



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date:

Product Name: 210.38MHz SMD7x5mm IF SAW Filter

TST Parts No.:TB0104A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Andy Lee

Approval by:_____ Francis Chen

Date:_____ 2007/9/12



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210.38MHz SMD 7x5mm IF SAW Filter

MODEL NO.: TB0104A

Rev. No.2

A. Maximum Rating:

1. Operating Temperature: -25 °C ~ +85 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input Power Level: 10 dBm

RoHS Compliant
Lead free
Lead-free soldering

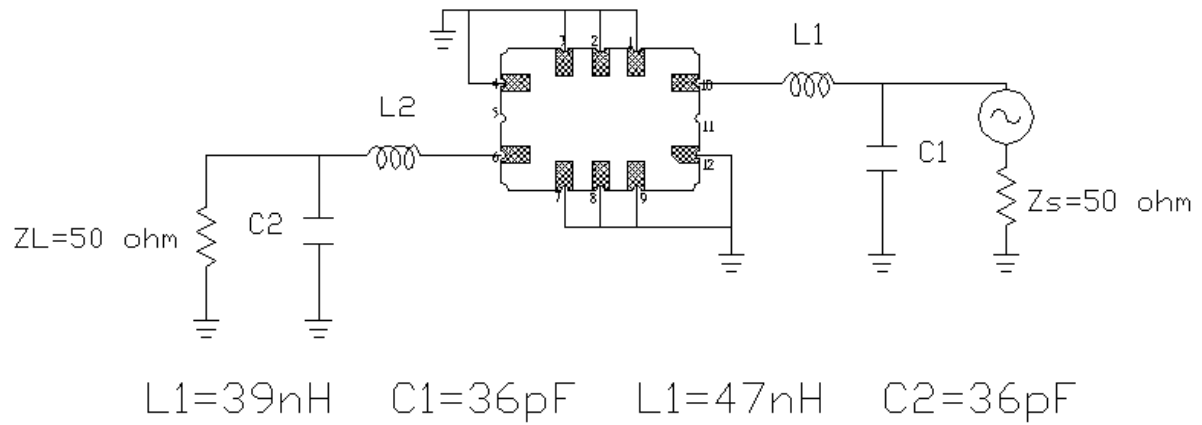
B. Characteristics :

1. Ambient Temperature: 25 °C

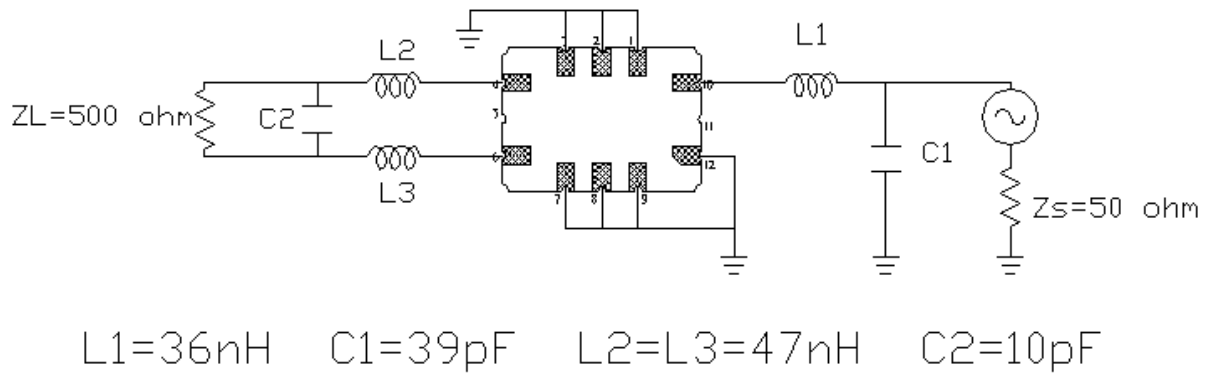
Characteristics	Value			Note
	Min.	Typ.	Max.	
Center Frequency F_c MHz	-	210.38	-	-
Insertion Loss at F_c dB	-	8.2	11.0	-
Passband Ripple ($F_c \pm 300\text{kHz}$) dB	-	0.4	1.3	-
5dB Bandwidth MHz	± 0.63	± 0.82	-	-
34dB Bandwidth MHz	-	± 1.18	± 1.25	-
36dB Bandwidth MHz	-	± 1.20	± 1.55	-
Phase Linearity ($F_c \pm 630\text{kHz}$) rms deg	-	2.60	3.75	-
Absolute Delay μS	-	716	-	-
Source impedance Ω	-	50	-	-
Load impedance Ω	-	500	-	-
Temperature Coefficient ppm/K ²	-	-0.036	-	-
Attenuation:(Reference level from F_c)				
(1) $F_c \pm 1.25\text{MHz}$ dB	35	48		
(2) 140MHz~206MHz dB	38	45		
(3) 214.76MHz~280MHz dB	38	48		

C. Measurement Circuit:

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



2. Single ended input 50 ohm to Balanced Output 500 ohm



D. Frequency Characteristics :

1. S21 Response

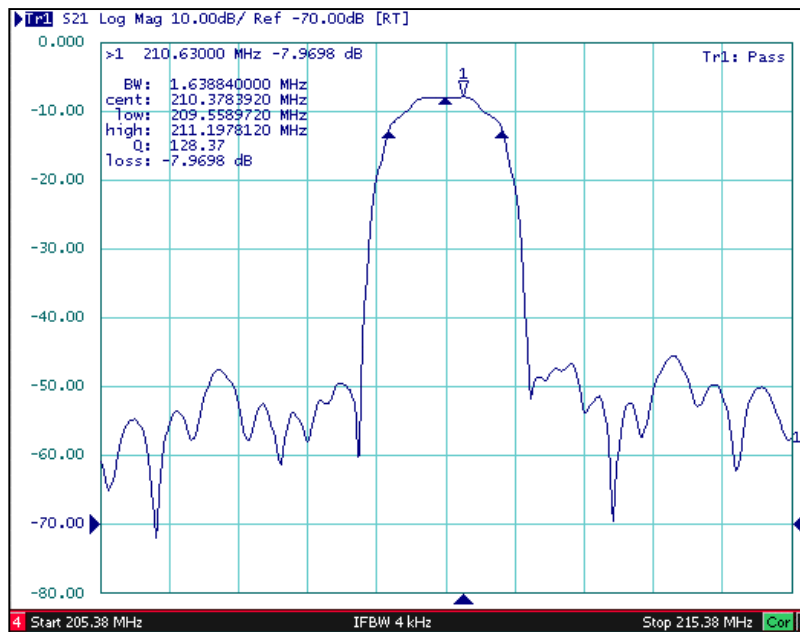


Fig1. Horizontal: 1MHz/Div Vertical: 10dB/Div

2. Pass band Ripple

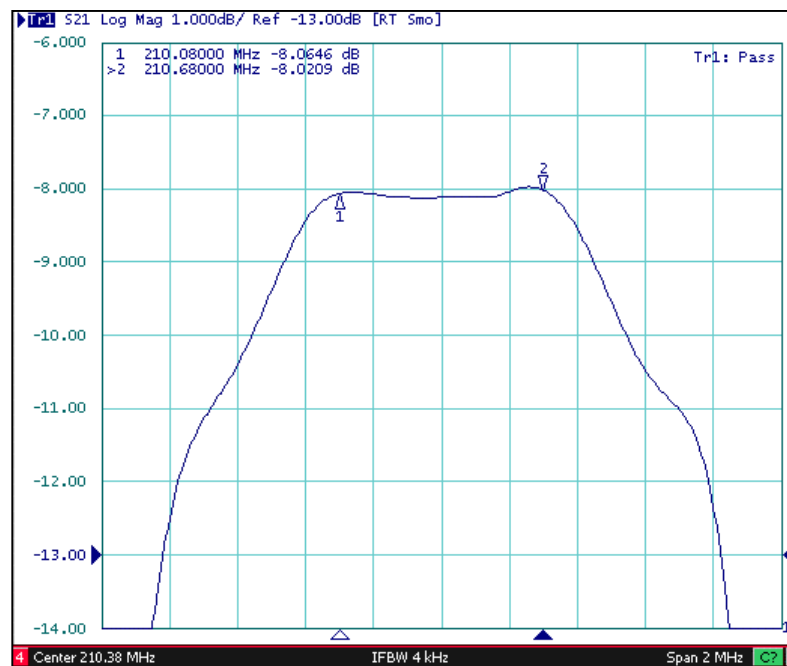


Fig2. Horizontal: 0.2MHz/Div Vertical: 1dB/Div

3. Group Delay Ripple

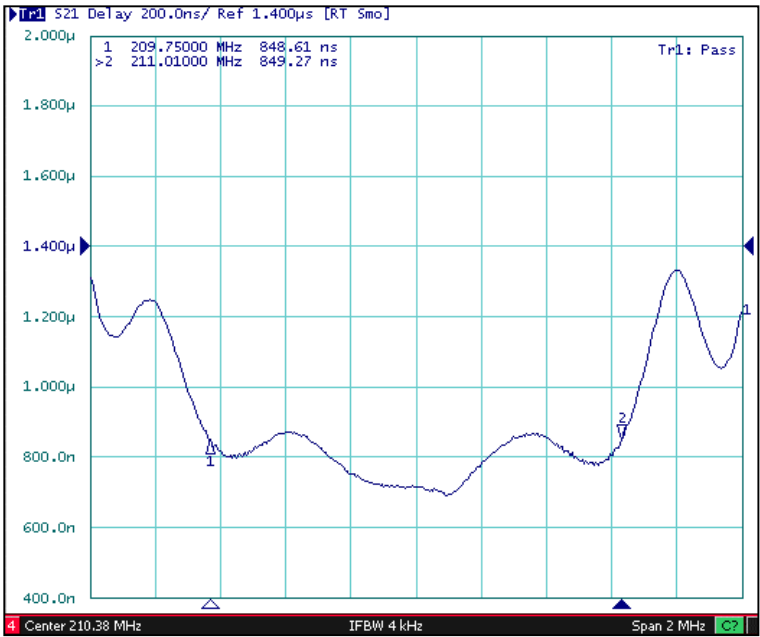
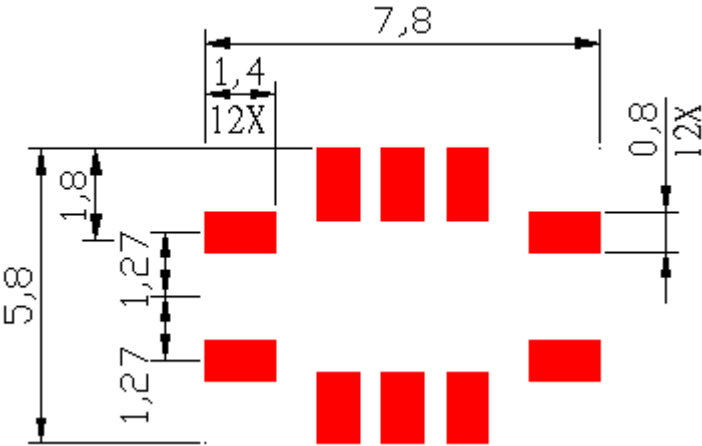
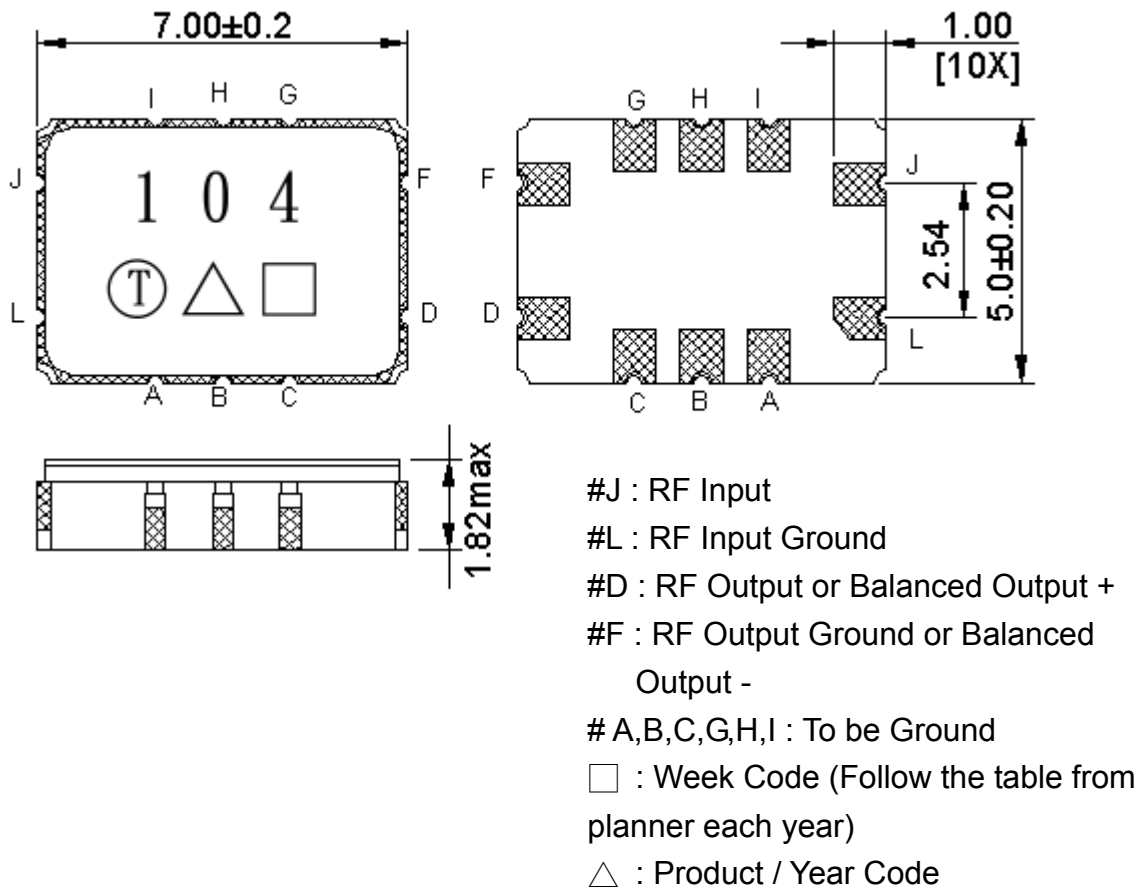


Fig3. Horizontal: 0.2MHz/Div Vertical: 200nS/Div

E. PCB Footprint



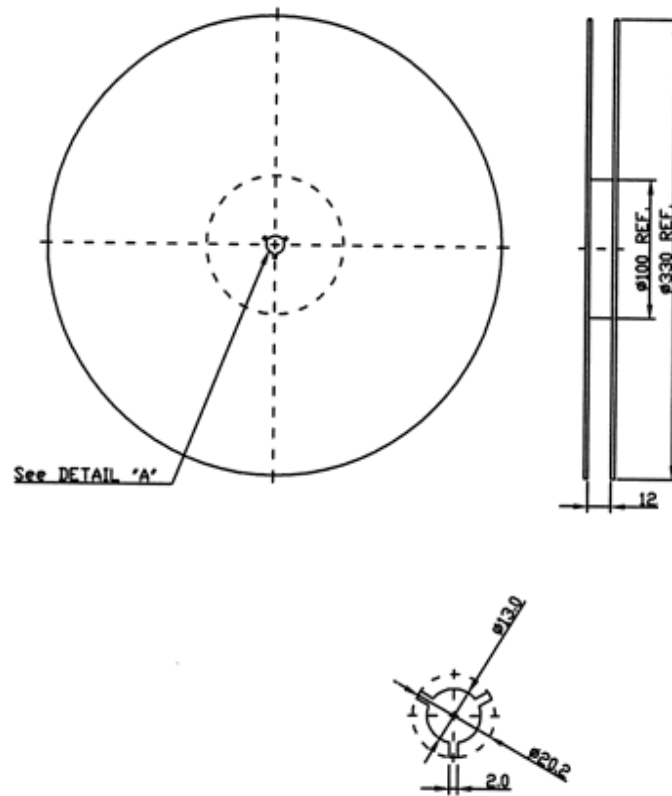
F. Outline Drawing:



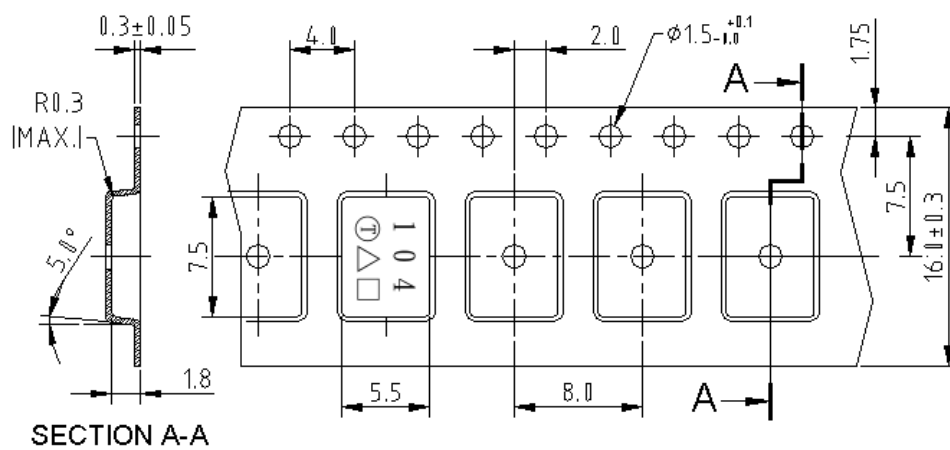
Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



Direction of feed



H. RECOMMENDED REFLOW PROFILE :

