



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: 256MHz IF SAW Filter (BW=34MHz)

TST Parts No.: TB0758A

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Andy Yu

Approval by: _____ Francis Chen

Date: _____ 2009/08/04



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SAW Filter 256MHz (SMD 5.0×7.0 mm)

Model No.: TB0758A

Rev. No.:1.0

A. MAXIMUM RATING:

1. Operating Temperature: -40 °C ~ +90 °C
2. Storage Temperature: -40 °C ~ +90 °C
3. Input power: 20dBm

RoHS Compliant
Lead free
Lead-free soldering

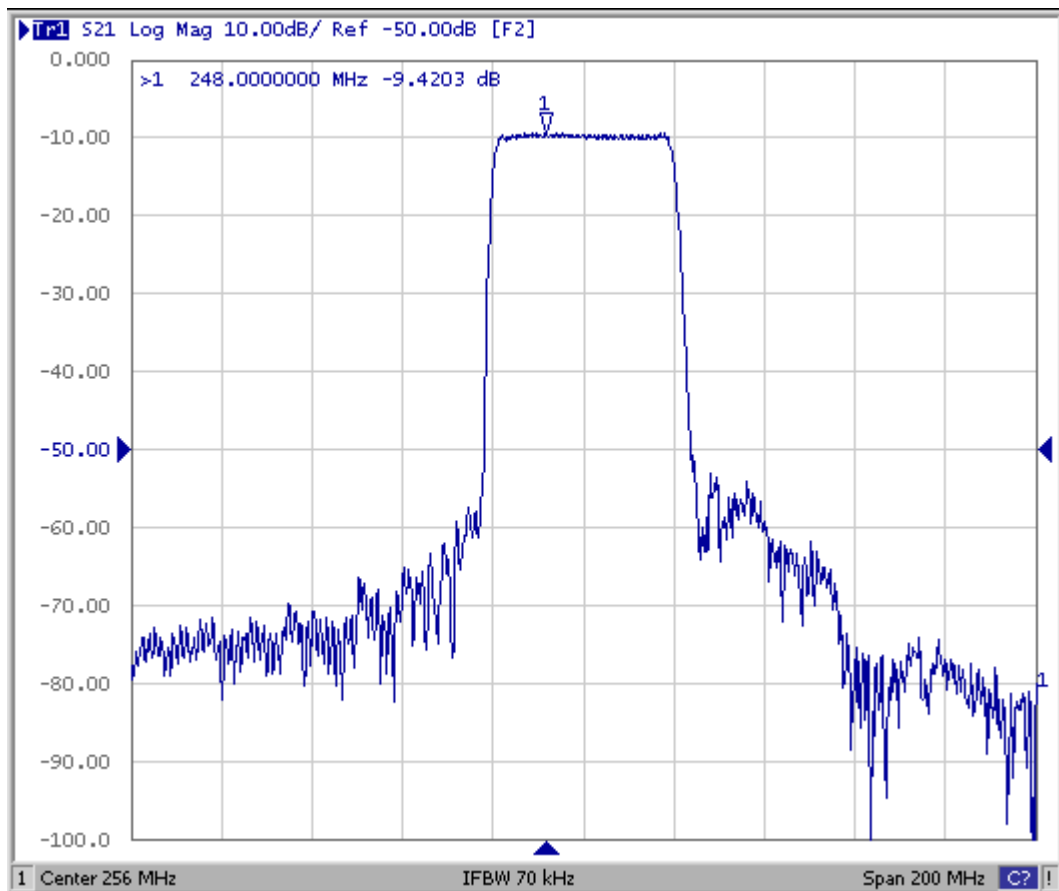
B. Characteristics :

Ambient Temperature: 25 °C

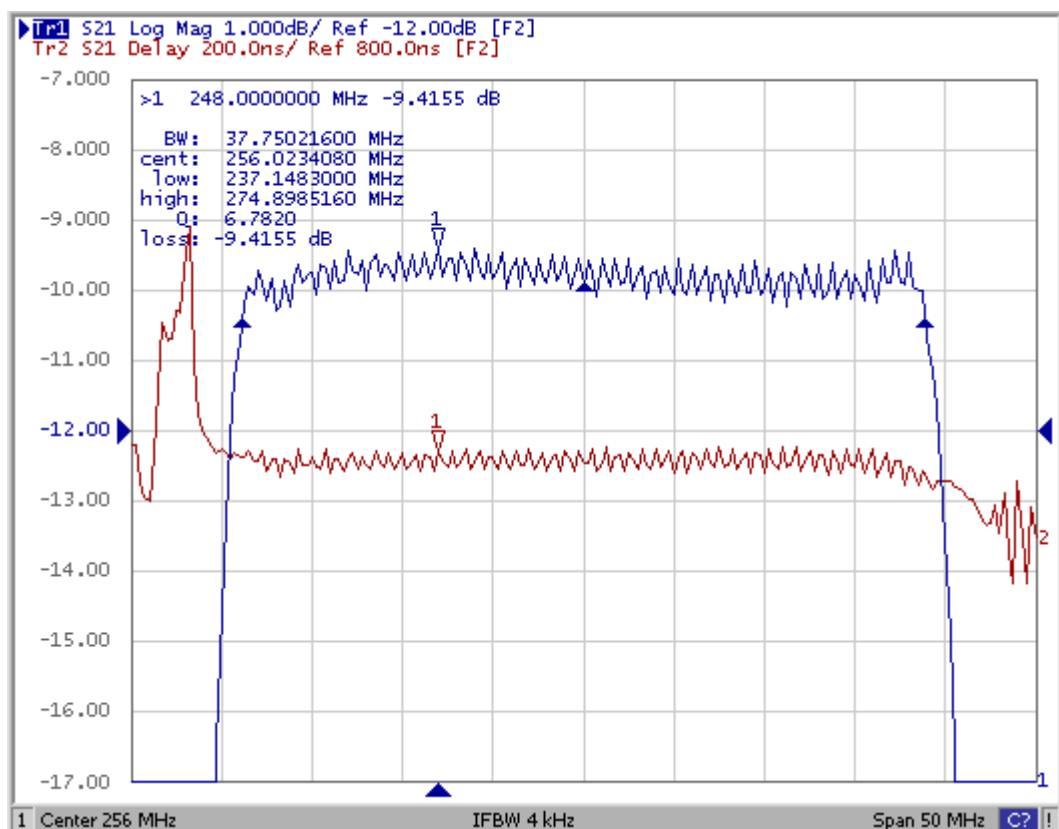
Characteristics		Value			Note
		Min.	Typ.	Max.	
Center frequency F_c	MHz	-	256	-	-
Minimum Insertion loss I.L.	dB	-	9.4	13.0	-
1dB BW	MHz	34	38	-	
40dB BW	MHz	-	45	50.0	
Attenuation (Reference to Minimum Insertion loss)					
225MHz	dB	40	51	-	-
290MHz	dB	40	47	-	-
Temp Coefficient	ppm/K	-	-94	-	-
Matching:					
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 :

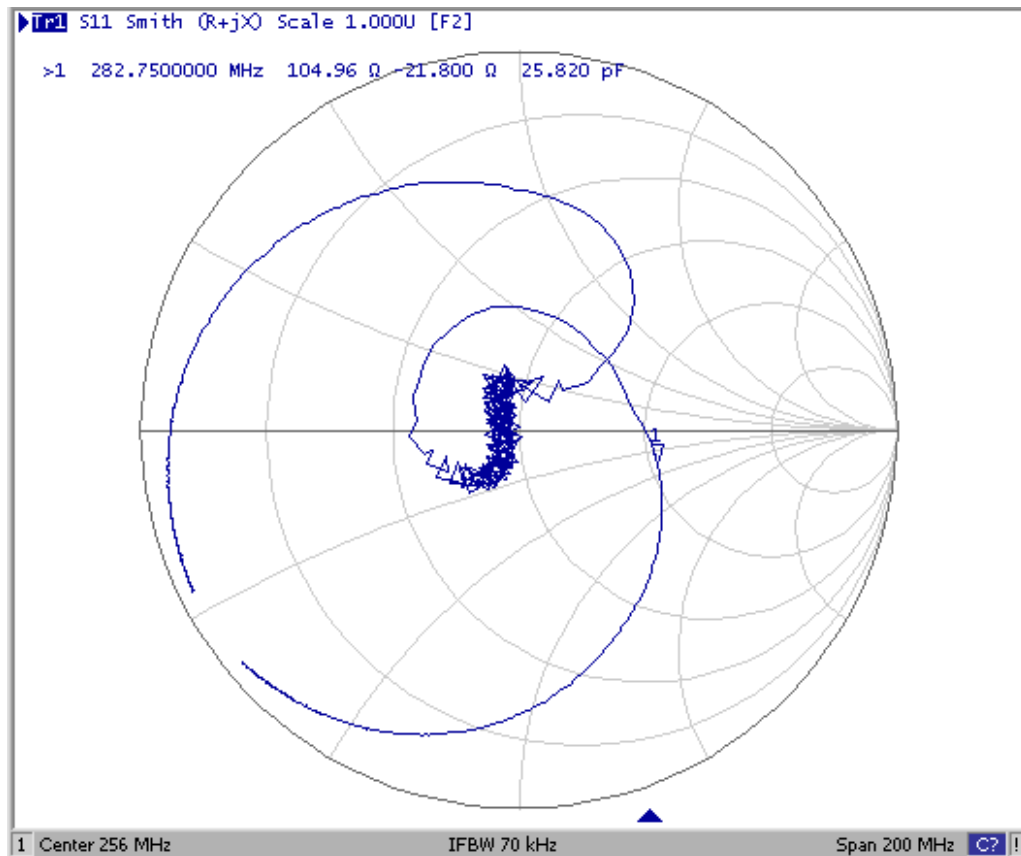
(1) wide band Response:(span 200MHz)



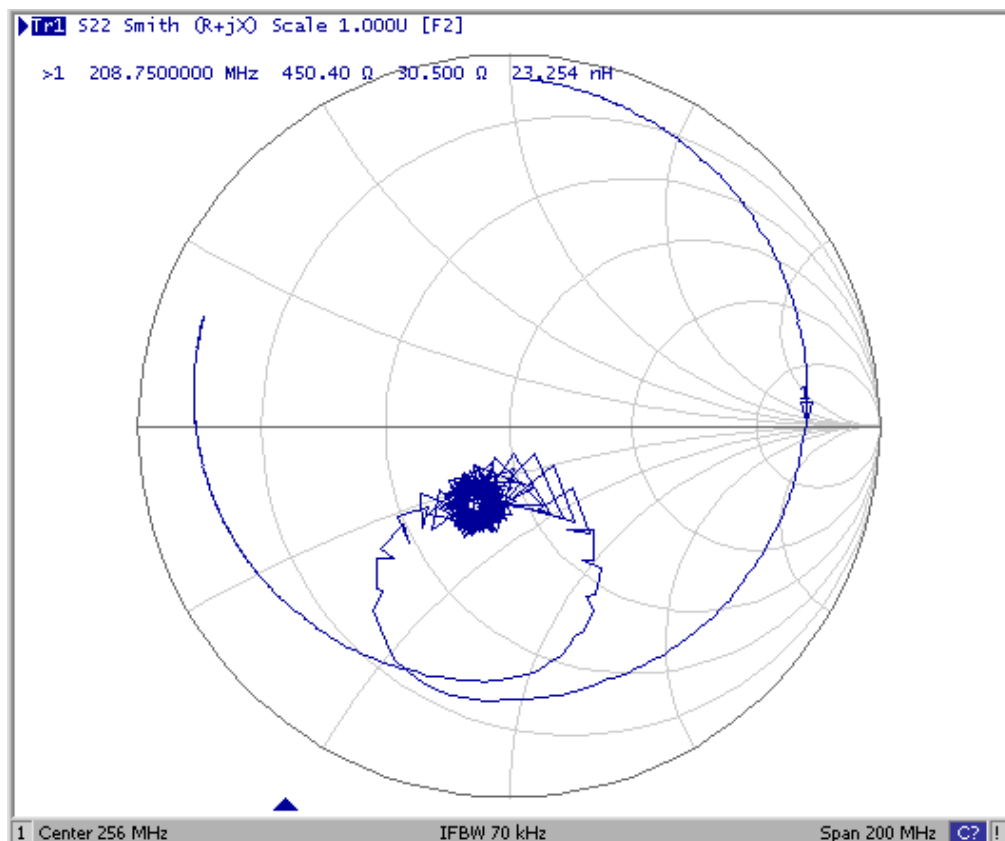
(2) Pass band Response and Group Delay Variation: (span 50MHz)



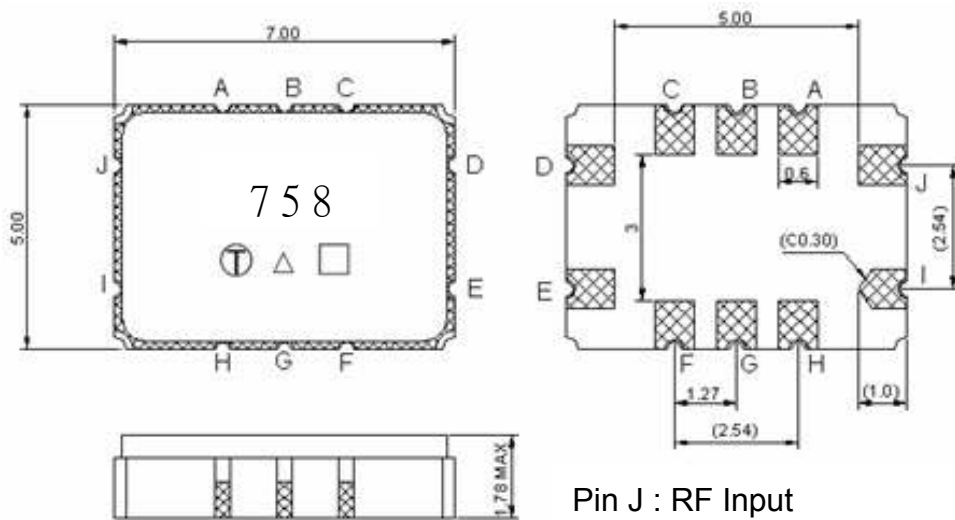
(3) S11 Smith-Chart: (span 200MHz)



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



D. Outline Drawing:



Pin J : RF Input

Pin E : RF Output

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

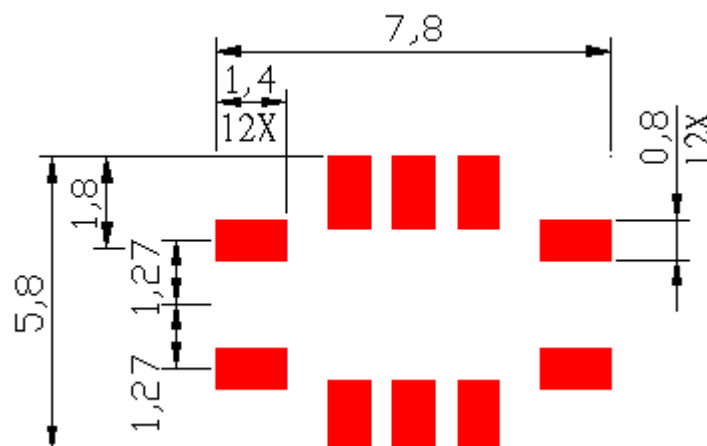
Unit: mm

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

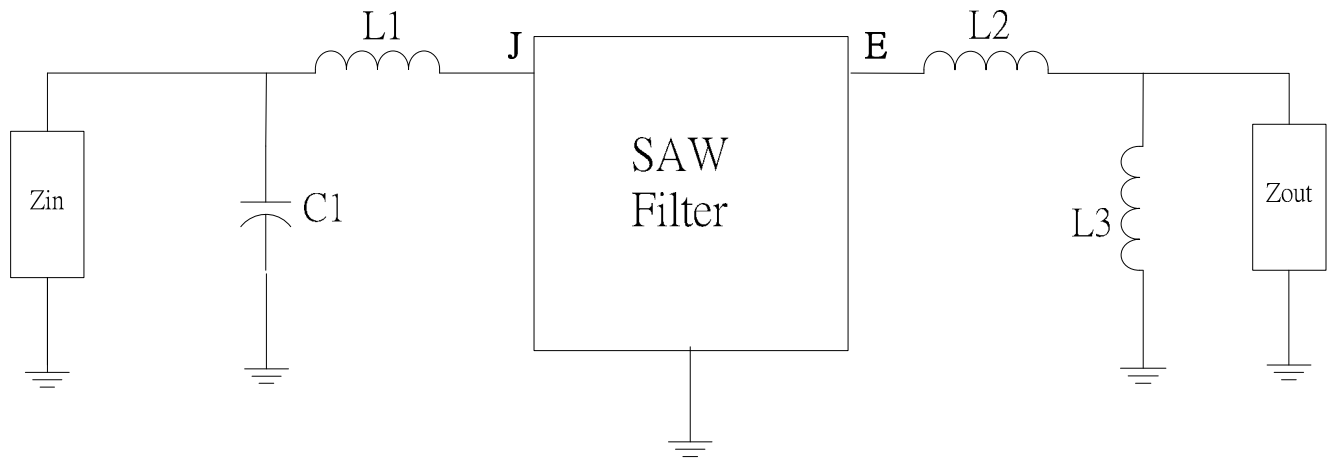
△ : Product / Year Code

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:

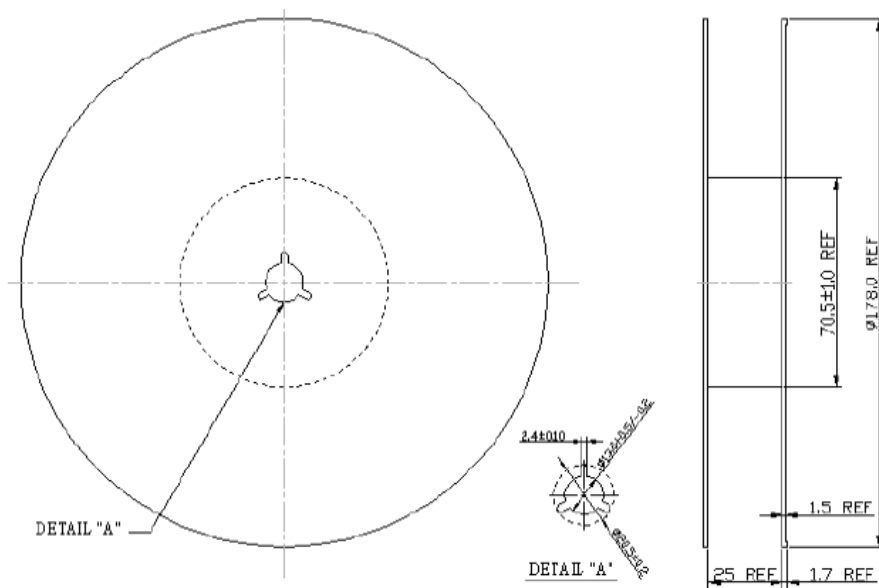


$$Z_{in} = Z_{out} = 50 \text{ ohm}$$

$$L1 = 24 \text{ nH}, C1 = 22 \text{ pF}, L2 = 8.2 \text{ nH}, L3 = 27 \text{ nH}$$

G. Packing:

(1). REEL DIMENSION:



The graph displays the temperature profile over a 360-second period. The temperature begins at 25°C, rises sharply to 145°C by 40 seconds, then more gradually to a peak of 260°C at 220 seconds. After the peak, it drops sharply to 145°C by 280 seconds and continues to decrease to 110°C by 360 seconds.

Time (Sec)	Temp (Deg C)
0	25
20	30
40	145
60	150
80	155
100	160
120	170
140	175
160	190
180	220
200	250
220	260
240	250
260	180
280	145
300	145
320	135
340	120
360	110