



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: IF SAW Filter 240 MHz

TST Parts No.:TB0270A

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

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

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

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

Date: \_\_\_\_\_ 2004/11/09



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## IF SAW Filter 240 MHz SMD 7 X5mm

MODEL NO.: TB0270A

REV. NO.1

### A. MAXIMUM RATING:

1. Operating Temperature: -40 °C ~ 80 °C
2. Storage Temperature: -40 °C ~ +85 °C

RoHS Compliant  
Lead free  
Lead-free soldering

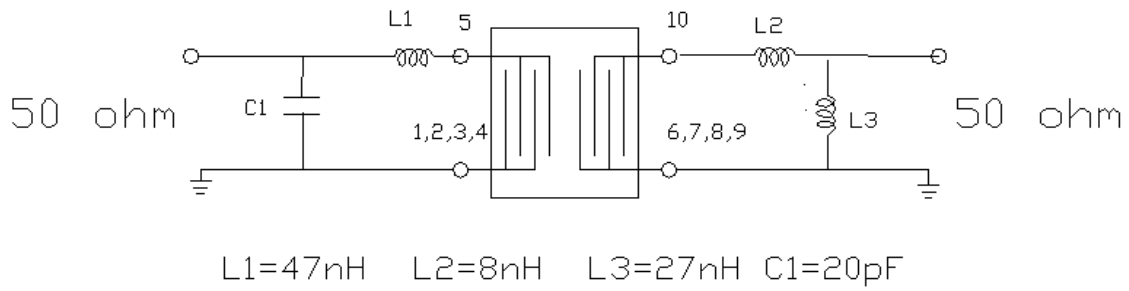
### B. Characteristics :

1. Ambient Temperature: 25 °C

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency $F_c$ MHz	-	240	-	-
Minimum Insertion loss I.L. dB	-	7.7	8.5	-
Passband ripple ( $F_c \pm 7\text{MHz}$ ) dB	-	0.8	1.4	-
Phase linearity ( $F_c \pm 6.3\text{MHz}$ )(p-p) deg	-	6	15	-
Return loss at Input and Output ( $F_c \pm 6.3\text{MHz}$ ) dB	9.5	12	1	-
Group Delay ( $F_c \pm 7\text{MHz}$ ) $\mu\text{S}$	-	0.6	1	-
Group Delay Ripple ( $F_c \pm 7\text{MHz}$ ) nS	-	33	100	1
Triple transit suppression TTS dB	-	45	40	-
Attenuation:( Reference level from minimum insertion loss)				dB
1) any 3.5MHz interval within $F_c \pm 7\text{MHz}$ dB	-	0.5	1	-
2) 150 MHz ~ 210 MHz dB	40	48	-	-
3) 210 MHz ~ 218 MHz dB	40	47	-	-
4) 218 MHz ~ 224 MHz dB	38	42	-	-
5) 218 MHz dB	40	49	-	-
6) 256 MHz ~ 258 MHz dB	35	39	-	-
7) 258 MHz ~ 262 MHz dB	35	39	-	-
8) 262 MHz ~ 330 MHz dB	35	40	-	-

Note 1 : measurement with smoothing; smoothing aperture  $\leq 50\text{kHz}$

**C. Measurement Circuit:**



**D. Frequency Characteristics :**

1. S21 Response

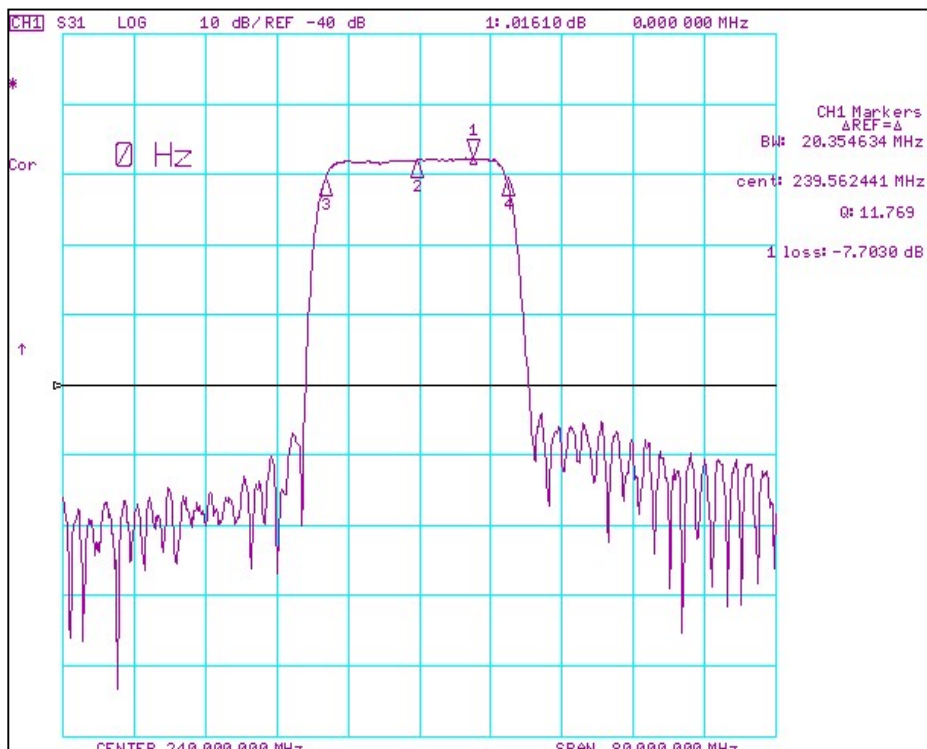


Fig1. Horizontal: 8MHz/Div Vertical: 10dB/Div

## 2. S21 Response (Group delay ripple of Passband)

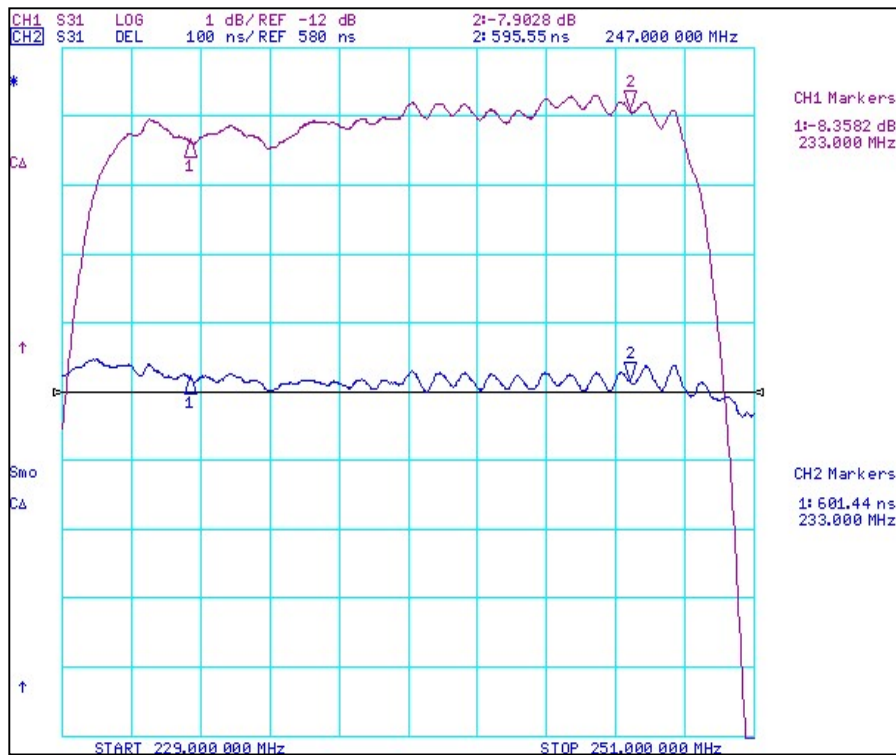


Fig2. Horizontal: 2.2MHz/Div; Vertical: 1dB/Div,  
 Vertical: 100nS/Div

## 3. S21 Response (Phase linearity)

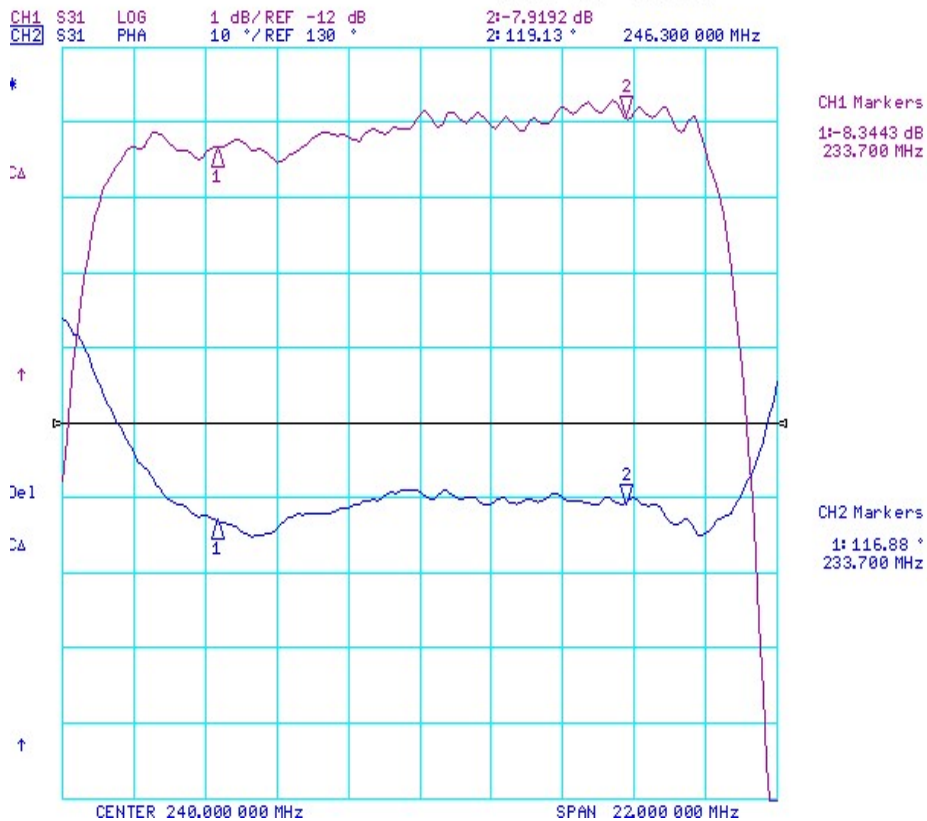
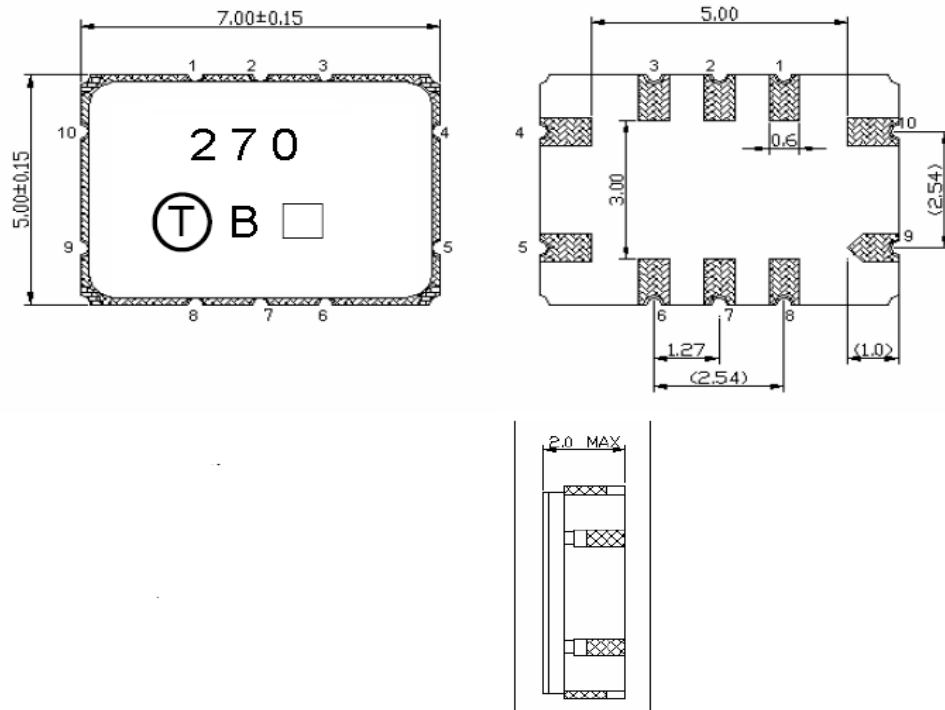


Fig3. Horizontal: 2.2MHz/Div; Vertical: 1dB/Div, 10deg/Div

**E. Outline Drawing:**



Pin 5: RF Input

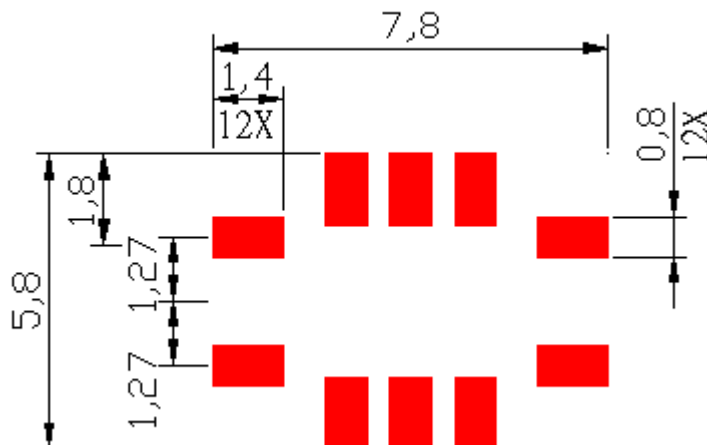
Pin 10: RF Output

Pin 1,2,3,4,6,7,8,9 : To be Ground

□: Date code

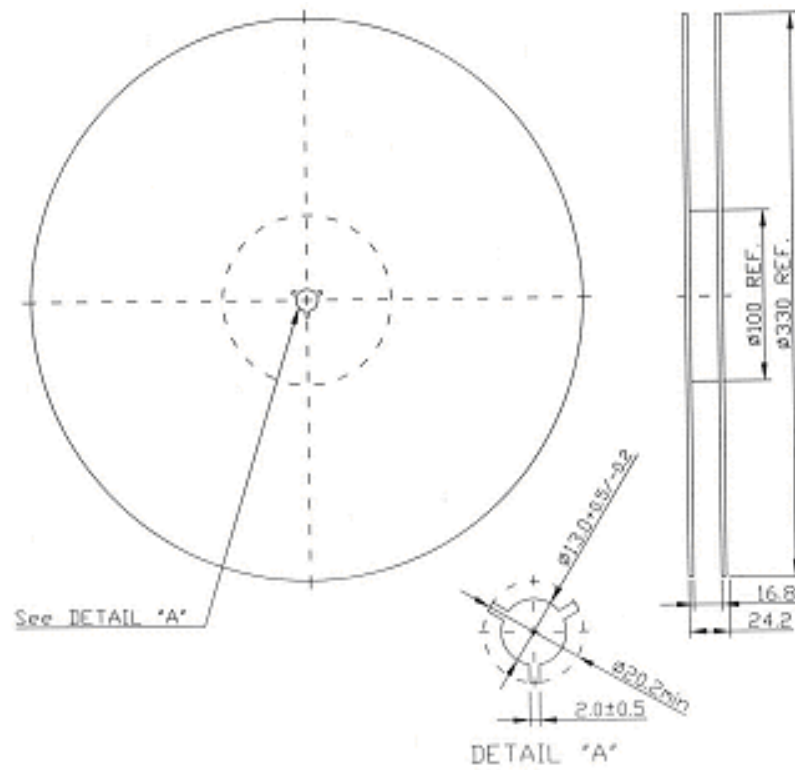
Unit: mm

**F. PCB FOOTPRINT:**



## F. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION

