



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 Web: www.taisaw.com

Approval Sheet For Product Specification

Issued Date:

Product Name: 70MHz SAW IF Filter (BW=20MHz)

TST Parts No.: TB0186A

Customer Parts No.: _____

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

Checked by: _____ Vincent Chiu

Approval by: _____ Francis Chen

Date: _____ 23 Sep. 2003



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

Model No.: TB0186A

Rev. No.:3

A. Maximum Rating:

RoHS Compliant
Lead free
Lead-free soldering

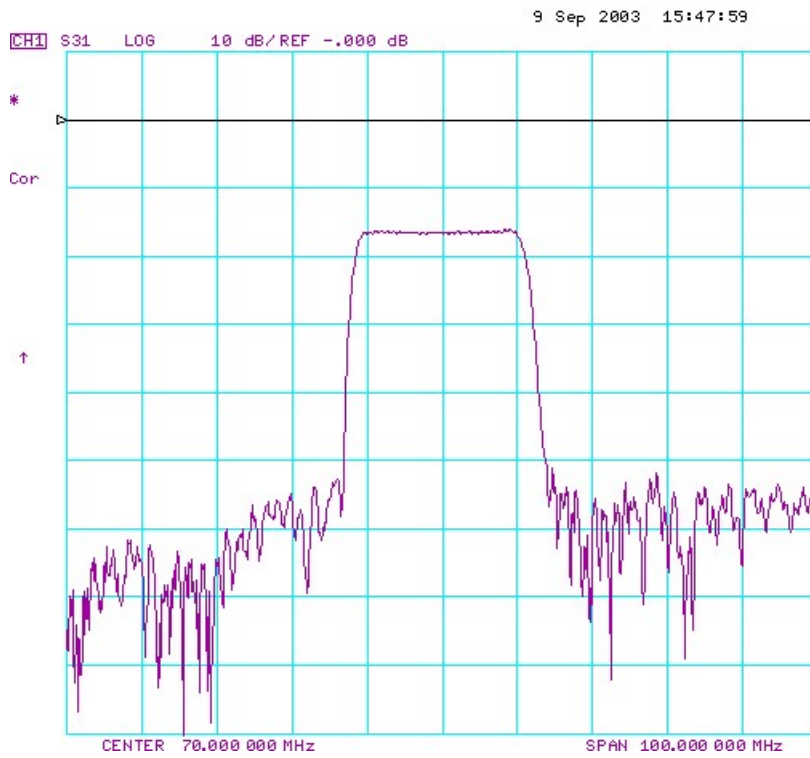
1. Input Power Level: +20 dB_m
2. Operating Temperature: 0°C to +70°C
3. Storage Temperature: -40°C to +85°C

B. Electrical Characteristics:

Parameter	Unit	Min.	Typ.	Max.
Center frequency, F_c	MHz	69.8	70	70.2
Insertion Loss, IL	dB	-	16	17.5
1 dB Bandwidth	MHz	20	20.9	-
3 dB Bandwidth	dB	21.5	22.2	-
40 dB Bandwidth	MHz	-	27.3	28.2
Amplitude ripple (61.76MHz~78.24MHz)	dB	-	0.6	1
Phase Linearity (61.2MHz~78.8MHz) (rms)	deg	-	1.5	5
Group Delay ripple (61.2MHz~78.8MHz)	nsec	-	60	100
Absolute Delay	μsec	-	0.72	-
Attenuation (Reference level from 0 dB)				
0 ~ 56MHz	dB	45	52	-
84~140MHz	dB	45	52	-
Substrate Material	-	-	LN-YZ	-
Temperature Coefficient	ppm/ °C	-	-94	-
Ambient Temperature	°C	-	25	-

C. Frequency Characteristics:

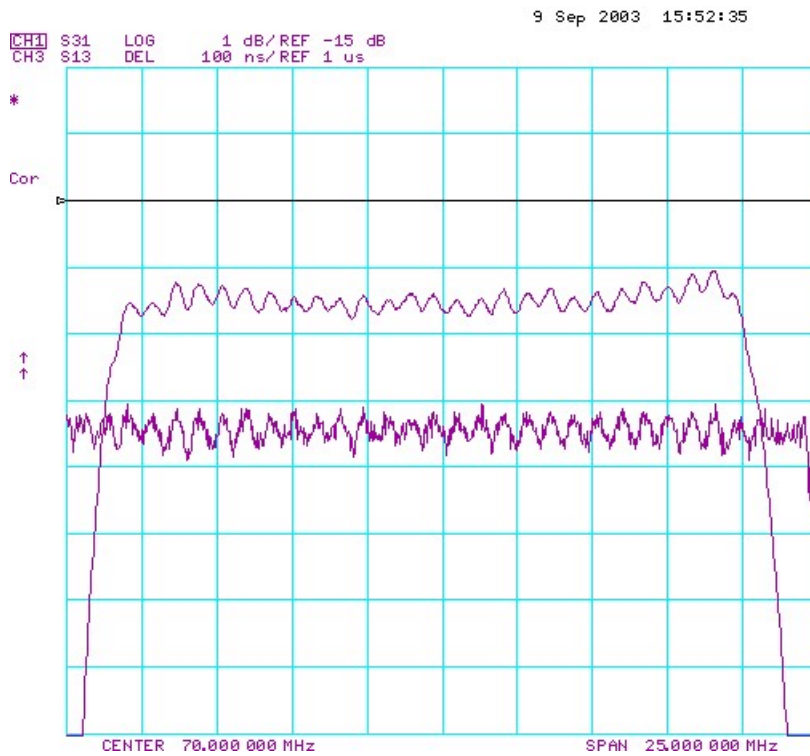
(1) S21 Response:



Horizontal: 10 MHz/Div

Vertical: 10 dB/Div

(2) Group Delay and Ripple



Horizontal: 2.5 MHz/Div

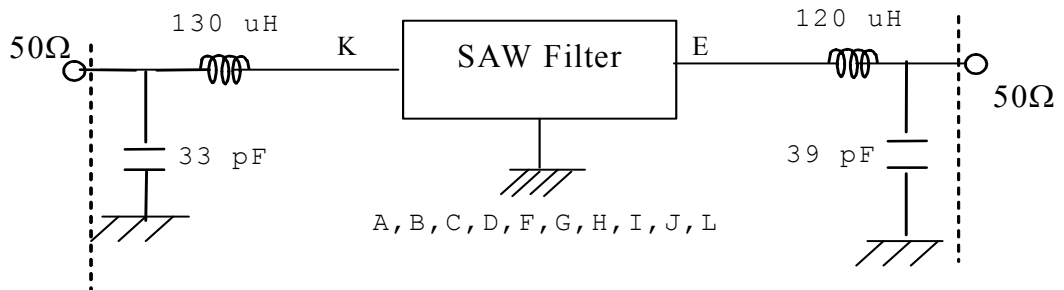
CH1 Vertical 1: 1 dB/Div

CH2 Vertical 2: 100 nsec/Div

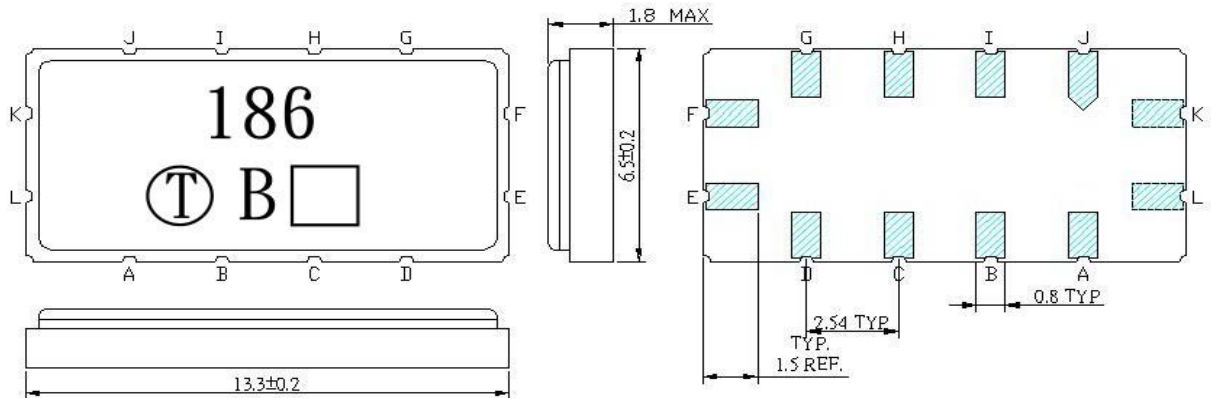
D. Measurement Circuit:

For 50 ohm Unbalanced Input and Output

Network analyzer



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