part No.: _____

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

Checked by: _____ Ricky Lee *Ricky*

Approved by: _____ Francis Chen *Francis*

Date: _____ 2009/07/29

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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IF SAW Filter 638.14MHz(BW=77MHz) SMD 5X5mm

MODEL NO.: TB0724A

REV.1.0

A. MAXIMUM RATING:

1. Operating Temperature: -20 °C ~ +80 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input power: 10dBm

RoHS Compliant
Lead free
Lead-free soldering

B. Characteristics :

Ambient Temperature: 25 °C

Characteristics		Value			Note
		Min.	Typ.	Max.	
Center frequency F_c	MHz	-	638.14	-	-
Minimum Insertion loss I.L.	dB	-	12.0	16.0	-
1dB BW	MHz	77.0	78.6	-	
45dB BW	MHz	-	104.0	108.0	
Passband Ripple ($F_c \pm 35\text{MHz}$)	dB	-	0.7	1.2	-
Attenuation (Reference to Minimum Insertion loss)					
10 ~ 519MHz	dB	50	58	-	-
519 ~ 583MHz	dB	40	48	-	-
693 ~ 734MHz	dB	38	41	-	-
734 ~ 1000MHz	dB	48	52	-	-
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. S21 Response: (span : 300MHz)

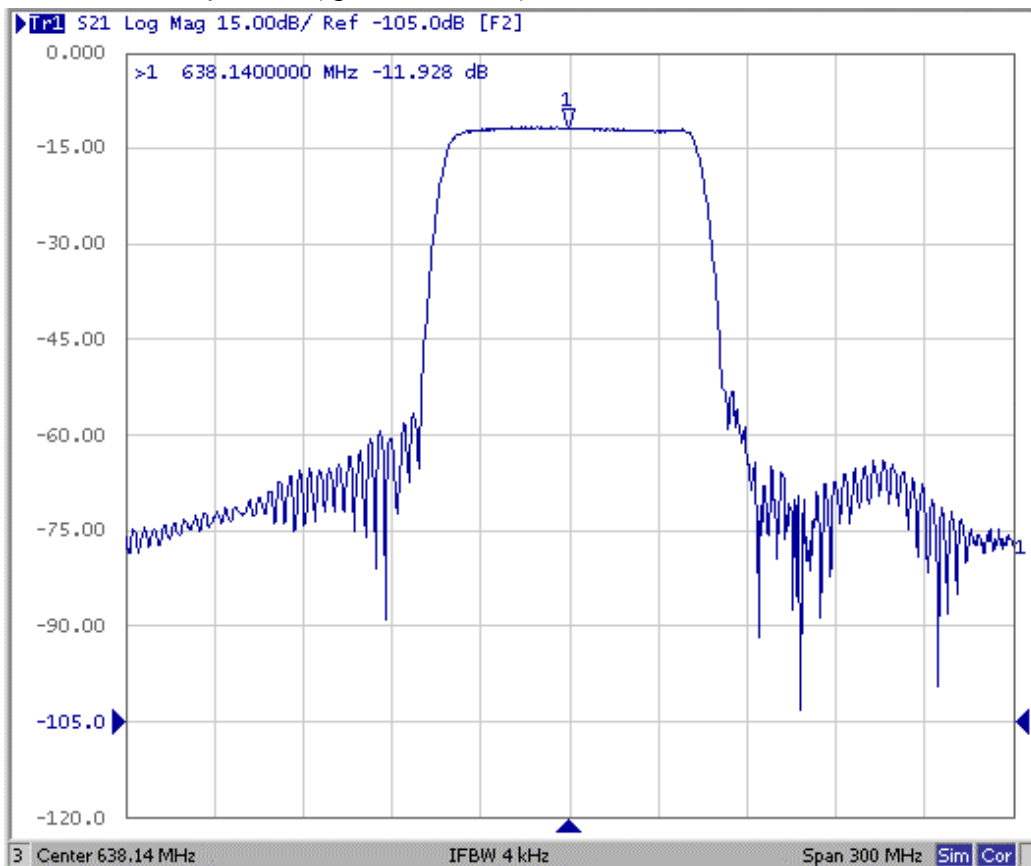


Fig1. Horizontal: 30MHz/Div Vertical: 15dB/Div

2. Group-Delay Ripple: (span : 120MHz)

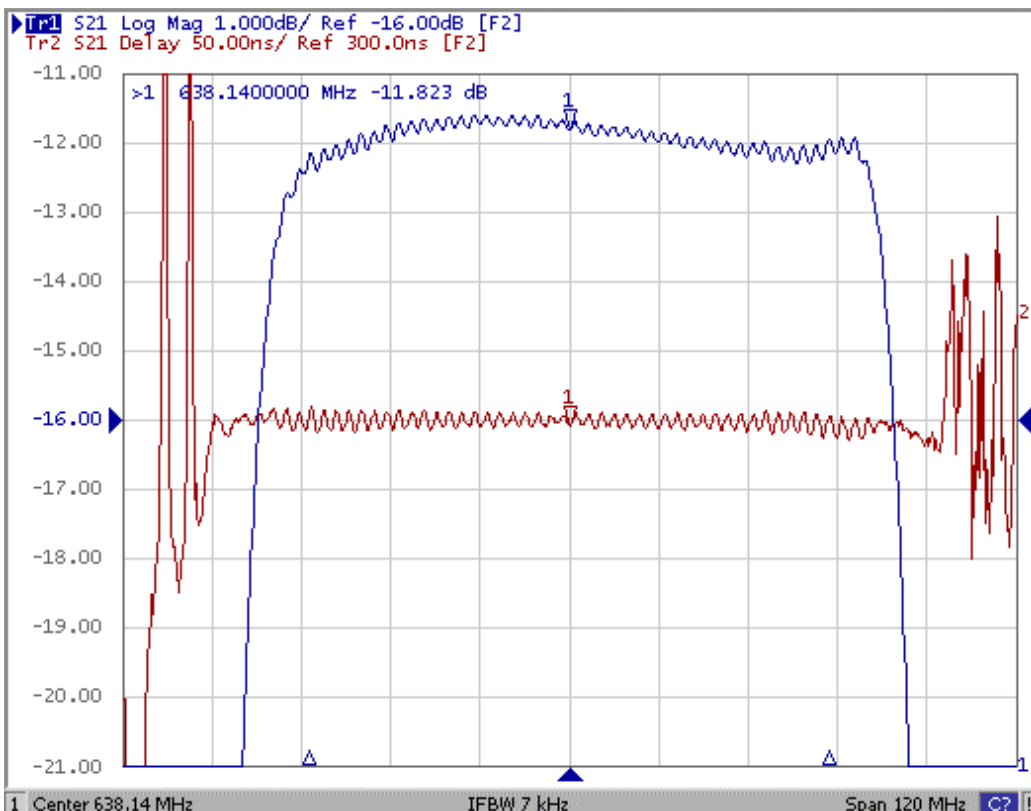
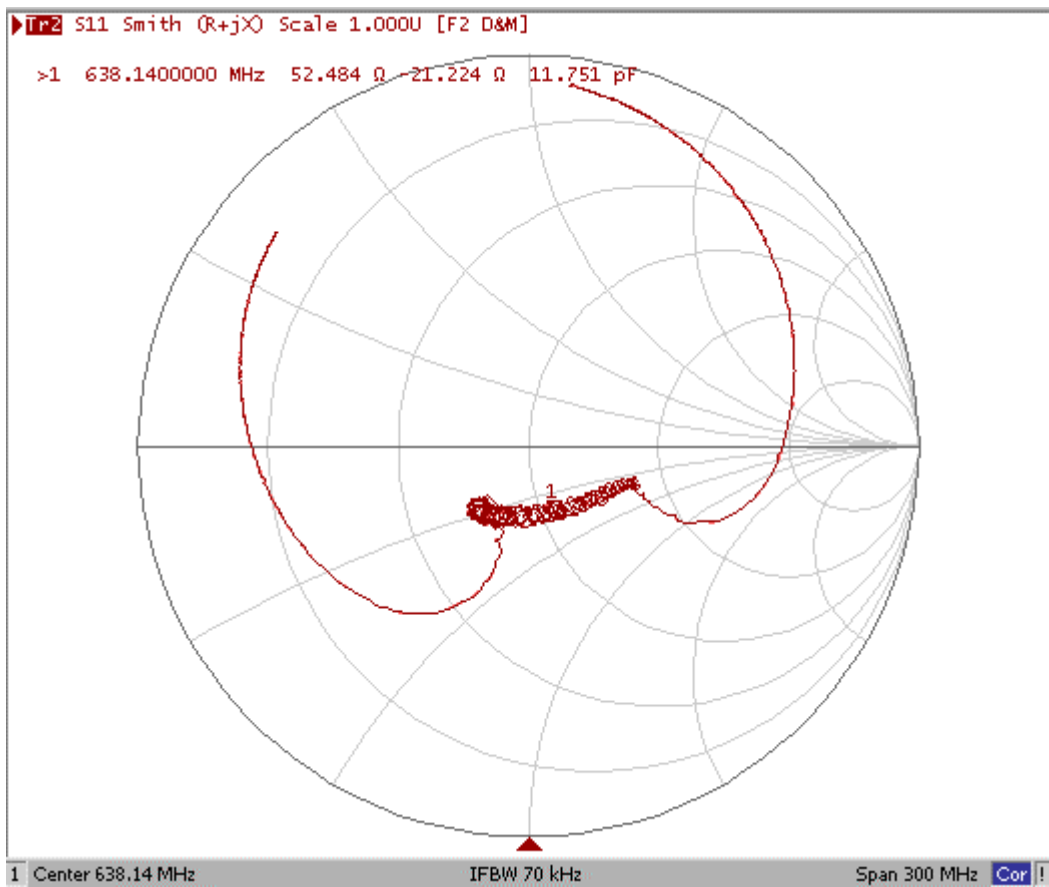
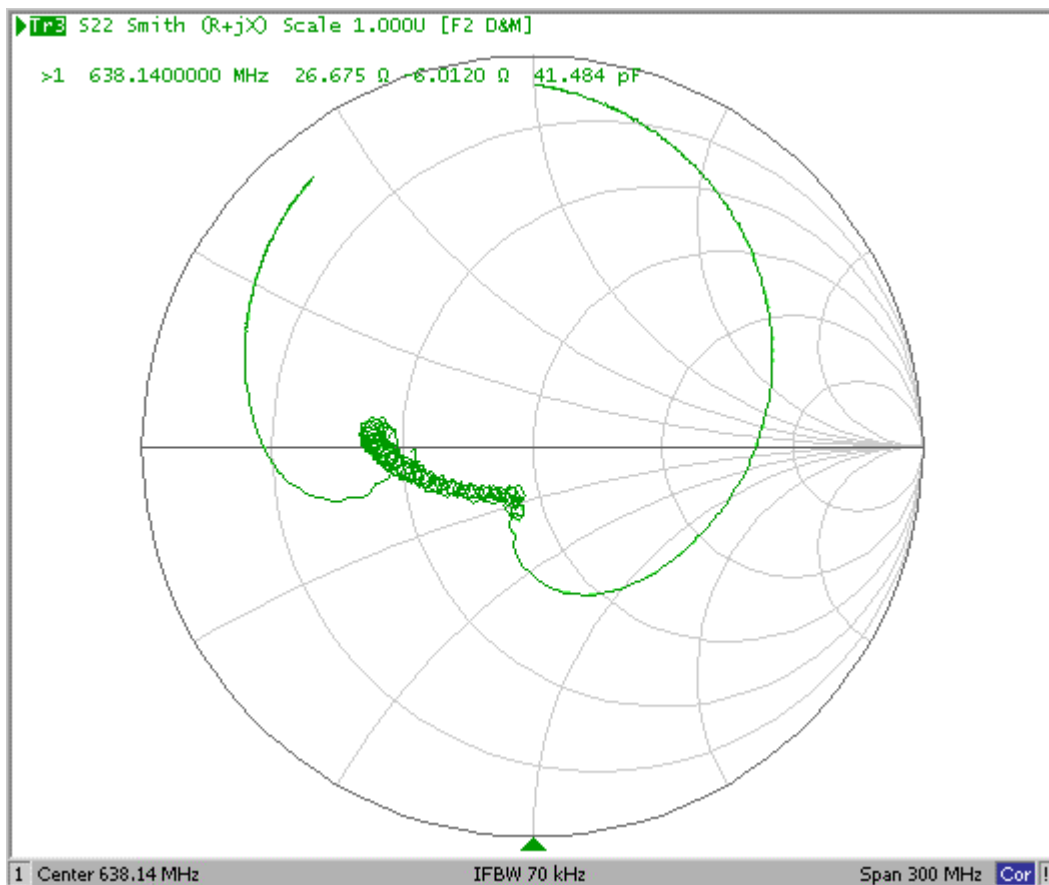


Fig2. Horizontal: 12MHz/Div Vertical: 50nec/Div

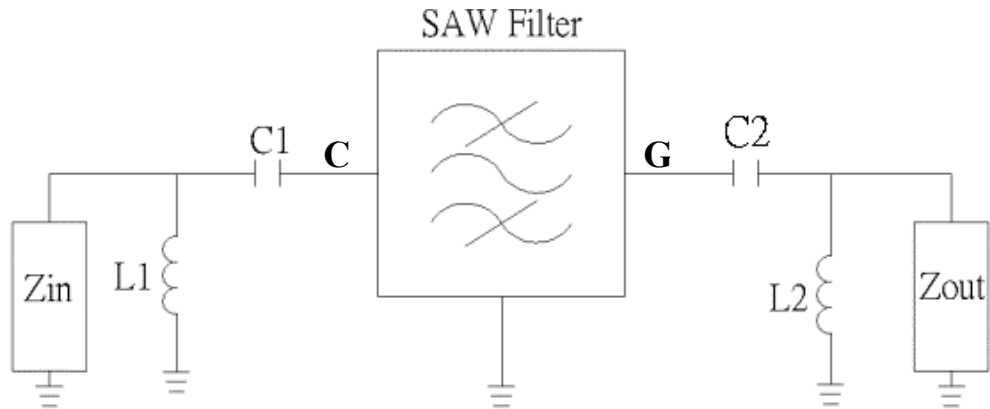
3. S11 Smith Chart: (span : 300MHz)



4. S22 Smith Chart (span : 300MHz)



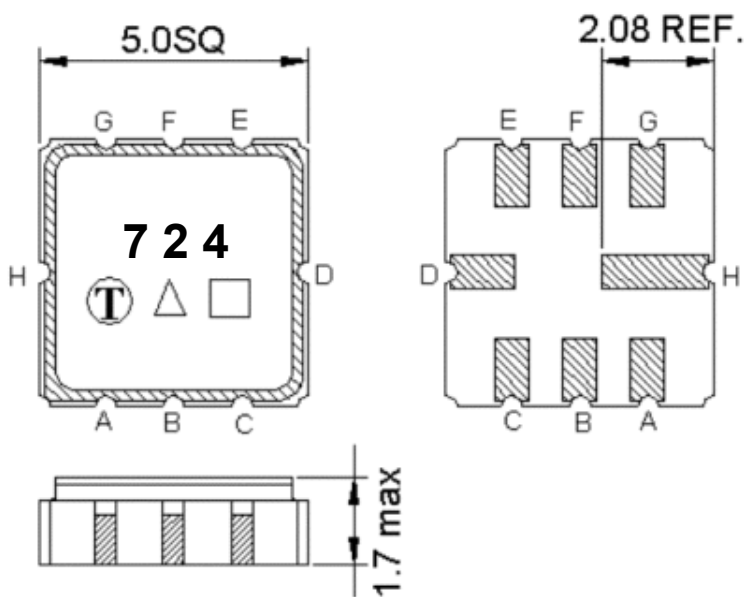
D. Measurement Circuit:



Zin and Zout are $50\ \Omega$.

$L1=6.8\text{ nH}, C1=4.8\text{ pF}, L2=6.8\text{ nH}, C2=5.1\text{ pF}$

E. Outline Drawing:



Pin C: RF input

Pin G: RF output

Pin H, D: Case Ground

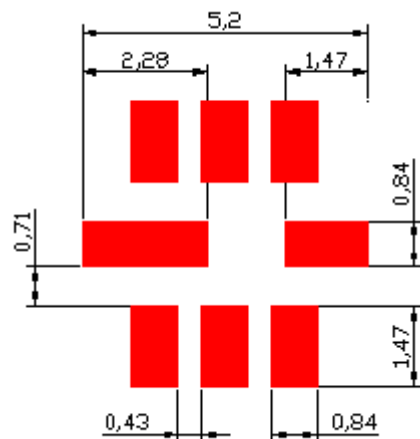
Pin A, B, E, F : Ground

□ : Week Code (W01->A,W02->B,...W27->a,...,W52->z)

△ : Product / Year Code, Unit : mm

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

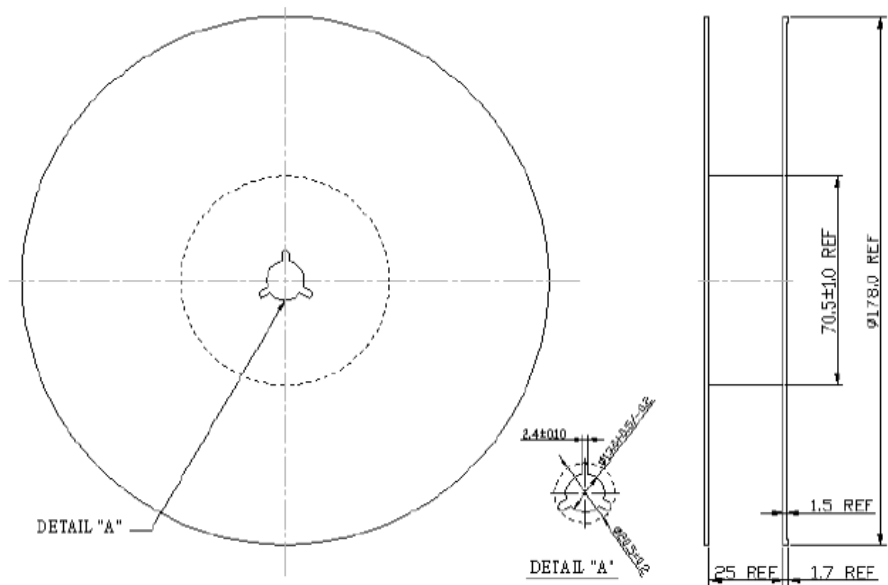
F. PCB Footprint:



Unit: mm

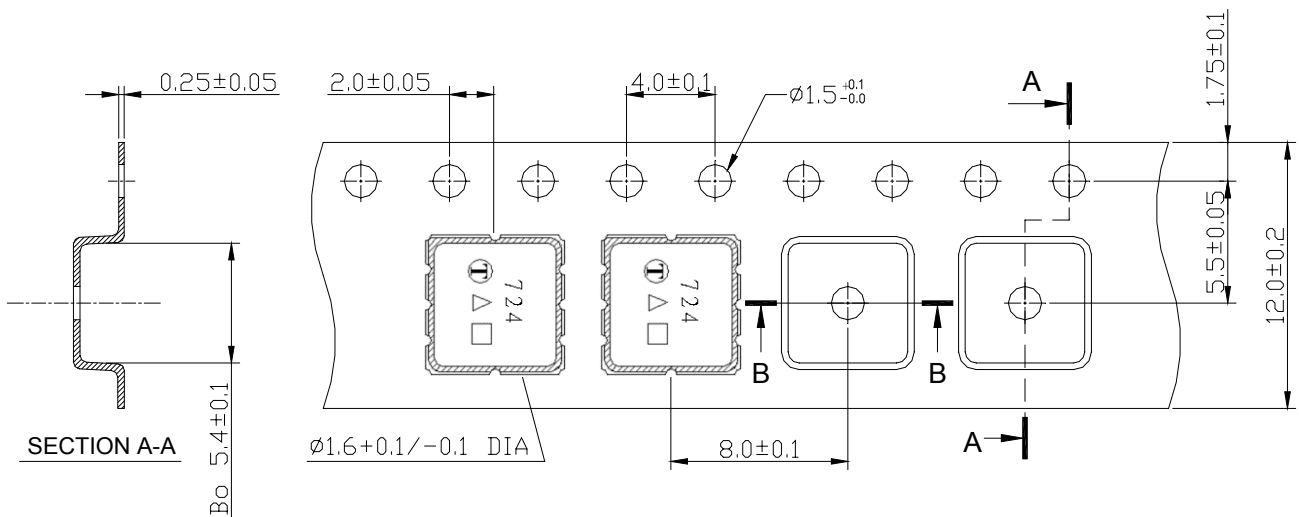
H. PACKING:

1. REEL DIMENSION



Unit: mm

2. TAPE DIMENSION



Unit: mm

I. RECOMMENDED REFLOW PROFILE_:

