



# 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=5MHz)

TST Parts No.: TB0194A

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

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

Checked by: \_\_\_\_\_ Andy Lee

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

Date: \_\_\_\_\_ 7,4 ,2003



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

MODEL NO.: TB0194A

REV. NO.:1

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm

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	69.8	70	70.2	
Insertion Loss, <b>IL</b>	dB	-	8	9	
1dB Bandwidth	MHz	4.35	4.45	-	
3dB Bandwidth	dB	5	5.5		
40dB Bandwidth	MHz		8.64	10.25	
Passband ripple (68.26MHz~71.74MHz)	dB	-	0.78	1	
Phase Linearity(68MHz~72MHz) (rms)	deg	-	6.28	9.5	
Group Delay ripple (68MHz~72MHz)	nS		119	150	
Absolute Delay	μS	-	0.84	-	
Attenuation Reference level from Min IL)					
0 ~ 64.875MHz	dB	40	45	-	
75.125~140MHz	dB	40	44	-	
Substrate Material	-	-	YZ-LN	-	
Temperature Coefficient	ppm/°C	-	-94	-	
Ambient Temperature	°C	-	25	-	

### C.FREQUENCY CHRACTERISTICS:

(1) S21 Response:

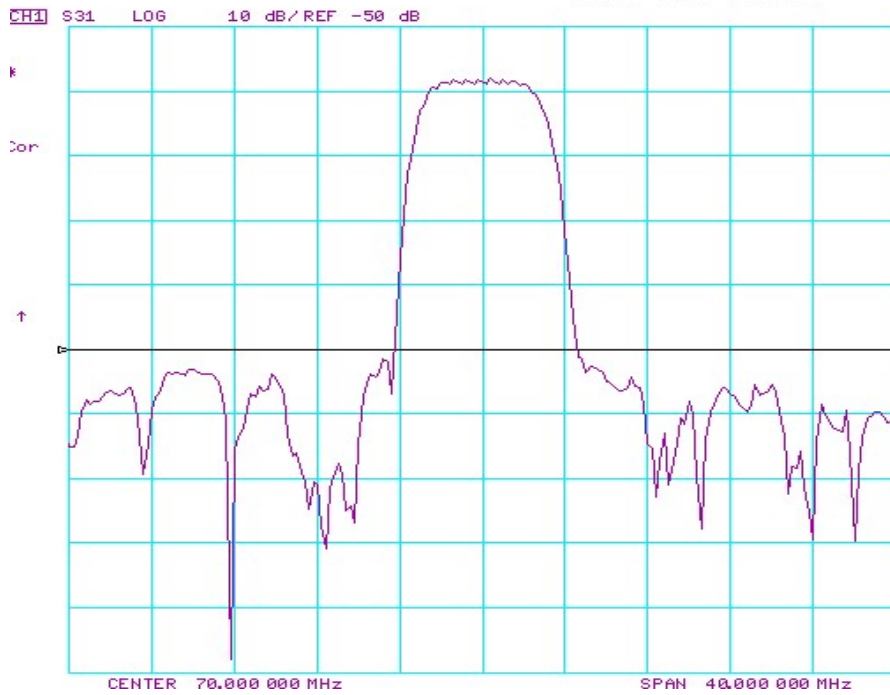


Fig-1 S21 Response Horizontal: 4MHz/Div  
Vertical: 10dB/Div

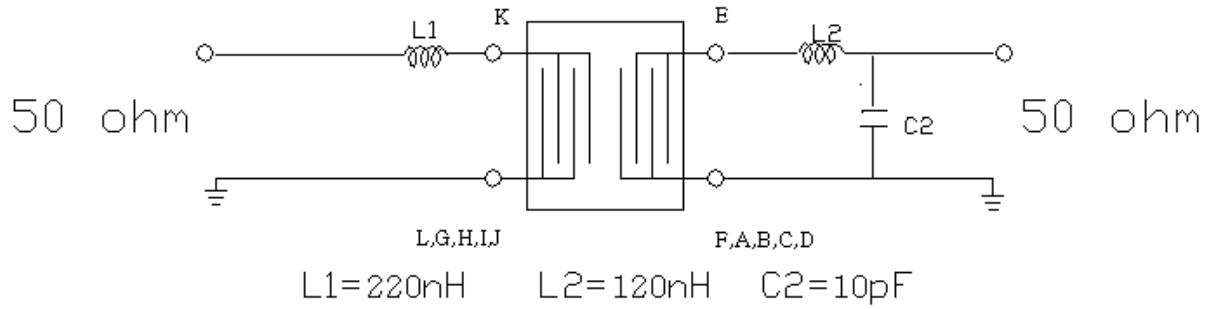
(2) Passband of Response:



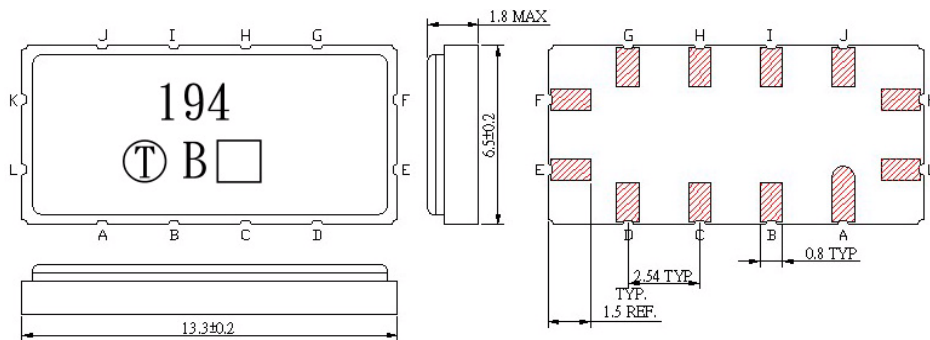
Fig-2 Group Delay and Ripple, Horizontal:1MHz/Div  
Vertical 1: 1 dB/Div Vertical 2: 200nS/Div

**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