



# TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales3@mail.taisaw.com](mailto:tstsales3@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Approval Sheet For Product Specification

Issued Date:

Product Name: High Attenuation 70MHz IF SAW Filter (BW=3.5MHz)

TST Parts No.: TB0184A

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

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

Checked by: \_\_\_\_\_ Vincent Chiu

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

Date: \_\_\_\_\_ 22 Oct. 2003



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High Attenuation 70 MHz IF SAW Filter (SMD 13.3x6.5 mm)

Model No.: TB0184A

Rev. No.:1

## A. Maximum Rating:

RoHS Compliant  
Lead free  
Lead-free soldering

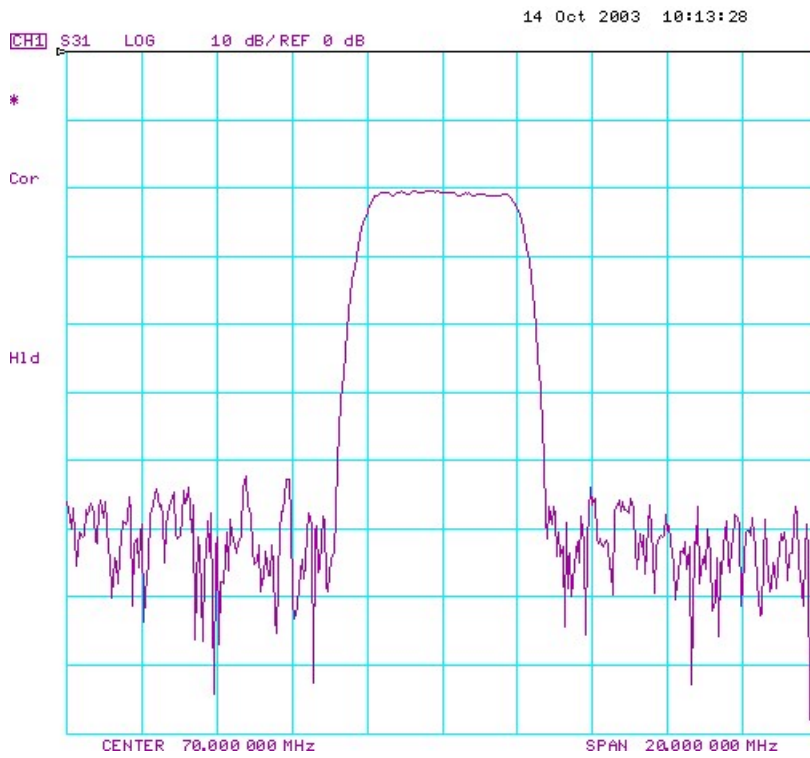
1. Input Power Level: +20 dB<sub>m</sub>
2. Operating Temperature: 0°C to +70°C
3. Storage Temperature: -40°C to +85°C

## B. Electrical Characteristics:

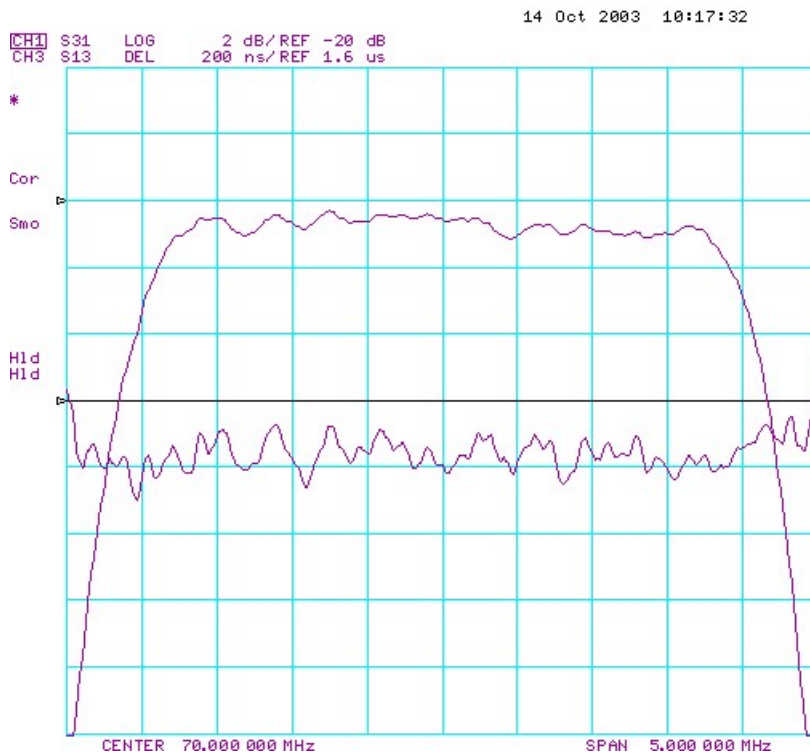
Parameter	Unit	Min.	Typ.	Max.
Center frequency, <b>F<sub>c</sub></b>	MHz	69.8	70	70.2
Insertion Loss, <b>IL</b>	dB	-	21	23
1 dB Bandwidth	MHz	3.5	3.75	-
3 dB Bandwidth	dB	3.8	4.1	-
40 dB Bandwidth	MHz	-	5.5	5.75
Amplitude ripple (68.6MHz~71.4MHz)	dB	-	0.75	1
Phase Linearity (68.5MHz~71.5MHz) (rms)	deg	-	3.5	6
Group Delay ripple (68.5MHz~71.5MHz)	nsec	-	120	150
Absolute Delay	μsec	-	1.4	-
Attenuation (Reference level from 0 dB)				
10 ~ 56MHz	dB	55	63	-
84~140MHz	dB	55	63	-
Substrate Material	-	-	LT	-
Temperature Coefficient	ppm/ °C	-	-18	-
Ambient Temperature	°C	-	25	-

### C. Frequency Characteristics:

#### (1) S21 Response:



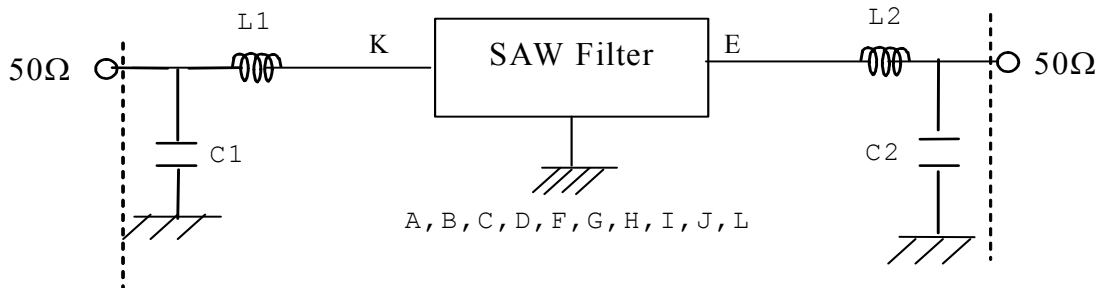
#### (2) Group Delay and Ripple



**D. Measurement Circuit:**

For 50 ohm Unbalanced Input and Output

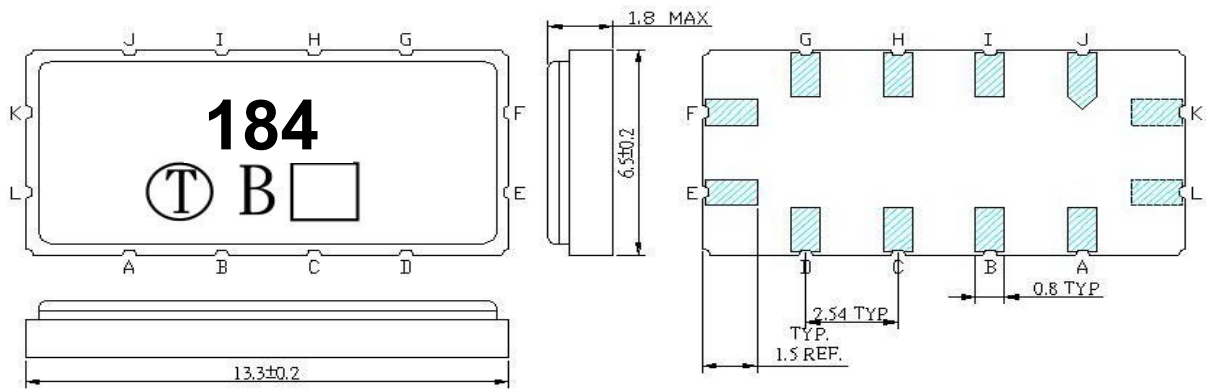
Network analyzer



Input: L1=200 nH, Q>40; C1=33 pF

Output: L2=68 nH, Q>40; C2=82 pF

**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, G, H, I, J: To be Ground
- : Date code