



# 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: SAW IF Filter 183.6MHz (SMD 7×5 mm)

TST Parts No.: TB0187A

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

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

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

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

Date: \_\_\_\_\_ 12,3 ,2003



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SAW Filter 183.6MHz (SMD 7×5 mm)

MODEL NO.: TB0187A

REV. NO.:2

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. Operating Temperature: -30°C to 85°C

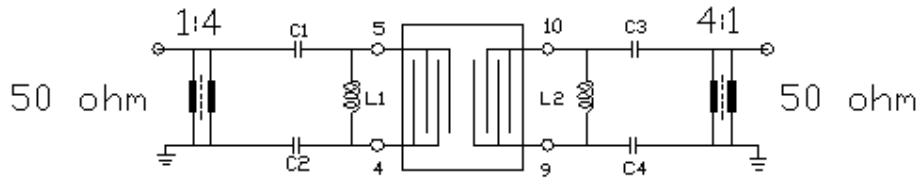
RoHS Compliant  
Lead free  
Lead-free soldering

## B. ELECTRICAL CHARACTERISTICS:

Characteristics	Value		
	Min.	Typ.	Max.
Center frequency $F_c$ MHz	-	183.6	-
Minimum insertion loss at $F_c$ dB	-	9.5	10.5
5dB Bandwidth	1.26	1.46	
33dB Bandwidth	-	1.73	1.8
Ripple ( $F_c-0.3\text{MHz} \dots F_c+0.3\text{MHz}$ ) dB	-	0.6	1.2
Phase linearity ( $F_c-0.63\text{MHz} \dots F_c+0.63\text{MHz}$ ) (rms)		1.7	2.5
Attenuation:			
1) $F_c \pm 0.9$ MHz dB	28	31	-
2) $F_c \pm 1.25$ MHz dB	33	36	-
3) $F_c \pm 1.7$ MHz dB	30	33	-
4) $F_c \pm 2.05$ MHz dB	33	37	-
5) 10~168 MHz dB	50	58	-
6) 168.6~174.6 MHz dB	40	48	-
7) 174.6~182.7 MHz dB	28	31	-
8) 184.5~192.6 MHz dB	30	33	-
9) 192.6~198.6 MHz dB	40	48	
10) 198.6~283.6 MHz dB	50	57	

**C. MEASUREMENT CIRCUIT:**

1) For 200 ohm balanced Input and Output



$$C1=C2=7PF \quad C3=C4=4PF$$

$$L1=33NH \quad L2=56NH$$

**D. FREQUENCY CHARACTERISTICS:**

(1) wide band of Response:

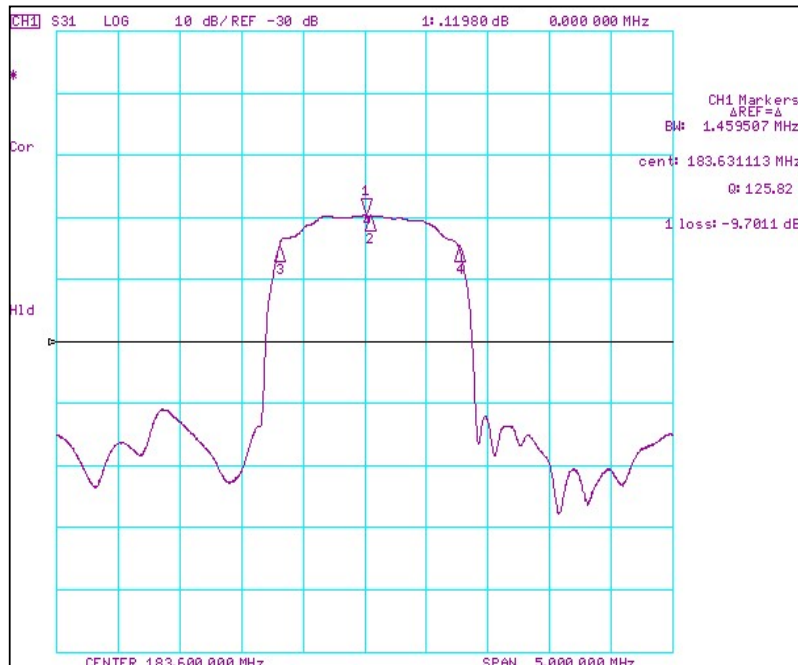


Fig-1 S21 Response Horizontal: 0.5MHz/Div  
Vertical: 10dB/Div  
Reference: -30dB

(2) Passband of Response:

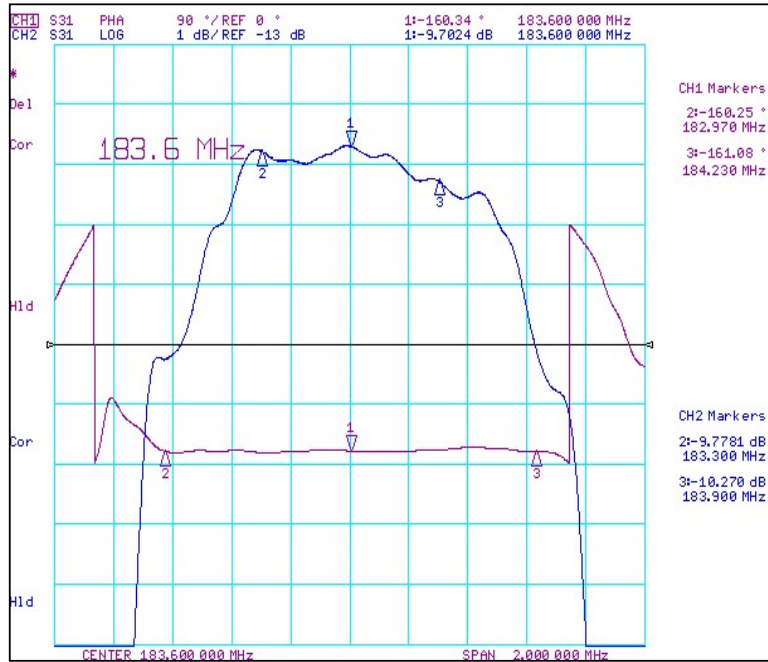
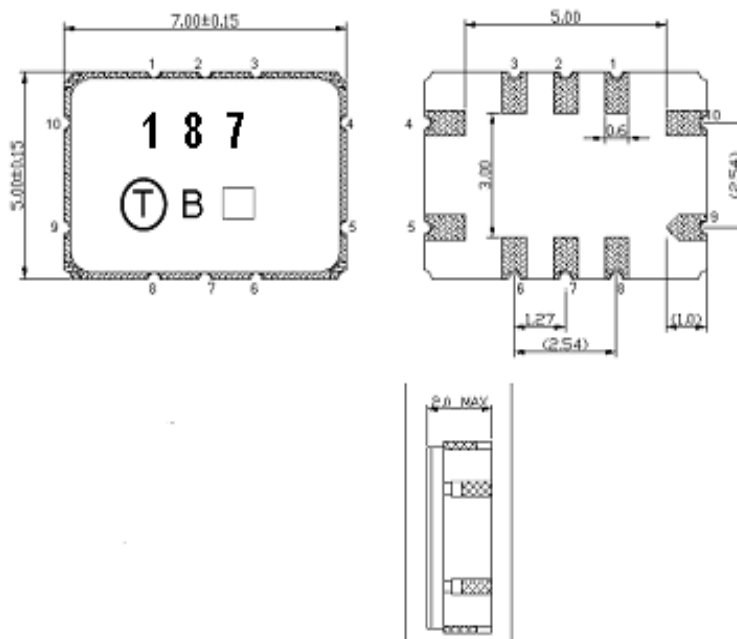
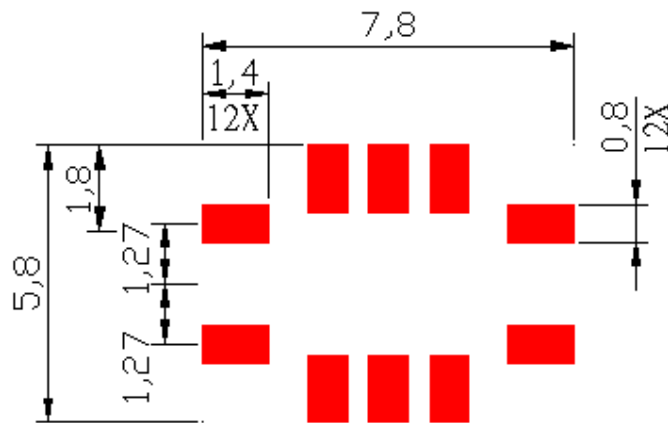


Fig-2 Phase linearity and Ripple, Horizontal:0.2MHz/Div  
Vertical: 1 dB/Div Vertical: 90 degree/Div

E. OUTLINE DRAWING:

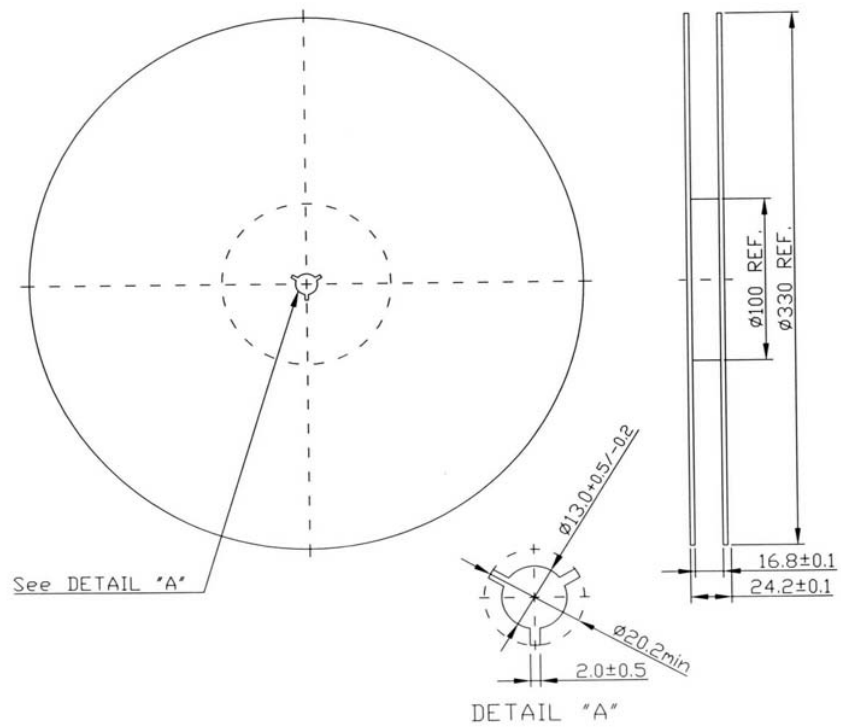


F. PCB FOOTPRINT:



G. PACKING:

1. REEL DIMENSION



## 2.TAPE DIMENSION

