



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: IF SAW Filter 168.5 MHz

TST Parts No.:TB0260A

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

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

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

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

Date: \_\_\_\_\_ 2007/12/28



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## IF SAW Filter 168.5 MHz SMD 5X5mm

MODEL NO.: TB0260A

REV. NO.:5

### A. Maximum Rating:

- Input power level: max. 20 dBm for  $\leq 100$  hours  
max. 5 dBm for  $\leq 15$  years
- Operating Temperature:  $-20\text{ }^{\circ}\text{C} \sim +80\text{ }^{\circ}\text{C}$
- Storage Temperature:  $-40\text{ }^{\circ}\text{C} \sim +85\text{ }^{\circ}\text{C}$

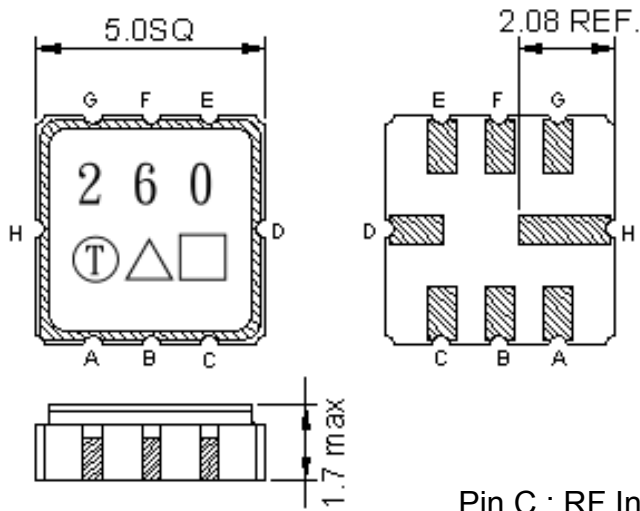
RoHS Compliant  
Lead free  
Lead-free soldering

### B. Characteristics :

- Ambient Temperature:  $25\text{ }^{\circ}$

Characteristics		Value			Note
		Min.	Typ.	Max.	
Center frequency	$F_c$ MHz	-	168.5	-	-
3dB Bandwidth		-	28	-	-
Maximum Insertion loss	I.L. (158.5~178.5MHz) dB	-	8	10	-
Passband Ripple (158.5~178.5MHz)		-	0.8	1	-
Group Delay Ripple (158.5~178.5MHz)		-	45	100	-
Input VSWR (158.5~178.5MHz)			1.3	2	
Output VSWR (158.5~178.5MHz)			1.9	2.5	
Phase linearity (158.5~178.5MHz)			6		
Attenuation:( Reference level from minimum insertion loss)					
1)	DC ~ 100 MHz	45	47	-	-
2)	100 ~ 149 MHz	35	37	-	-
3)	190 ~ 250 MHz	33	38	-	-
4)	250 ~ 300 MHz	45	48	-	-

**C. Outline Drawing:**



- Pin C : RF Input
- Pin G : RF Output
- Pin A,B,D,E,F,H : Ground
- Unit: mm
- : Week Code (Follow the table from planner each year)
- △ : Product / Year Code

Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

## D. Frequency Characteristics :

### 1. S21 Response

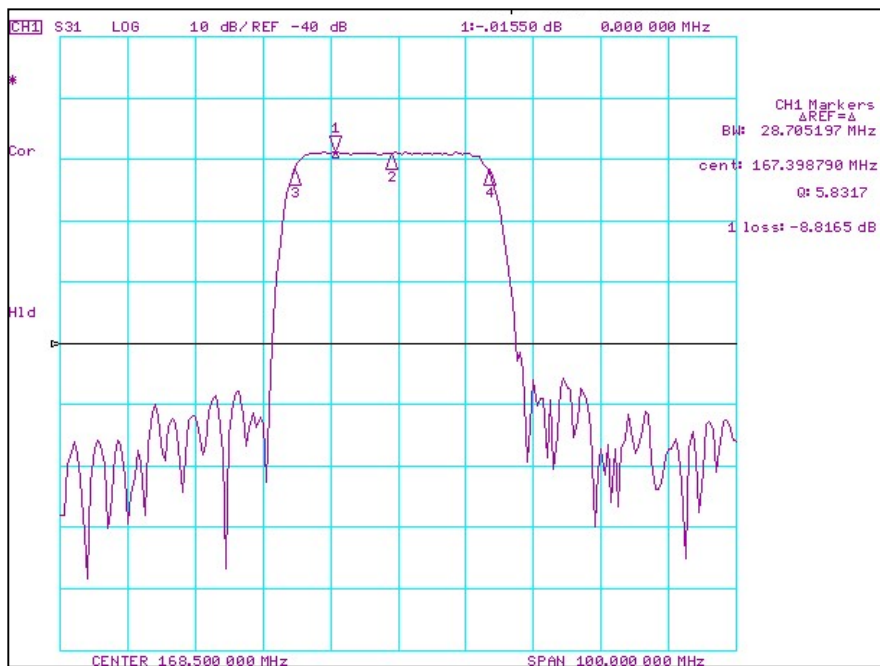


Fig.1 Horizontal : 10MHz/Div Vertical: 10dB/Div

### 2. Pass band Ripple and Group Delay Ripple



Fig. 2 Horizontal : 4MHz/Div Vertical: 1dB/Div Vertical: 100nS/Div

### 3. Wide band Response

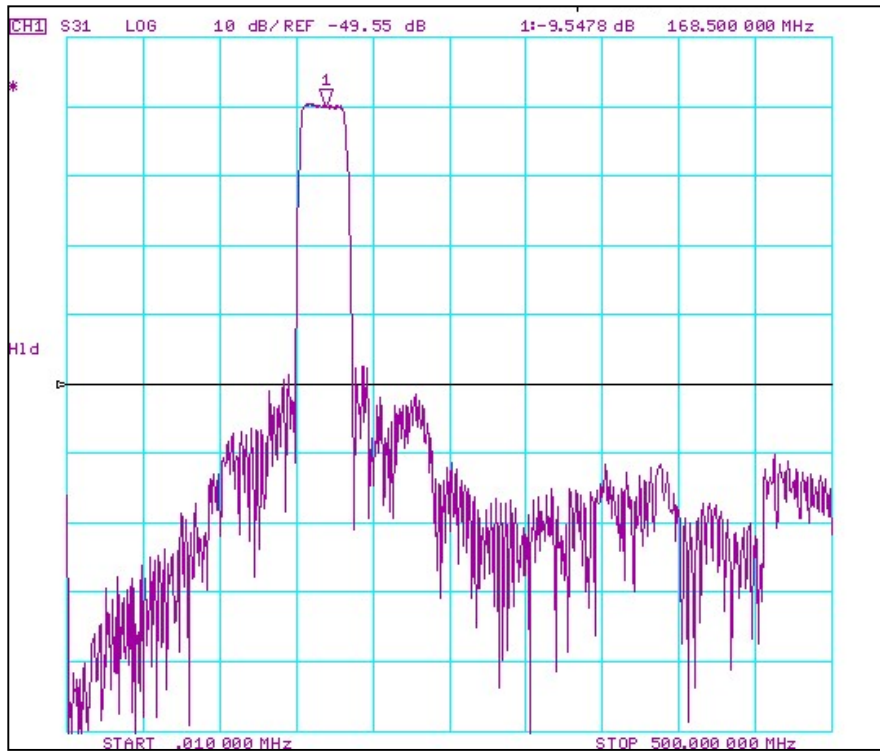


Fig. 3 Horizontal : 10MHz~500MHz

### 4. Input VSWR

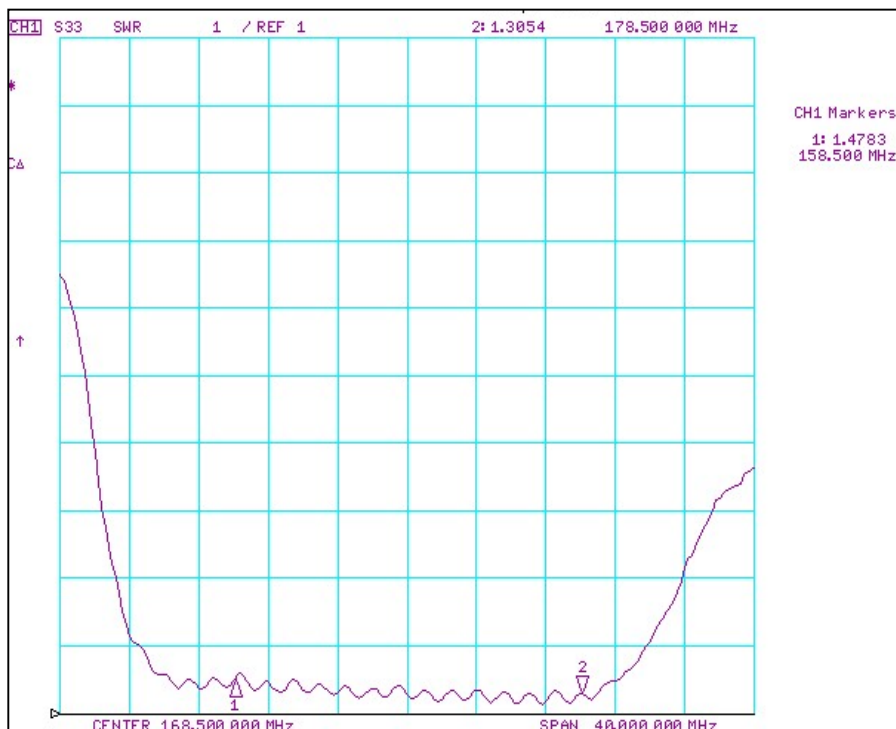


Fig. 4 Horizontal : 148.5MHz~188.5MHz

## 5. Output VSWR

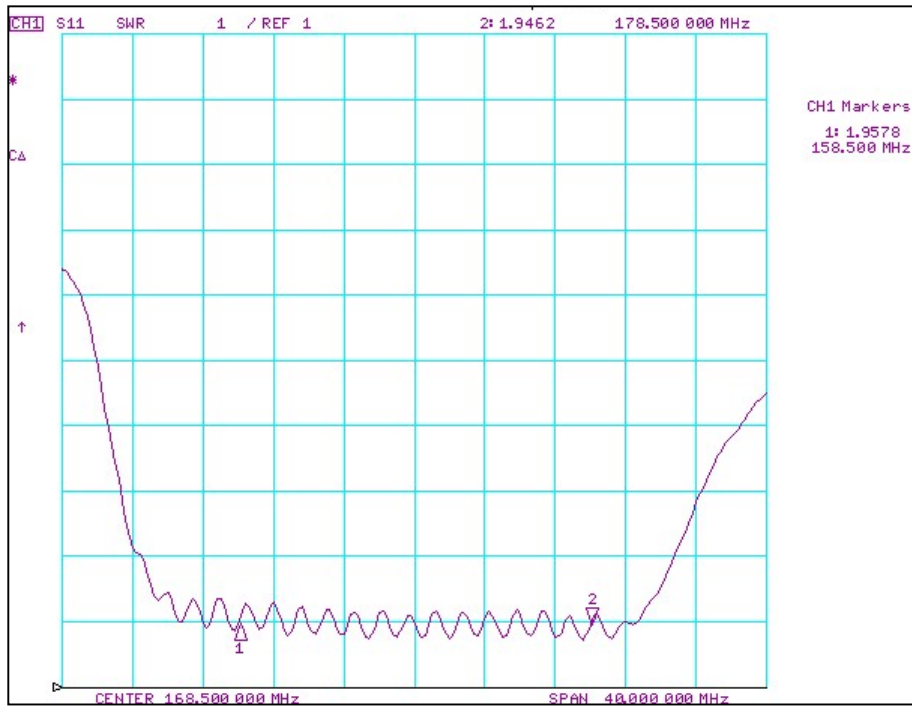
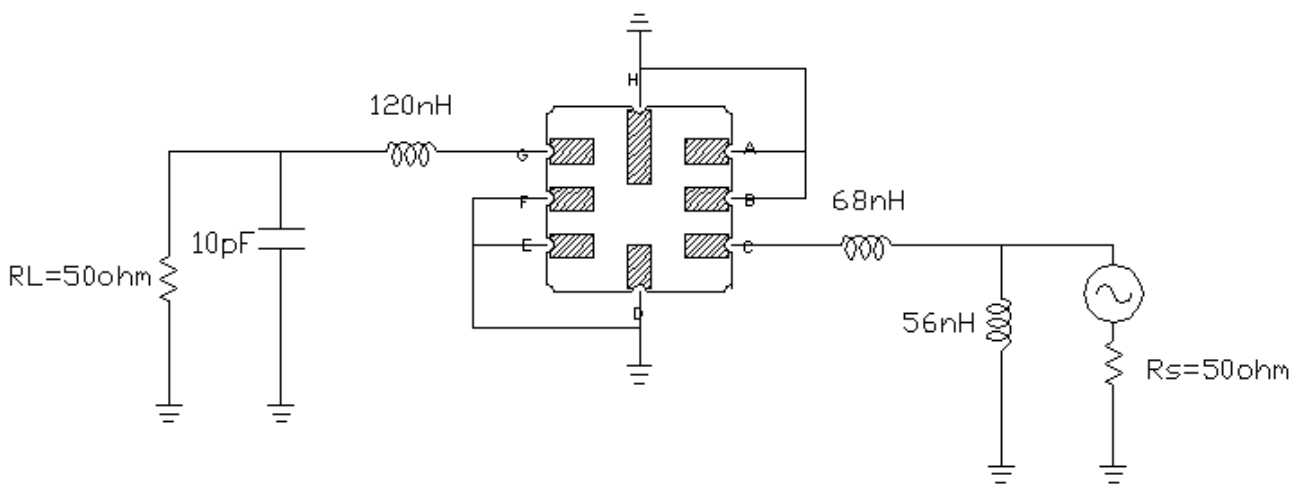
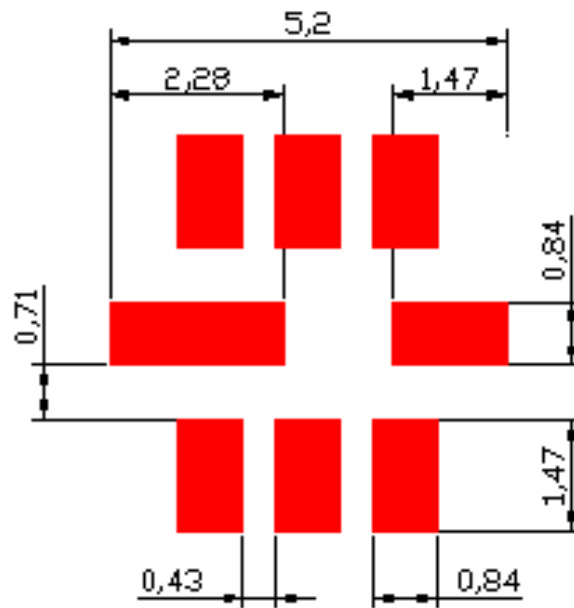


Fig. 5 Horizontal : 148.5MHz~188.5MHz

## E. TEST FIXTURE :

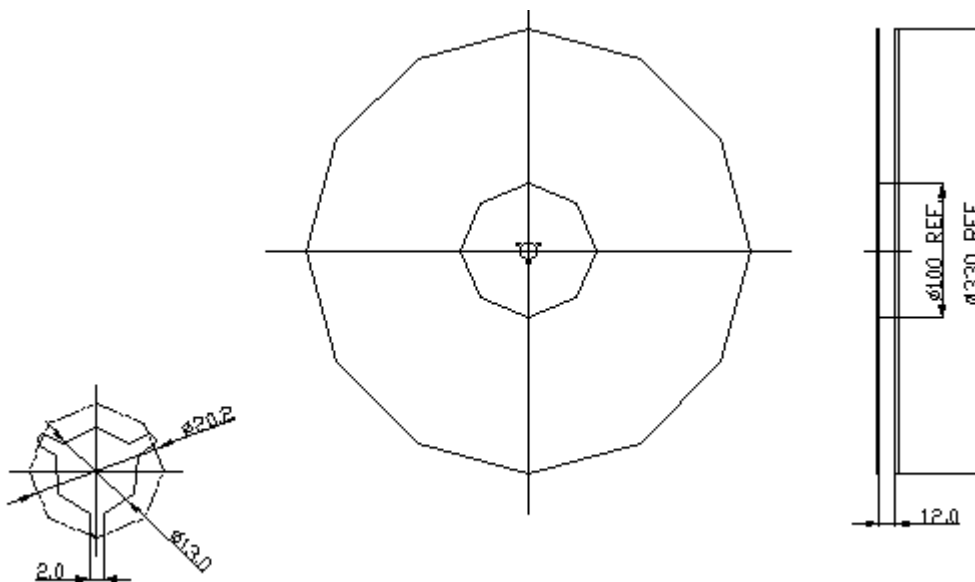


## F. PCB Footprint

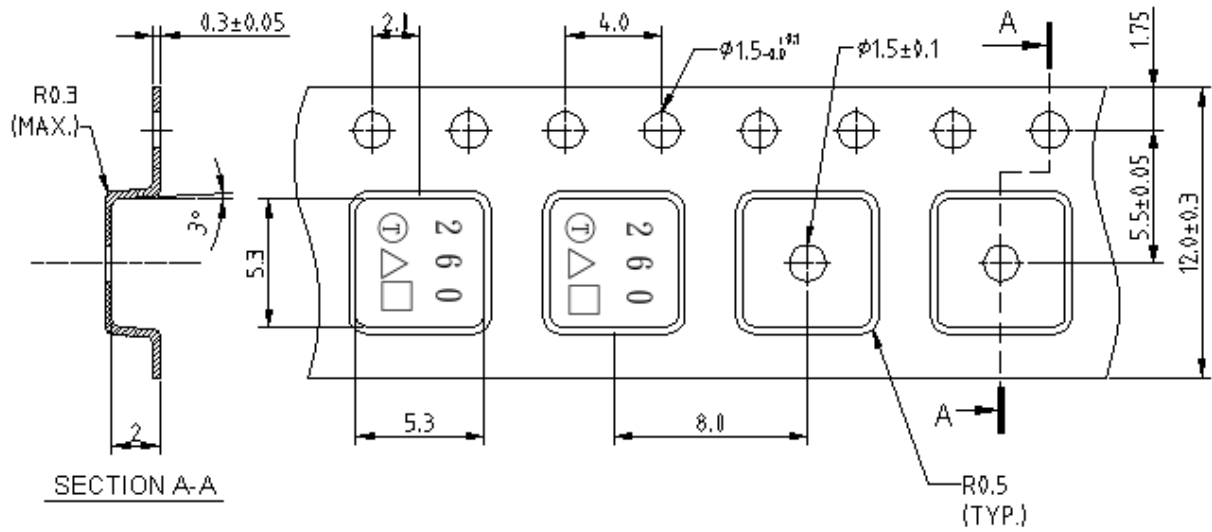


## G. Package:

### 1. REEL DIMENSION



## 2. TAPE DIMENSION



## H. Recommended Reflow Profile :

