



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: IF SAW Filter 456 MHz(SMD 5.0X7.0mm)

TST Parts No.:TB0463A

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

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

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

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

Date: \_\_\_\_\_ 2006/12/18



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## IF SAW Filter 456 MHz SMD 5X7mm

MODEL NO.: TB0463A

Rev No.1

### A. MAXIMUM RATING:

1. Operating Temperature: -20 °C ~ +60 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input Power Level: 10 dBm

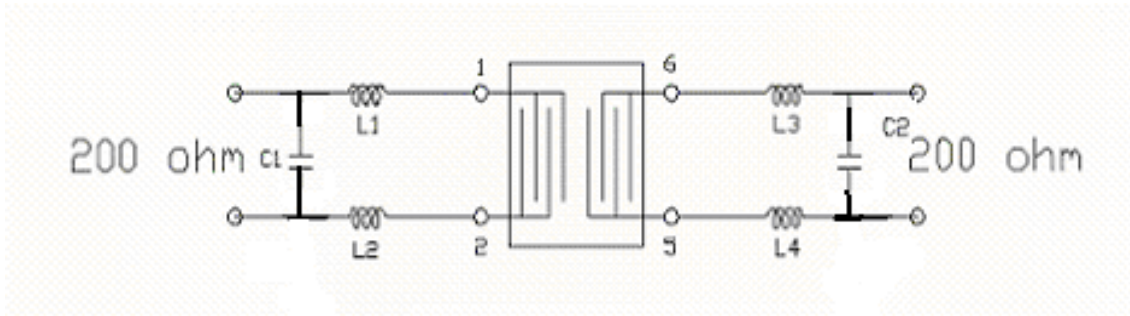
RoHS Compliant  
Lead free  
Lead-free soldering

### B. Characteristics :

1. Ambient Temperature: 25 °C
2. Optimal Source Impedance(Balanced): 200 ohm
3. Optimal Load Impedance(Balanced): 200 ohm

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency $F_c$ MHz	-	456	-	-
Minimum Insertion Loss (452.1~459.9MHz) dB		7.9	9	-
Passband Ripple (452.1~459.9MHz) dB	-	0.8	1.25	-
30dB Bandwidth MHz	-	17.4	18.0	-
Attenuation:( Reference level from minimum insertion loss)				dB
1) 10 MHz....256 MHz dB	30	62	-	-
2) 256 MHz ~ 360 MHz dB	40	55	-	-
3) 360 MHz ~ 421 MHz dB	43	47	-	-
4) 421 MHz ~ 441 MHz dB	38	42	-	-
5) 441 MHz ~ 443.25 MHz dB	36	42	-	-
6) 471.55 MHz ~ 491 MHz dB	36	42	-	-
7) 491 MHz ~ 551 MHz dB	40	44	-	-
8) 552 MHz ~ 656 MHz dB	40	52	-	-
8) 656 MHz ~ 946 MHz dB	30	62	-	-
Absolute Group Delay at $F_o$ nS	-	388	450	-
Group Delay Ripple (451.8~460.2MHz) dB	-	26	75	-
Input Return Loss(452.1~459.9MHz) dB	10	24	-	-
Output Return Loss (452.1~459.9MHz) dB	10	14	-	-
Temp Coefficient ppm/°C	-23			

**C. Measurement Circuit:**



C1 = 15pF L1=L2=18nH C2=12pF L3=L4=15nH

**D. Frequency Characteristics :**

1. S21 Response

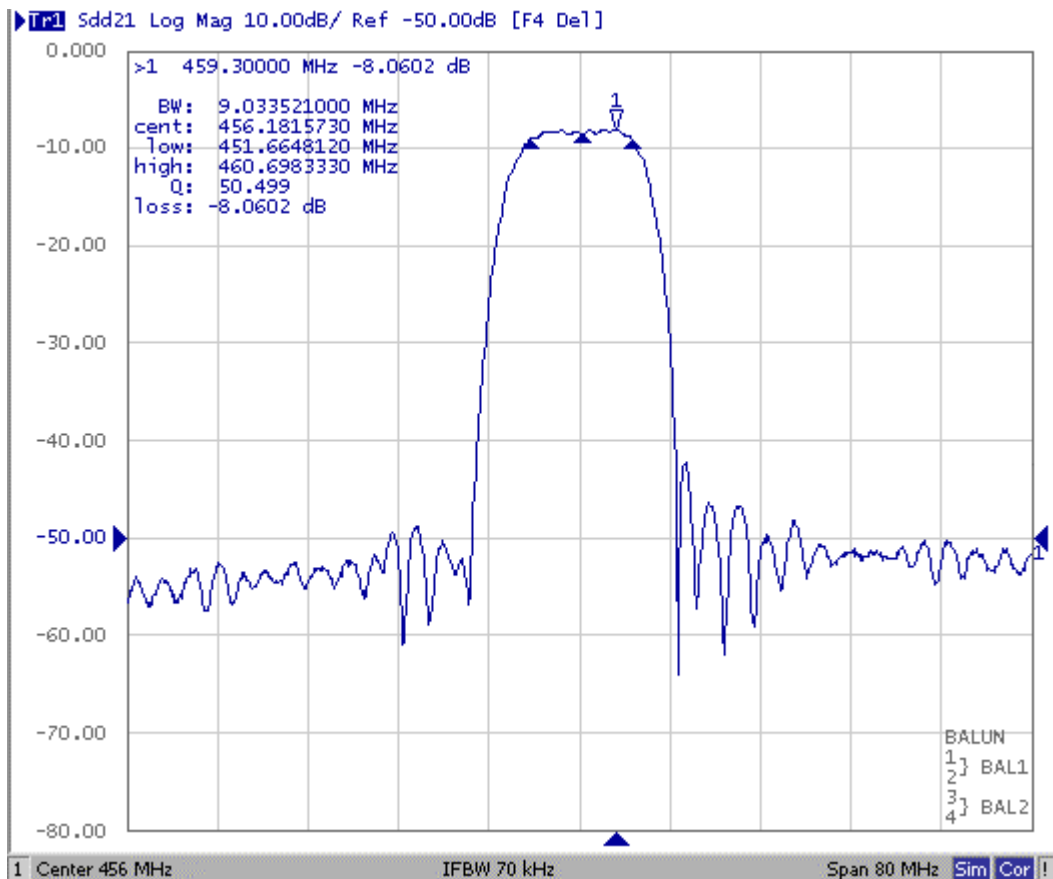


Fig1. Horizontal: 8MHz/Div Vertical: 10dB/Div

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

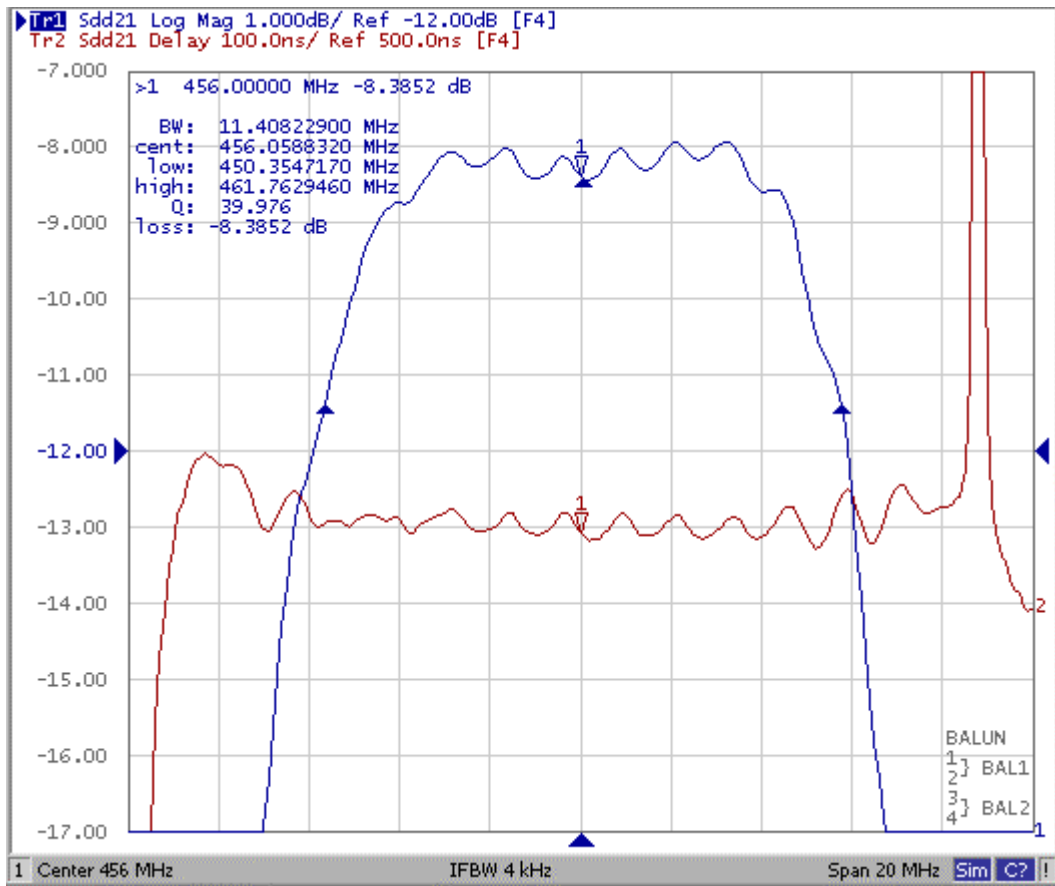
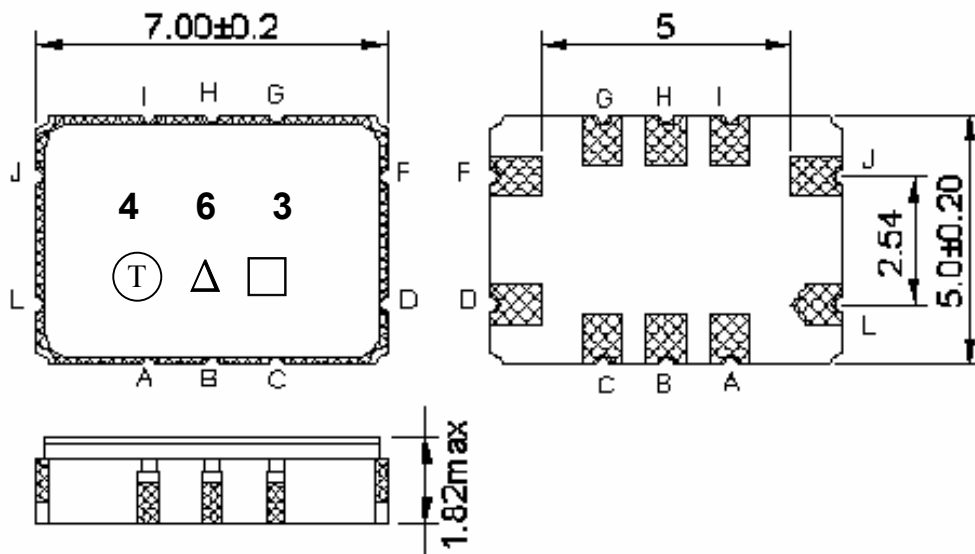


Fig2. Horizontal: 2MHz/Div Vertical: 1dB/Div  
Vertical: 100nS/Div

## E. Outline Drawing:



Pin J,L : Balanced Input

Pin F,D : Balanced Output

Pin A,B ,C ,I,H,G : To be Ground

□ : Week Code (Follow the table from planner each year)

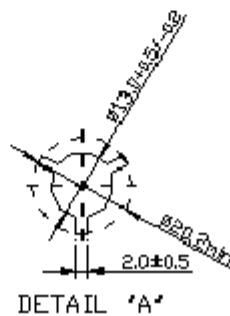
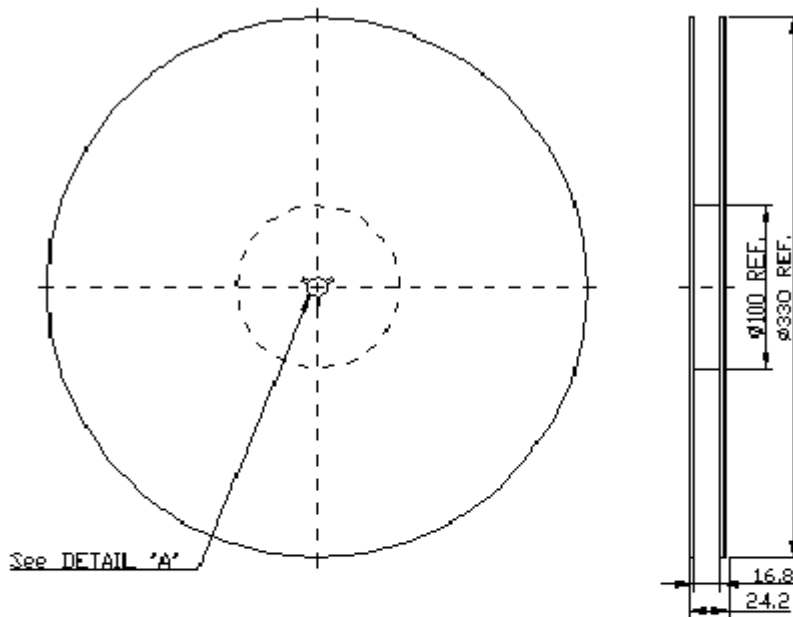
Unit : mm

△ : Product / Year Code

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

## F. PACKING:

### 1. REEL DIMENSION



## 2. TAPE DIMENSION

