



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.

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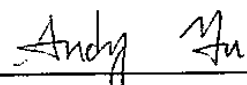
Approval Sheet For Product Specification

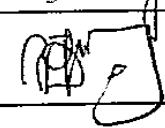
Product Name: SAW Filter 109MHz SMD 13.3×6.5mm

TST Parts No.:TB0770A

Customer Parts No.:_____

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

Checked by:_____ Andy Yu 

Approval by:_____ Francis Chen 

Date:_____ 06/04/2009

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 109 MHz(BW=5.8MHz) SMD 13.3mmX6.5mm

MODEL NO.: TB0770A

REV.1.0

A. MAXIMUM RATING:

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

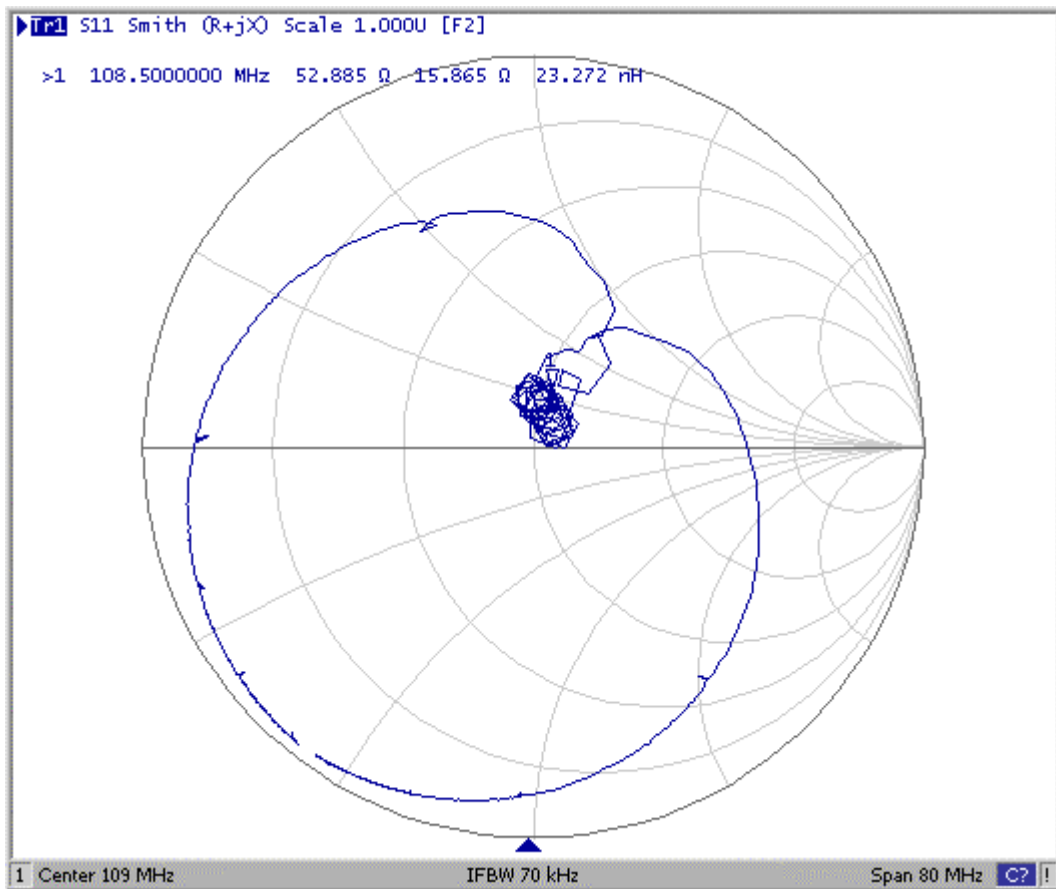
RoHS Compliant
Lead free
Lead-free soldering

B. Characteristics :

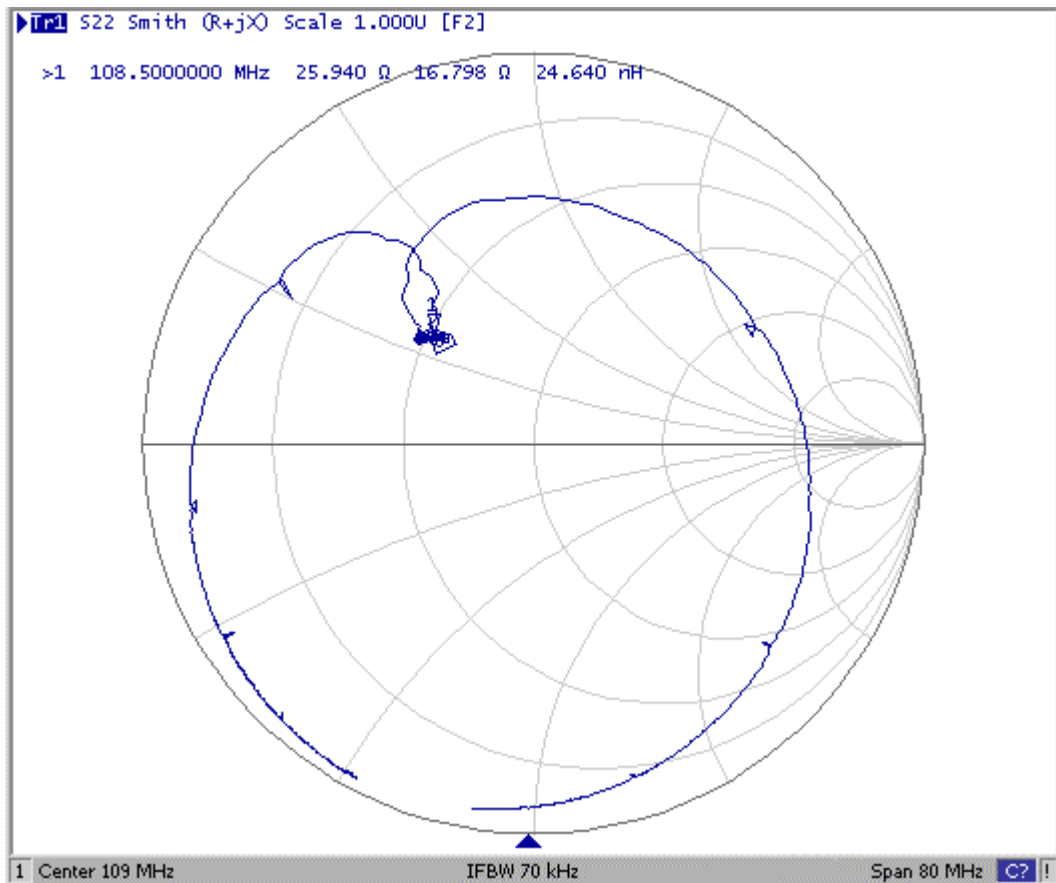
Ambient Temperature: 25 °C

Characteristics	Value			Note.
	Min.		Max.	
Center frequency F_c MHz	108.6	109	109.4	-
Maximum Insertion loss I.L. dB	-	9.5	12.5	-
1dB Bandwidth MHz	5.80	7.0	-	-
3dB Bandwidth MHz	6.85	7.8	-	-
40dB Bandwidth MHz	-	10.6	11.0	-
Passband Ripple ($F_c \pm 2.4\text{MHz}$) MHz	-	0.40	1.00	-
Phase Linearity ($F_c \pm 2.4\text{MHz}$) (P-P) deg	-	6.8	14	-
Group Delay Ripple ($F_c \pm 2.4\text{MHz}$) nS	-	120	200	-
Group Delay at F_c uS	-	1.14	-	-
Temp Coefficient ppm/°C	-	-18	-	-

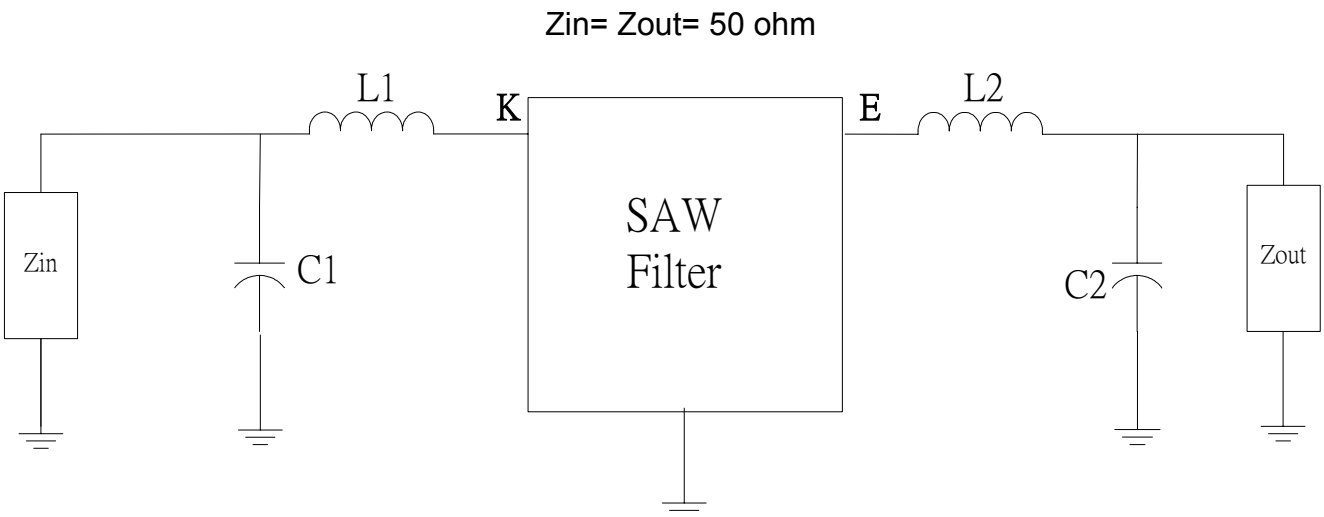
3. S11 Smith Chart: (span : 80MHz)



4. S22 Smith Chart (span : 80MHz)

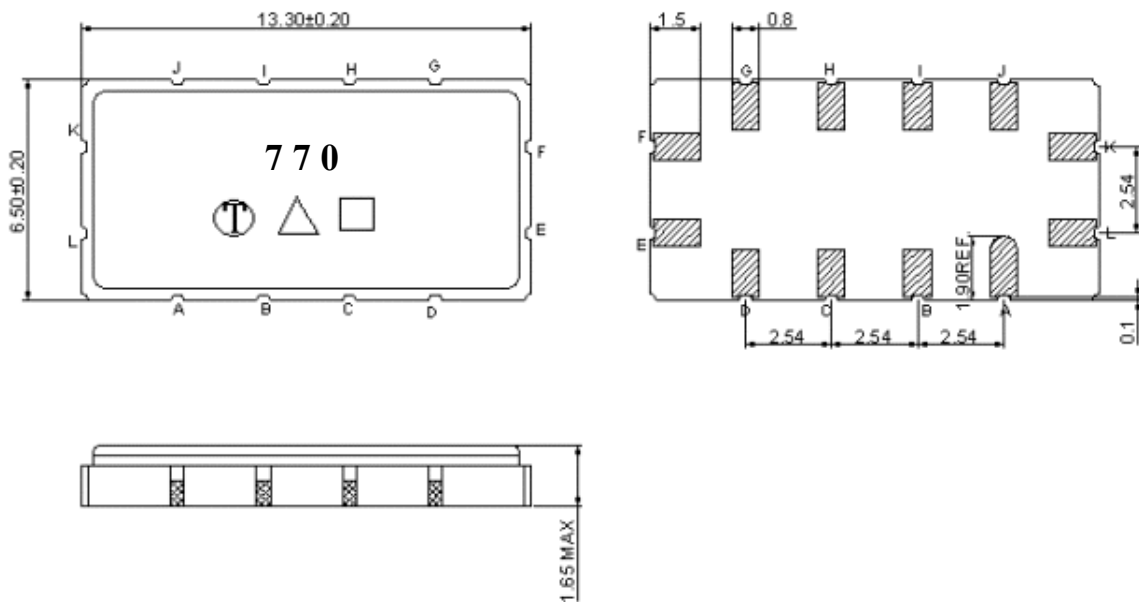


E. MEASUREMENT CIRCUIT



$L1=133\text{nH}, C1=36\text{pF}, L2=133\text{nH}, C2=15\text{pF}$

F.OUTLINE DRAWING:



Pin K: RF input

Pin E: RF output

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

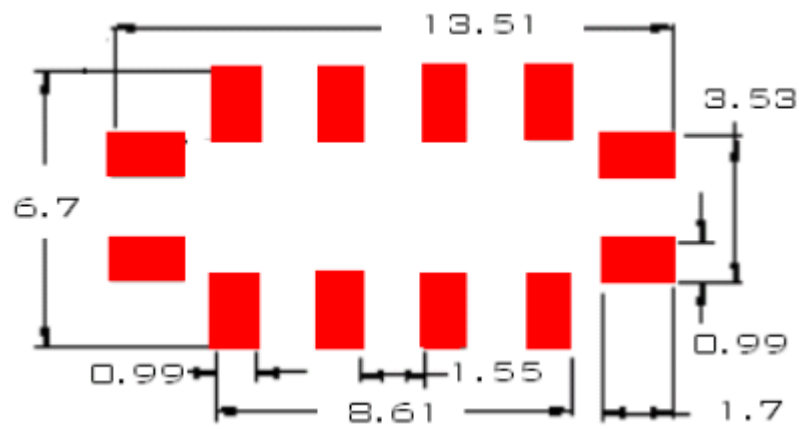
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

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

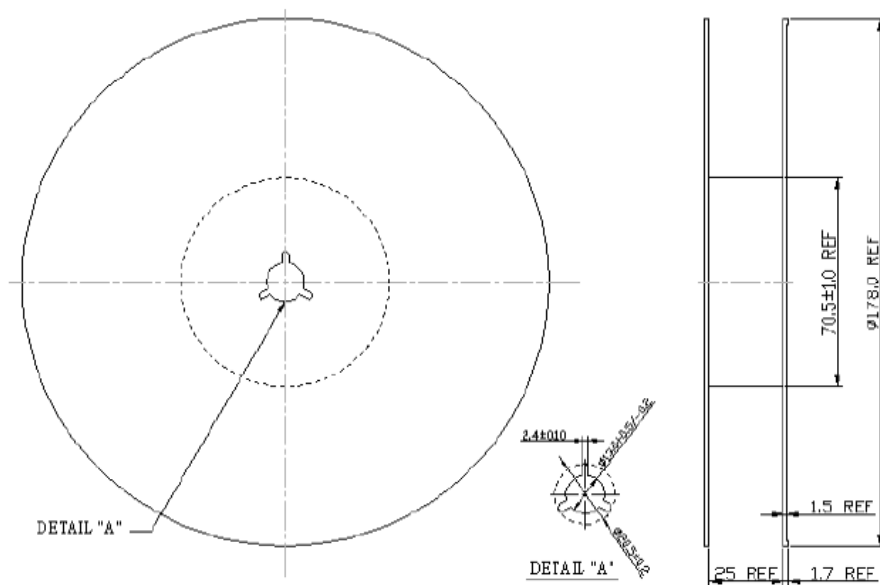
G. PCB Footprint



Unit: mm

H. PACKING:

1. REEL DIMENSION



Unit: mm

I. RECOMMENDED REFLOW PROFILE:

