



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Name: SAW Filter 193.7MHz (BW 18MHz) SMD 9.1x7.1mm

TST Parts No.:TB0609A

Customer Parts No.: _____

NOTE:

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Andy Yu *Andy*

Approval by: _____ Francis Chen *Francis*

Date: _____ 2011/7/21

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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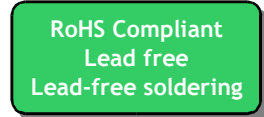
SAW Filter 193.7 MHz SMD 9.1mmX7.1mm

MODEL NO.: TB0609A

Rev. No. V1.0

A. MAXIMUM RATING:

1. Operating Temperature: -40°C to +85°C
2. Storage Temperature: -40°C to +85°C
3. Maximum Input Power : 15dBm



Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

1. Ambient Temperature: 25 °

Item	Unit	Min.	Type.	Max.
Center frequency, Fc	MHz	-	193.7	-
Insertion Loss, IL	dB	-	17.4	18.0
1 dB bandwidth	MHz	17.5	18.0	-
3 dB bandwidth	MHz	-	19.0	20
20 dB bandwidth	MHz	-	21.3	30
40 dB bandwidth	MHz	-	22.2	32
Pass band Ripple (p-p) Within Fc +8.5MHz	dB	-	0.7	1.2
Group Delay Variation (p-p) Within Fc +8.5MHz	ns	-	20	60
Absolute Group Delay at Fc	usec	-	1.02	-
Absolute Group Delay (mean) Within Fc+8.5MHz	usec	-	1.015	-
Relative Attenuation				
10 MHz to 170 MHz		40	47	-
230 MHz to 550 MHz	dB	35	40	-
550 MHz to 600 MHz		25	30	-
600MHz to 900MHz		20	23	-

C. FREQUENCY CHARACTERISTICS :

1.S21 Response

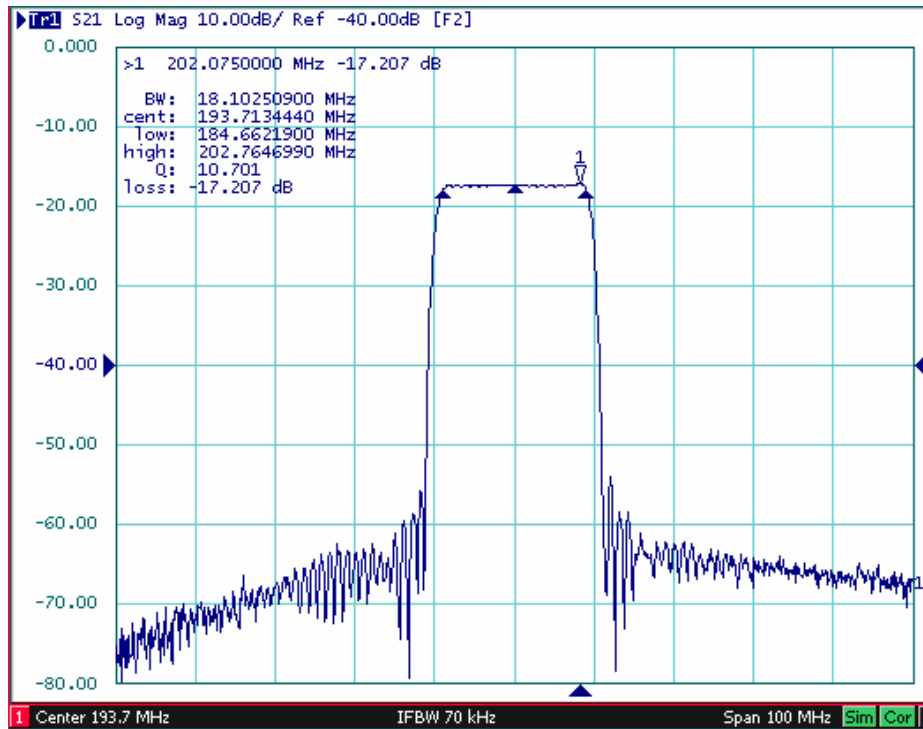


Fig1. Horizontal: 10MHz/Div Vertical: 10dB/Div

2. Passband Ripple

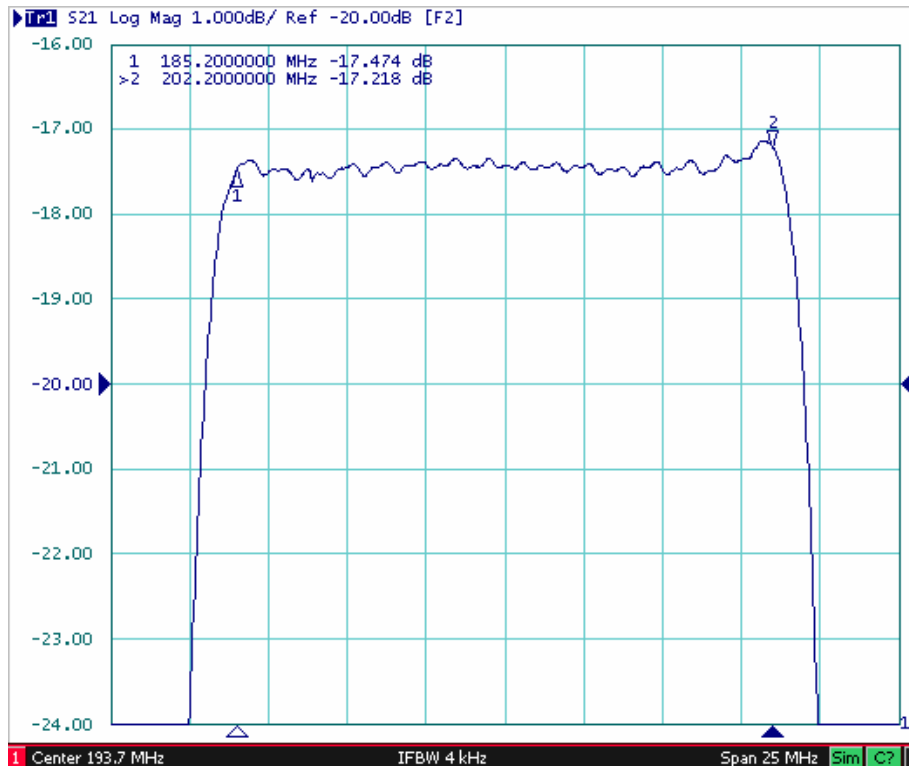


Fig2. Horizontal: 2.5MHz/Div Vertical: 1dB/Div

3. Group Delay Ripple:

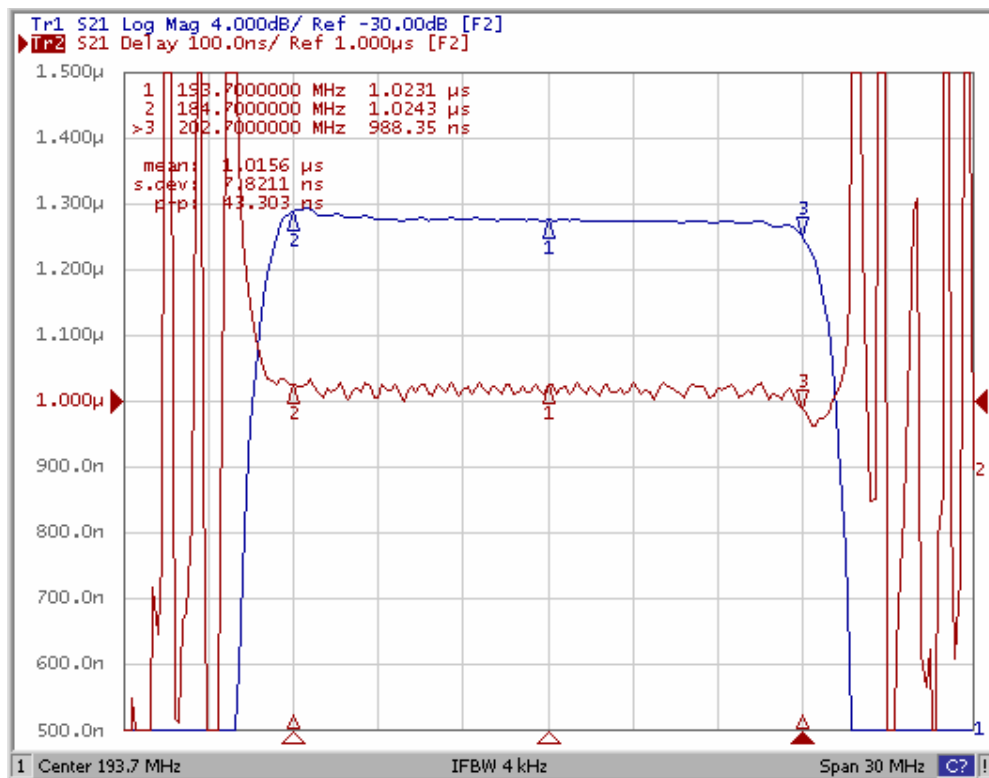


Fig3. Horizontal: 3.0MHz/Div Vertical: 100nS/Div

4. Wide Band Response:

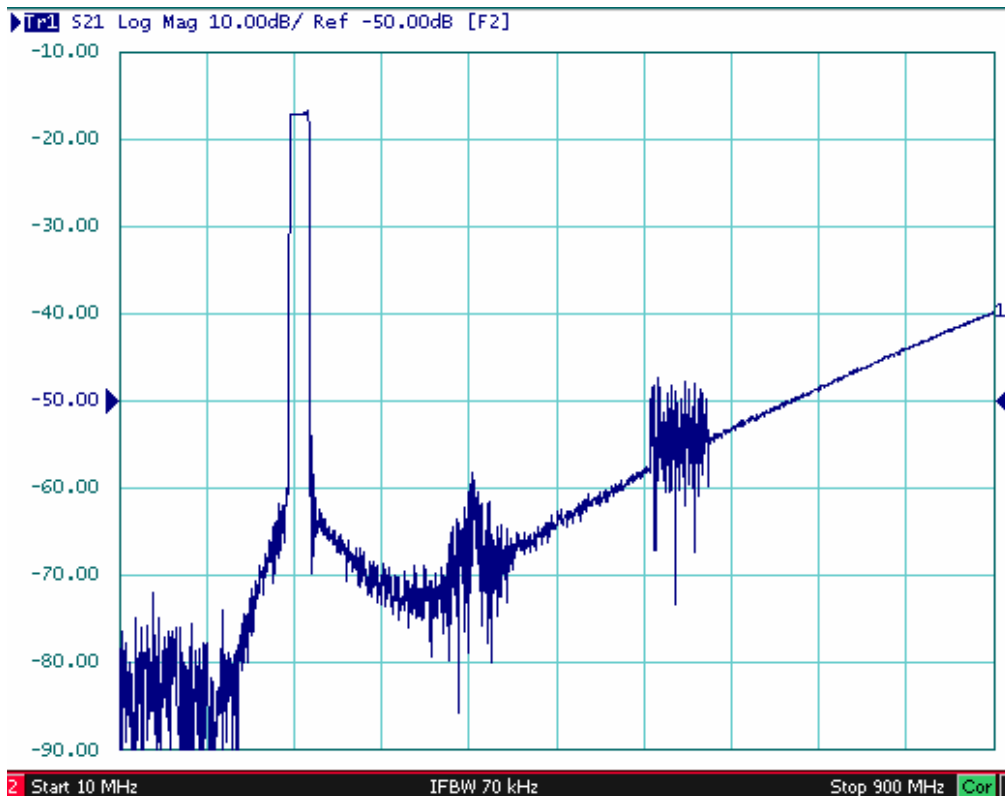
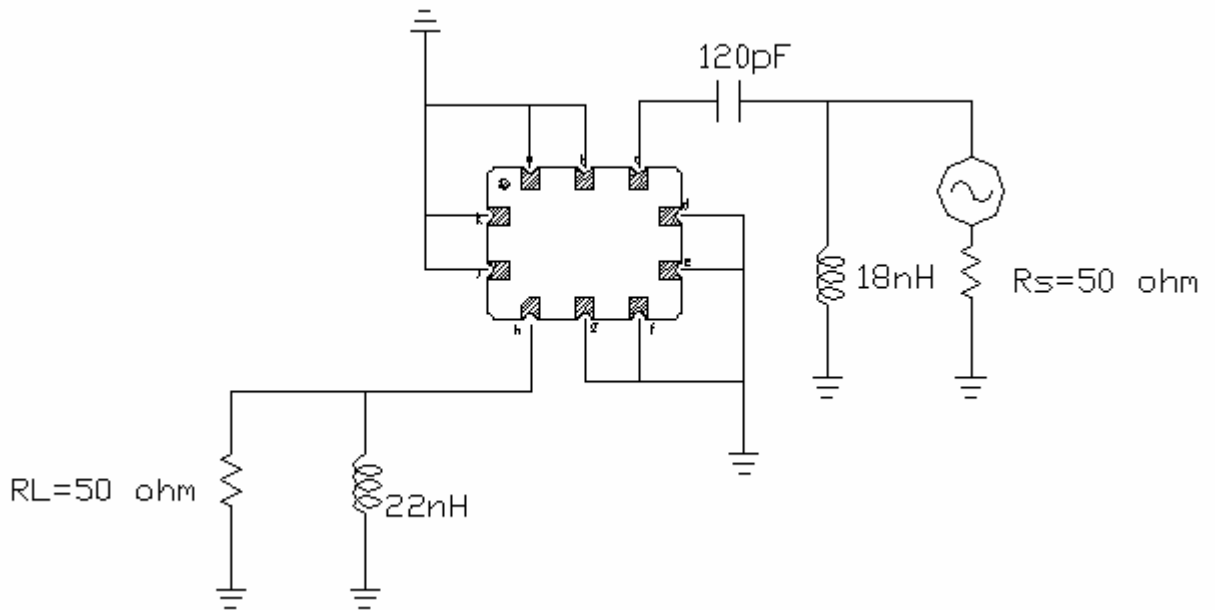


Fig3. Horizontal: 10~900MHz Vertical: 10dB/Div

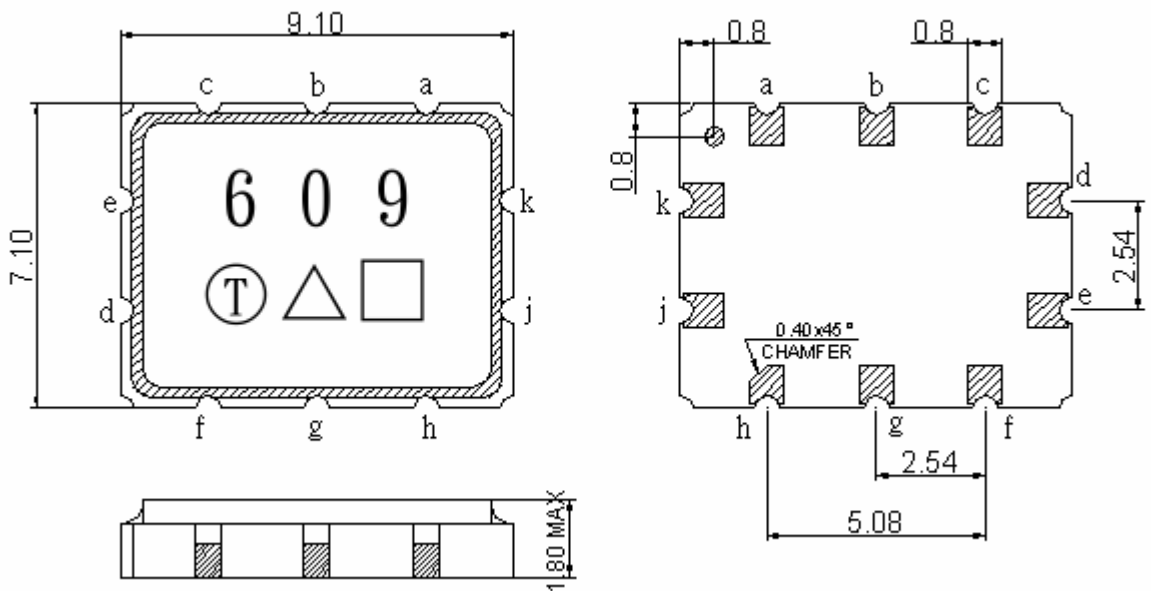
D. MEASUREMENT CIRCUIT

1. Single ended input 50 ohm to Single ended Output 50 ohm



Note: The matching structure will change according to different test fixture.

E. OUTLINE DRAWING:



Pin c : RF Input

Pin h : RF Output

Pin a,b,d,e,f,g,j,k : Ground

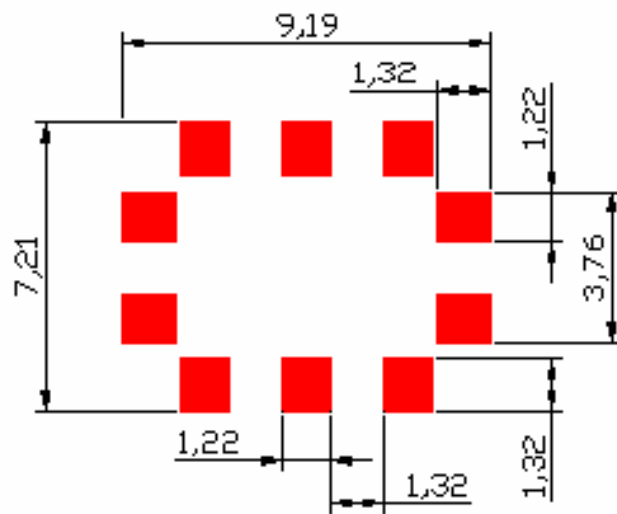
Unit: mm

□ : 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>

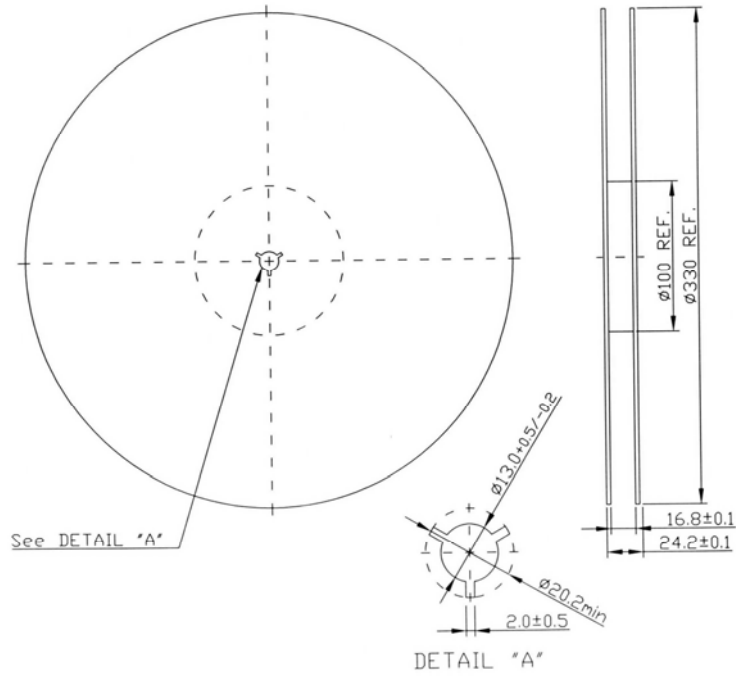
F. PCB Footprint



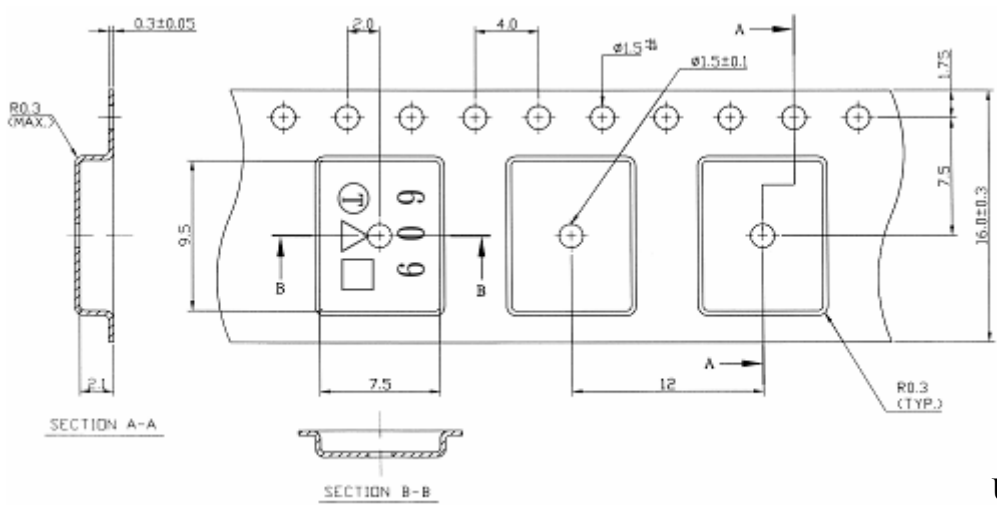
Unit: mm

G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE_:

