



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: Low Loss 70MHz SAW IF Filter (BW=7MHz)

TST Parts No.: TB0193A

Customer Parts No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ Andy Yu

Approval by: \_\_\_\_\_ Francis Chen

Date: \_\_\_\_\_ 11,14 ,2006



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Low Loss 70 MHz SAW Filter (SMD 13.3x6.5 mm)

MODEL NO.: TB0193A

REV. NO.:2.0

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. Operating Temperature: -30°C to +80°C
3. Storage Temperature: -40°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

## B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Type.	Max.	Note
Center frequency, <b>F<sub>c</sub></b>	MHz	-	70	-	
Insertion Loss, <b>IL</b>	dB	-	8.5	9.5	
1dB Bandwidth	MHz	6.2	6.71	-	
3dB Bandwidth	dB	7	7.78		
40dB Bandwidth	MHz		11	11.95	
Passband ripple (67.2MHz~72.8MHz)	dB	-	0.73	1	
Phase Linearity(67.2MHz~72.8MHz) (rms)	deg	-	4.5	8	
Group Delay ripple (67.2MHz~72.8MHz)	nS		98	125	
Absolute Delay	μS	-	0.86	-	
Attenuation Reference level from Min IL)					
0 ~ 64.25MHz	dB	40	47	-	
75.75~140MHz	dB	40	44	-	
Substrate Material	-	-	YZ-LN	-	
Temperature Coefficient	ppm/°C	-	-94	-	
Ambient Temperature	°C	-	25	-	

**C.FREQUENCY CHRACTERISTICS:**

(1) S21 Response:

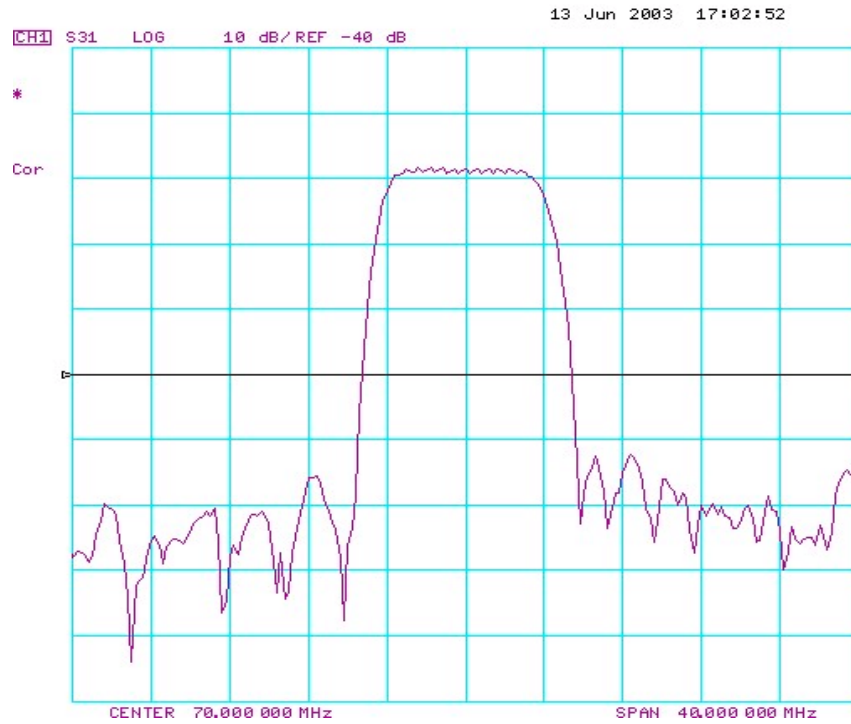


Fig-1 S21 Response Horizontal: 4MHz/Div  
 Vertical: 10dB/Div

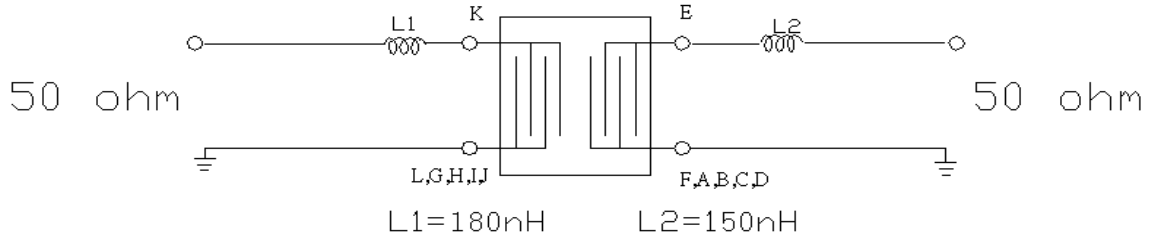
(2) Passband of Response:



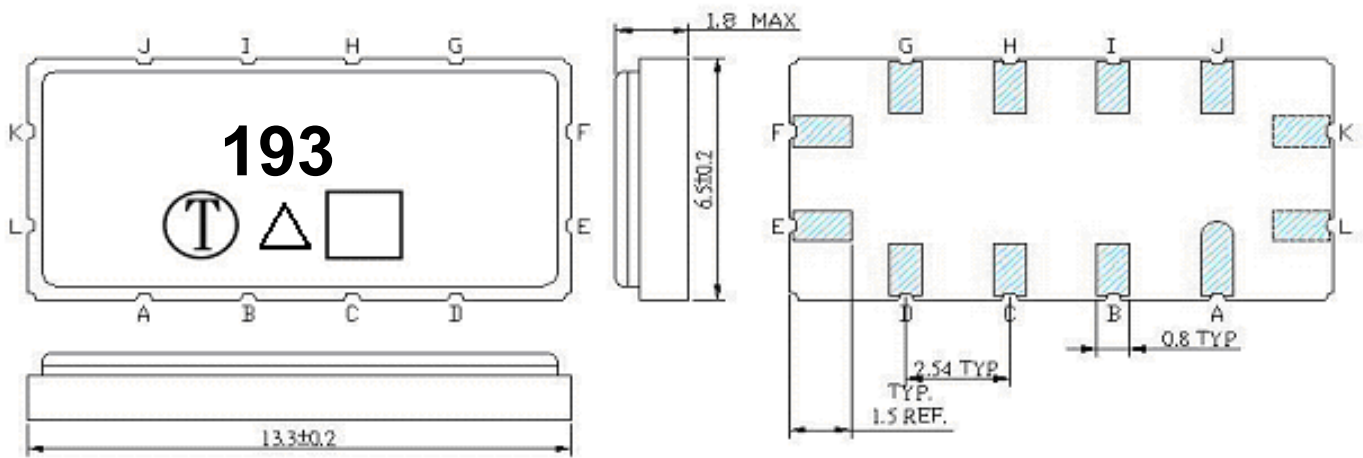
Fig-2 Group Delay and Ripple, Horizontal:1MHz/Div  
 Vertical: 2 dB/Div Vertical: 100nS/Div

**D. MEASUREMENT CIRCUIT:**

1) For 50 ohm Unbalanced Input and Output



**E. OUTLINE DRAWING:**



Unit: mm

- Pin K: RF Input
- Pin E: RF Output
- Pin L: Input Ground
- Pin F: Output Ground
- Pin A,B,C,D,J,I,H,G: To be Ground
- : Date code
- △ : Product / Year Code

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

**F. Recommended Reflow Profile:**

