



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: 133.96MHz IF SAW Filter (BW=20MHz)

TST Parts No.: TB0725A

Customer Parts No.: _____

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

Checked by: _____ Andy Yu *Andy Yu*

Approval by: _____ Francis Chen *Francis Chen*

Date: _____ 2010/05/04

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.

FR-71S03-02

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TST DCC
Release document



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SAW Filter 133.96MHz (SMD 13.3×6.5×1.65 mm)

Model No.: TB0725A

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

RoHS Compliant
Lead free
Lead-free soldering

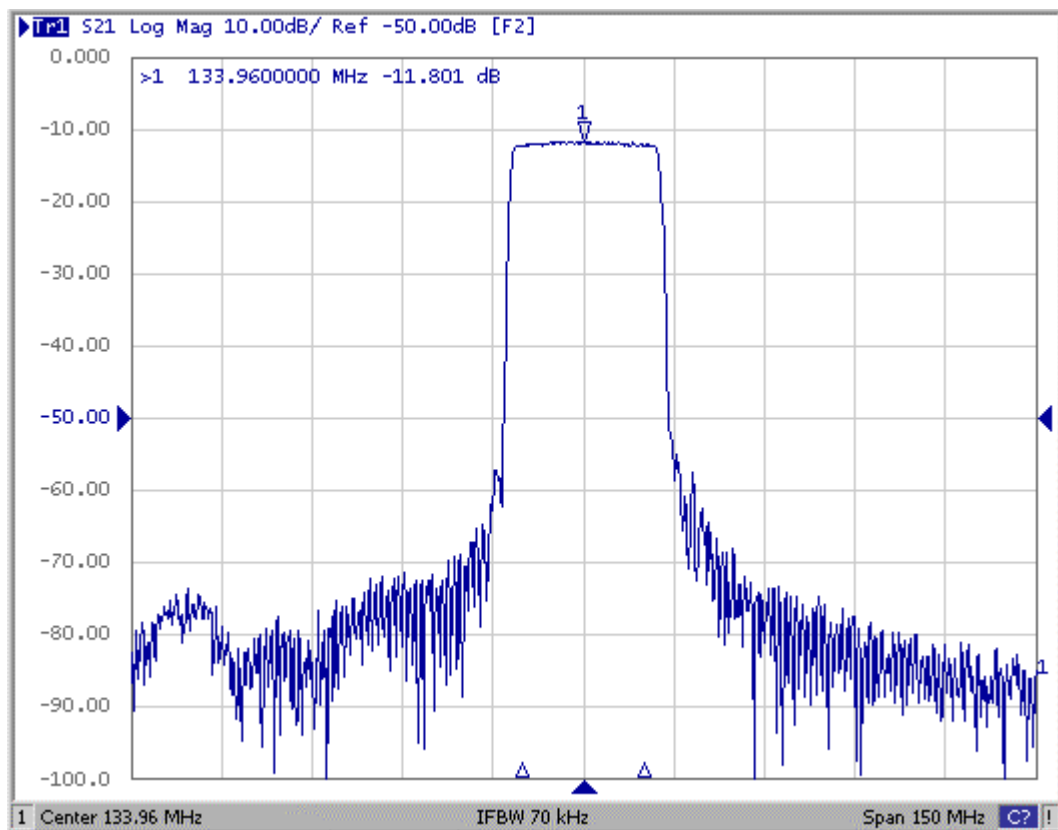
B. Characteristics :

Ambient Temperature: 25 °C

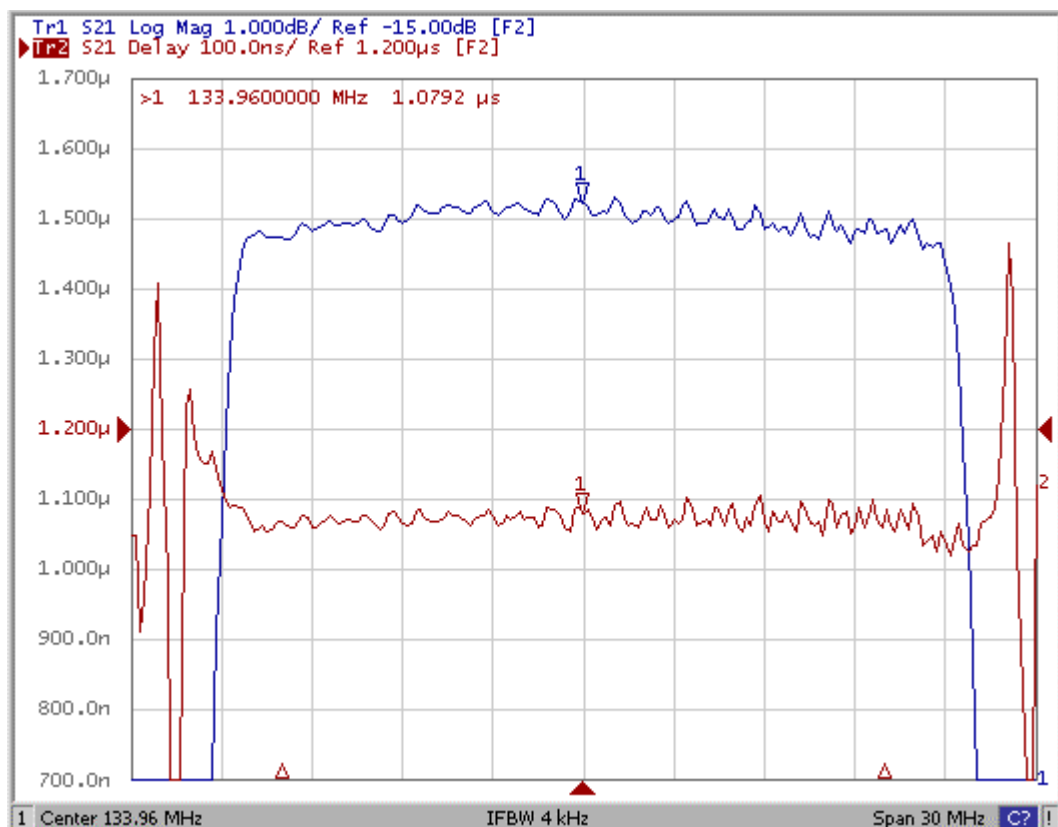
Characteristics		Value			Note
		Min.	Typ.	Max.	
Center frequency F_c	MHz	-	133.96	-	-
Minimum Insertion loss I.L.	dB	-	11.8	15.0	-
1dB BW	MHz	20.0	23.5	-	
45dB BW	MHz	-	28.3	31.0	
Passband Ripple ($F_c \pm 9.5\text{MHz}$)	dB	-	0.6	1.0	-
Attenuation (Reference to Minimum Insertion loss)					
10 ~ 103MHz	dB	50	53	-	-
103 ~ 118MHz	dB	40	52	-	
150 ~ 163MHz	dB	40	47	-	-
163 ~ 240MHz	dB	50	58		
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 :

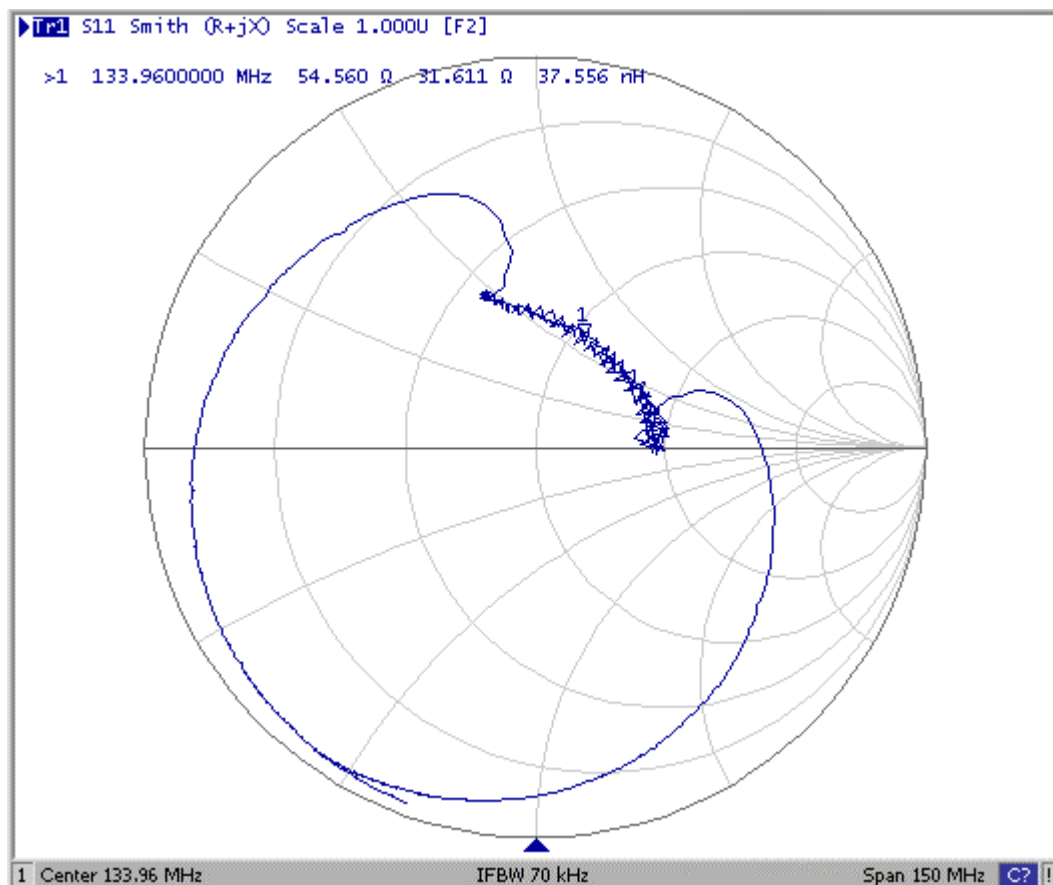
(1) wide band Response:(span 150MHz)



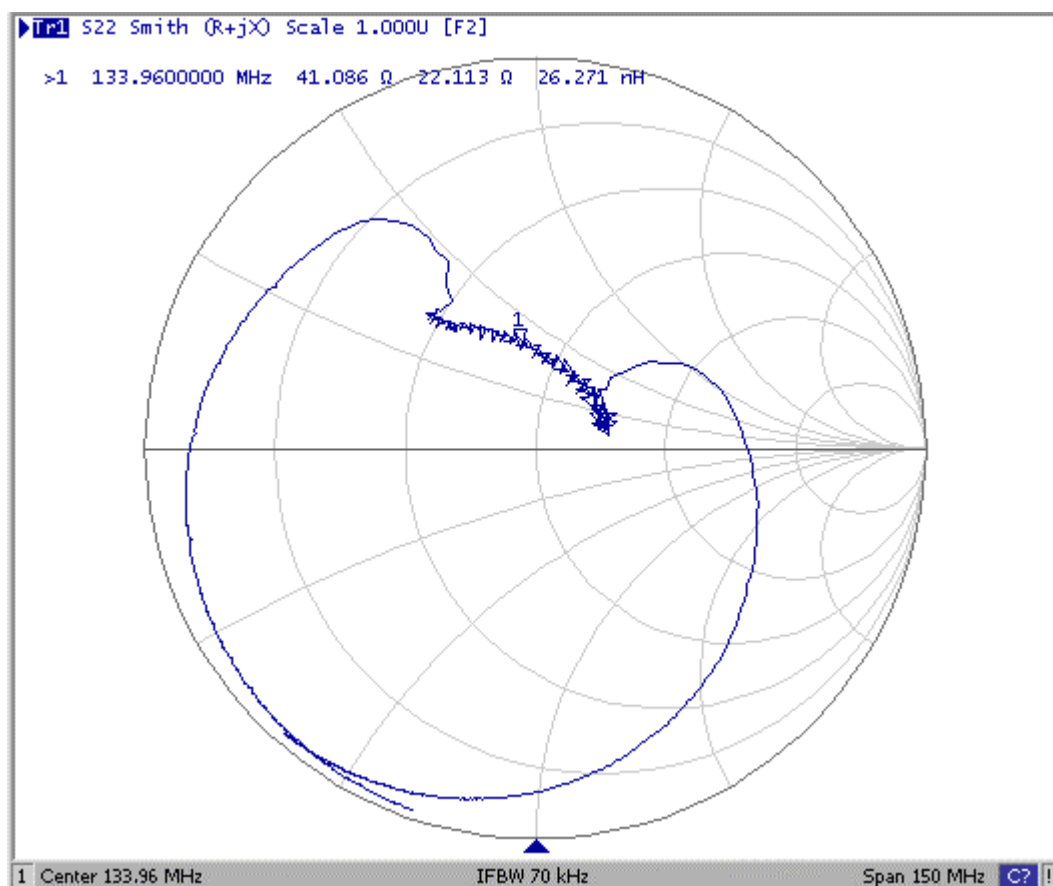
(2) Pass band Response and Group Delay Variation: (span 30MHz)



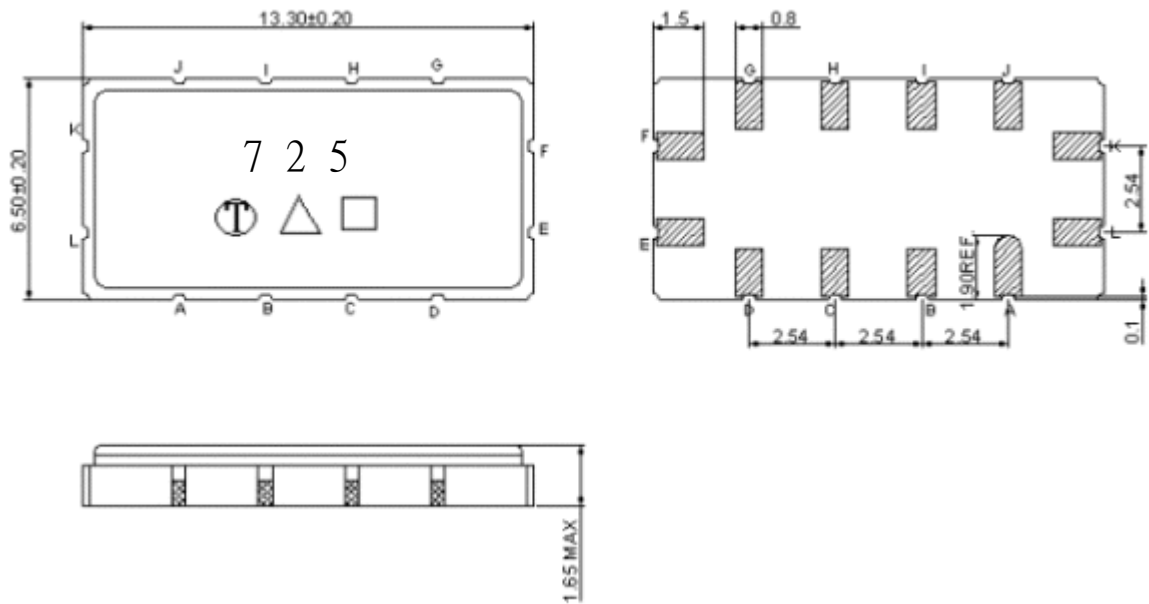
(3) S11 Smith-Chart: (span 150MHz)



(4) S22 Smith-Chart: (span 150MHz)



D. Outline Drawing:



Pin K: RF input

Pin E: RF output

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

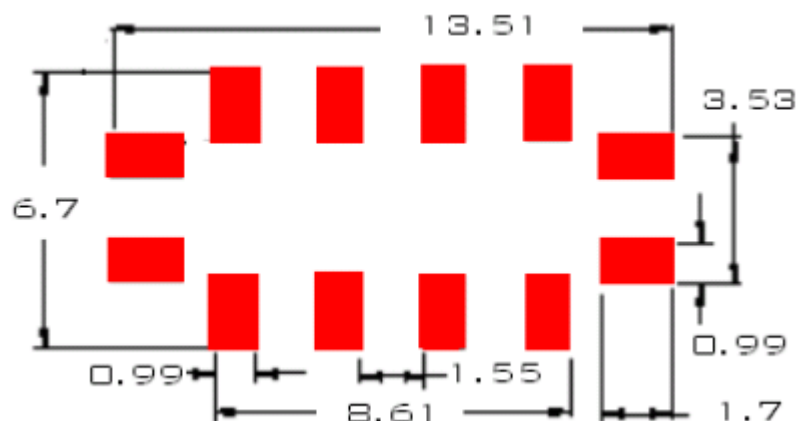
□ : Week Code (Follow the table from planner each year)

Unit : mm (week01, 02, 03...52 =>A, B, C...z)

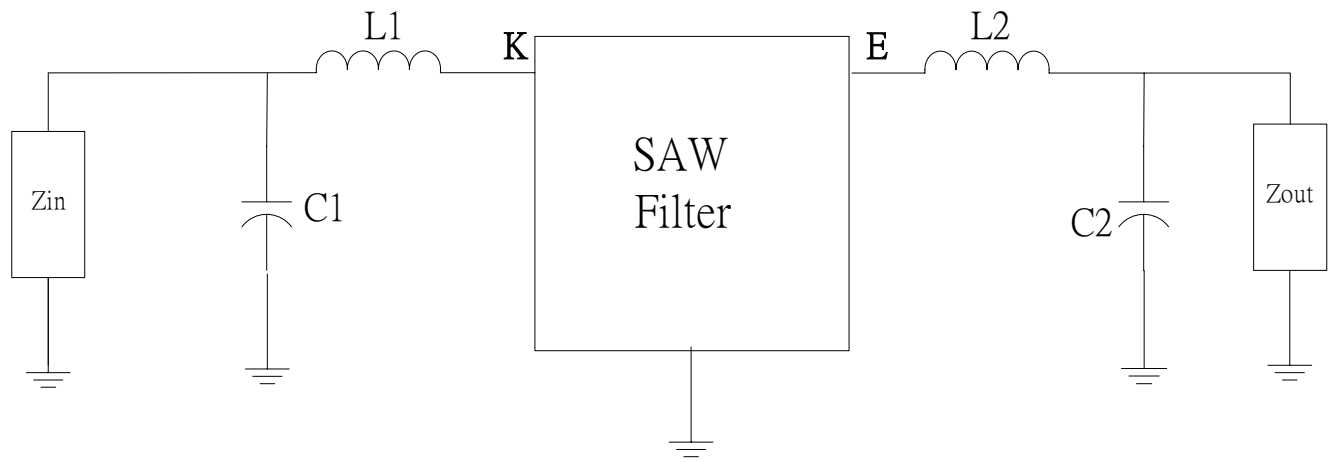
△ : Product / Year Code

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:

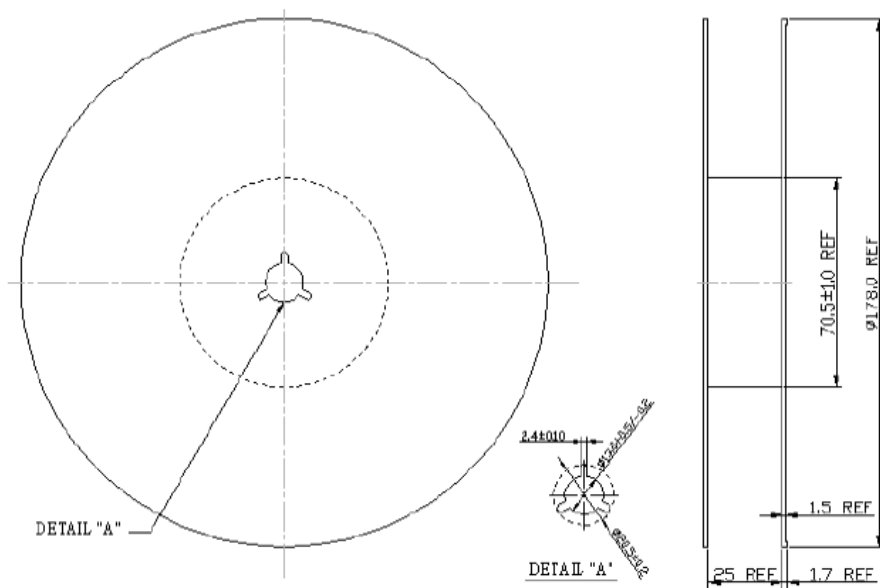


$$Z_{in} = Z_{out} = 50 \text{ ohm}$$

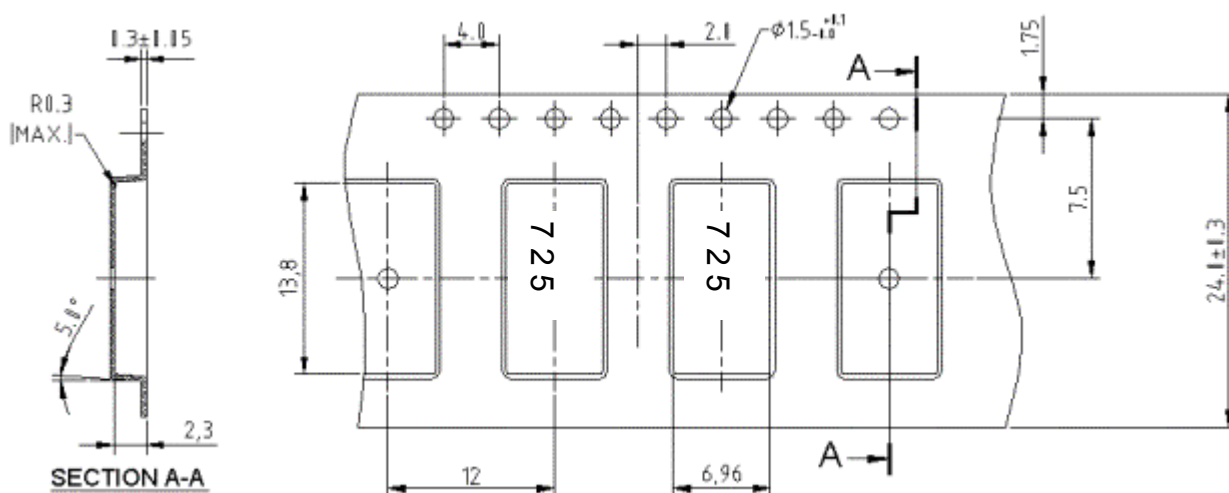
$$L1 = 68\text{nH}, C1 = 33\text{pF}, L2 = 68\text{nH}, C2 = 36\text{pF}$$

G. Packing:

(1). REEL DIMENSION:



(2). TYPE DIMENSION:



H. Recommended Reflow Profile:

