



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date:

Product Name: 456 MHz 10.4MHz BW SMD7x5mm IF SAW Filter

TST Parts No.:TB0492A

Customer Parts No.:_____

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

Checked by:_____ Andy Yu

Approval by:_____ Francis Chen

Date:_____ 2009/10/13

www.DataSheet4U.com

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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456MHz 10.4MHz BW SMD7x5mm IF SAW Filter

MODEL NO.: TB0492A

REV No. 2.0

A. MAXIMUM RATING:

1. Operating Temperature: -40 °C ~ +90 °C
2. Storage Temperature: -40 °C ~ +90 °C
3. Input Power Level: 10 dBm

RoHS Compliant
Lead free
Lead-free soldering

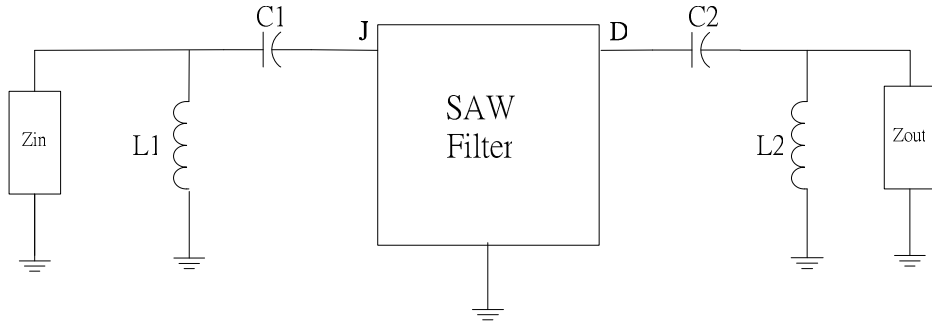
B. Characteristics :

1. Ambient Temperature: 25 °C
2. Optimal Source Impedance(Balanced): 200 ohms
3. Optimal Load Impedance(Balanced): 200 ohms

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center Frequency F_c MHz	-	456.0	-	-
Minimum Insertion Loss dB		10.5	11.0	
Passband Ripple ($F_c \pm 2.9\text{MHz}$) dB	-	0.8	1.5	-
Passband Ripple ($F_c \pm 5.0\text{MHz}$) dB		1.7	2.0	
Group Delay Ripple ($F_c \pm 5.2\text{MHz}$) nS	-	80	150	-
Absolute group delay (at F_c) uS		0.44		
Attenuation:(Reference level from minimum insertion loss)				dB
1) $F_c \pm 10.0\text{MHz} \dots F_c \pm 43.0\text{MHz}$ dB	37	40	-	-
2) 411 MHz ~ 413 MHz dB	40	53	-	-
3) 393 MHz ~ 411 MHz dB	40	53	-	-
4) 343 MHz ~ 393 MHz dB	42	56	-	-
Temp Coefficient ppm/°C ²	-18			

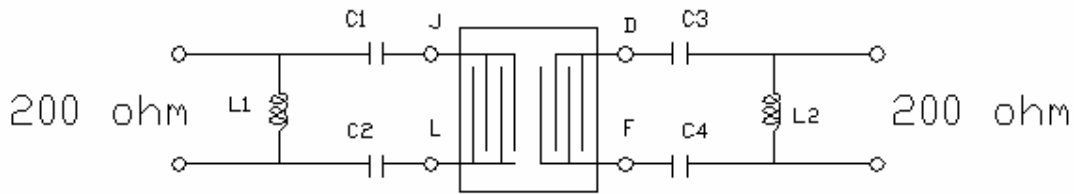
C. Measurement Circuit:

(1) Single end 50 ohm to Single end 50 ohm



$L1=10\text{nH}$, $C1=150\text{pF}$, $L2=10\text{nH}$, $C2=120\text{pF}$

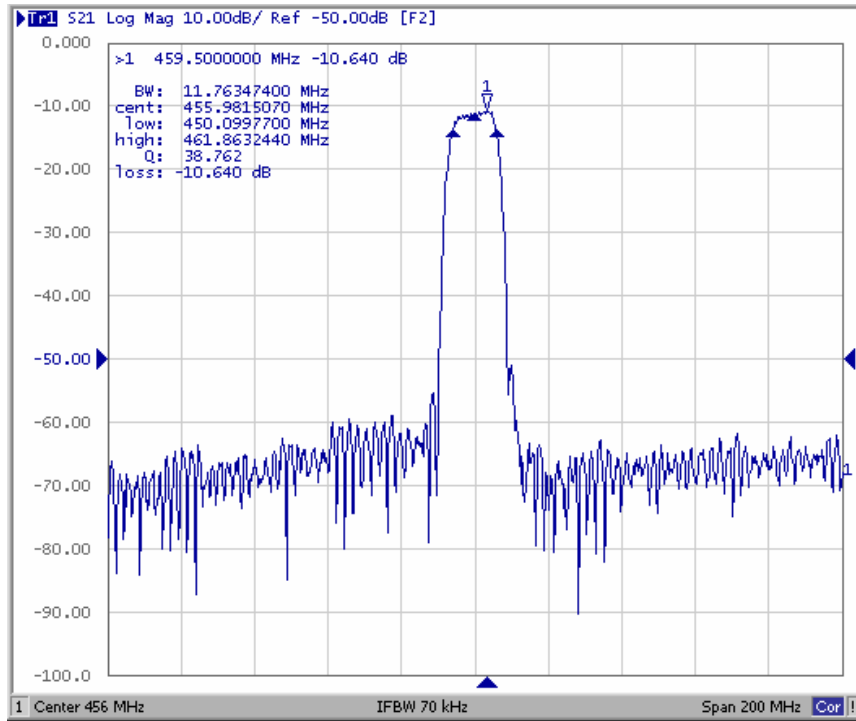
(2) Balanced 200 ohm to Balanced 200 ohm



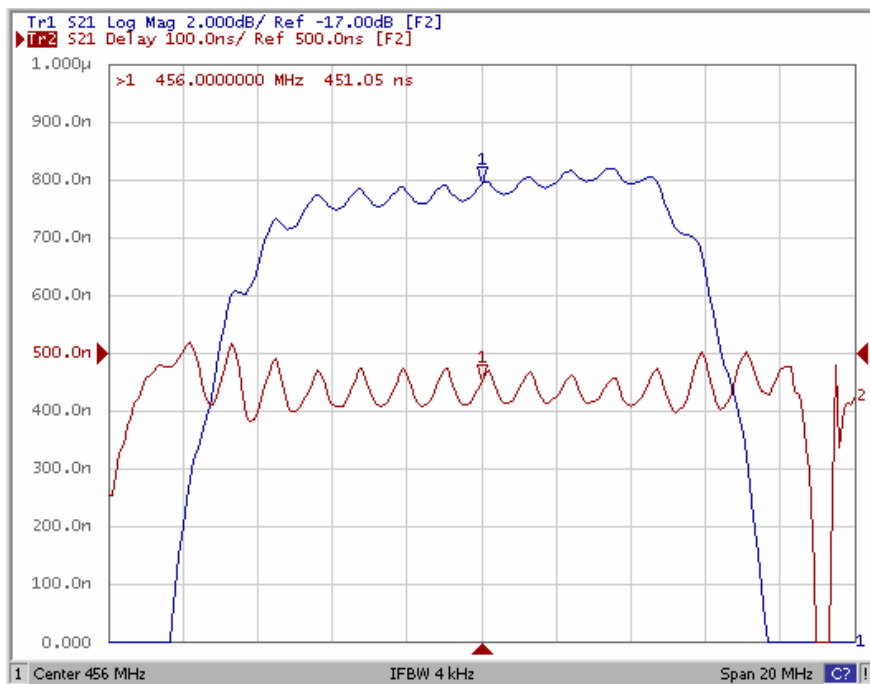
$C1=C2=15\text{pF}$ $L1=22\text{nH}$ $C3=C4=15\text{pF}$ $L2=20\text{nH}$

D. Frequency Characteristics :

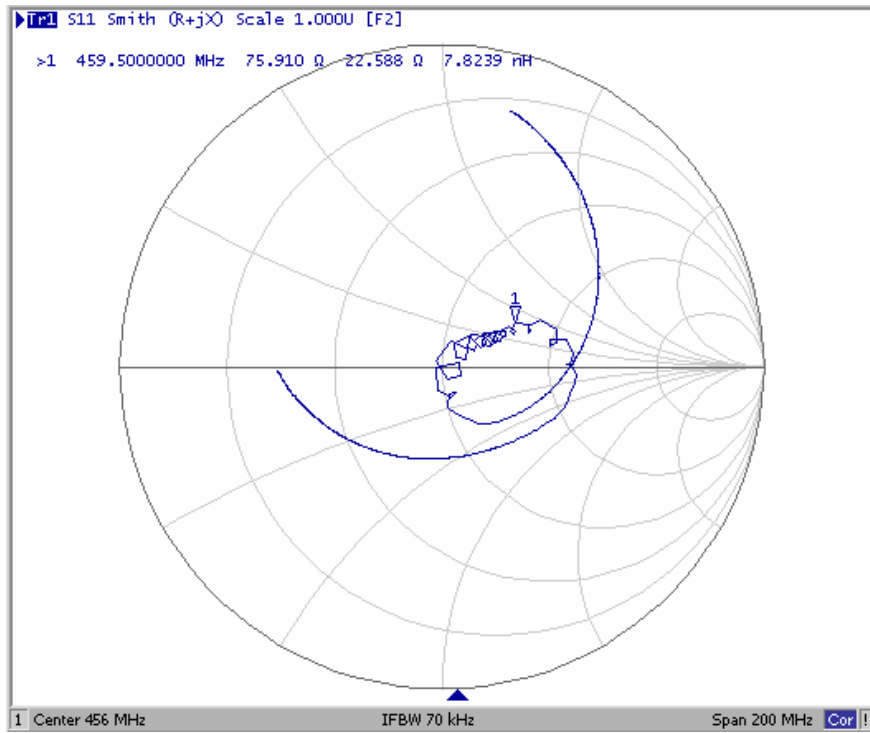
1. S21 Response



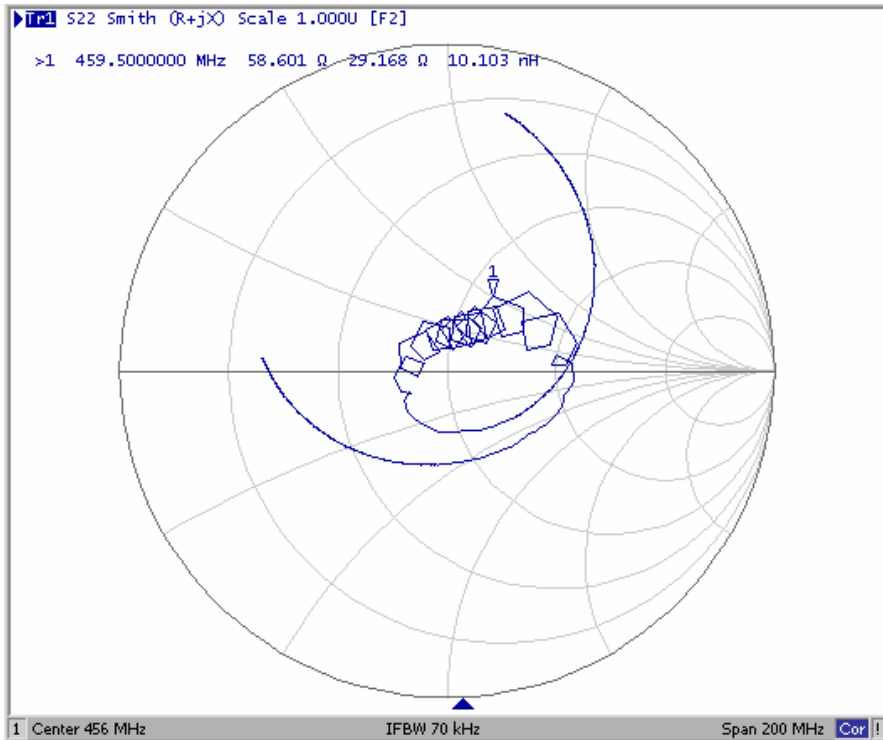
2. Pass band Ripple



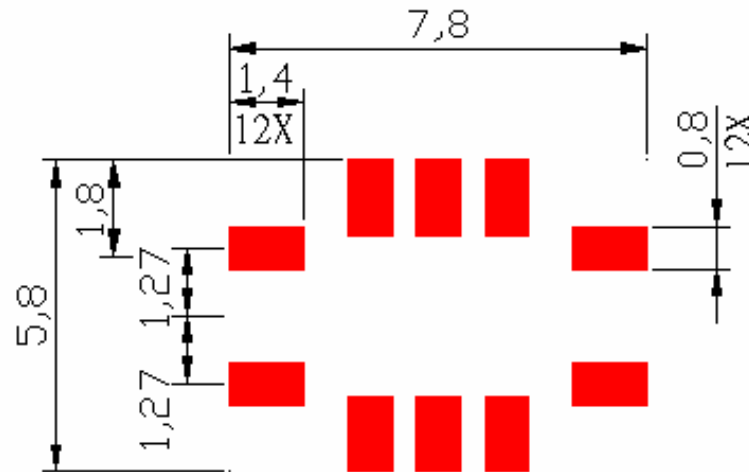
3. S11 Smith-Chart:



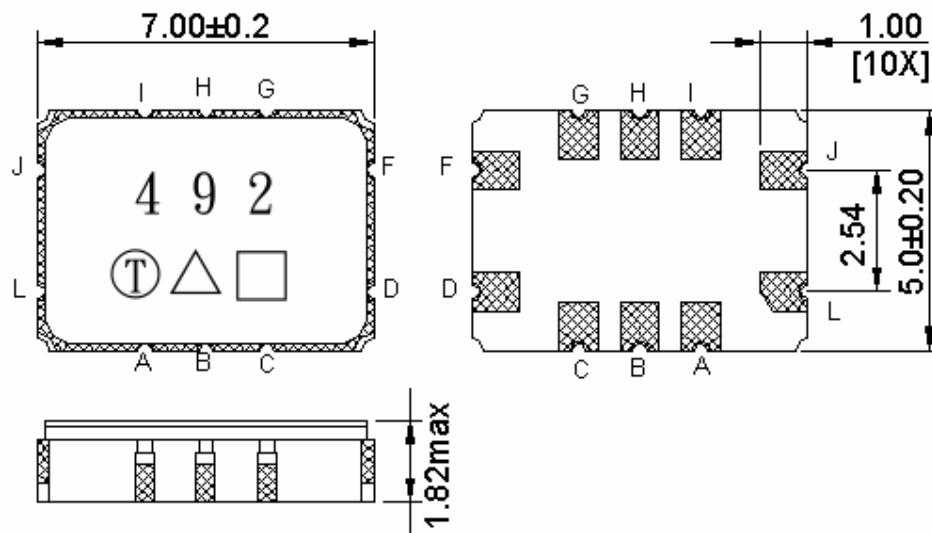
4. S22 Smith-Chart:



E. PCB Footprint



F. Outline Drawing:



Pin J : Balanced Input or single ended input

Pin D : Balanced Output or single ended Output

Pin F : Balanced Input return or single ended Input ground

Pin L : Balanced Output return or single ended Output ground

Pin A,B,C,G,H,I : To be Ground

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

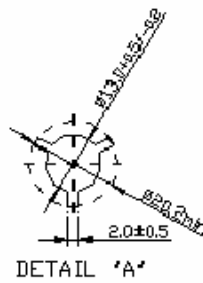
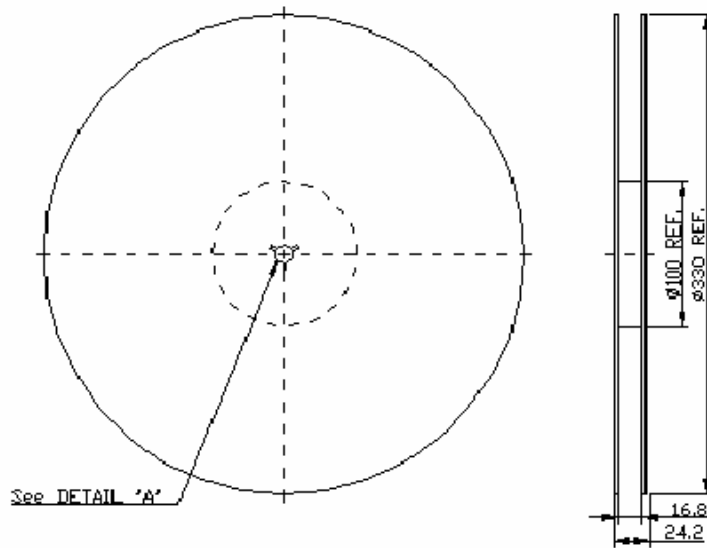
Unit : mm

△ : Product / Year Code

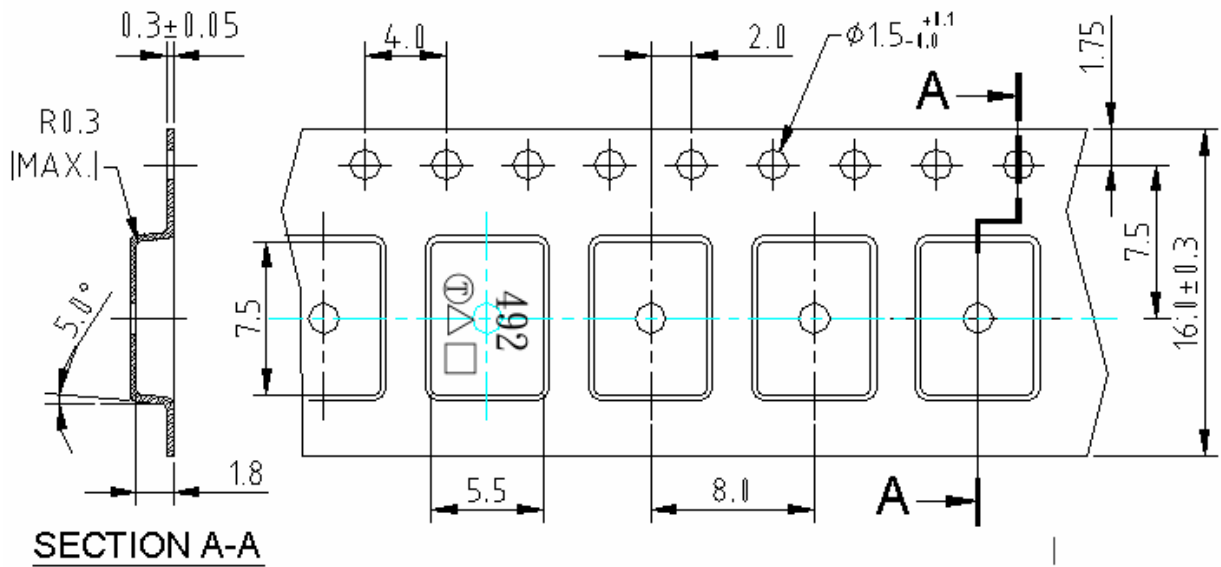
Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H. Recommended Reflow Profile:

