



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date:

Product Name: IF SAW Filter 140 MHz (SMD 13.3mmX6.5mm)

TST Parts No.:TB0431A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Andy Yu

Approval by:_____ Francis Chen

Date:_____ 2008/5/12



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IF SAW Filter 140 MHz SMD 13.3mmX6.5mm

MODEL NO.: TB0431A

Rev. NO. 1.0

A. MAXIMUM RATING:

0. Maximum Input Power: 15dBm
1. Operating Temperature: -40 °C ~ +85 °C
2. Storage Temperature: -40 °C ~ +85 °C

RoHS Compliant
Lead free
Lead-free soldering

B. Characteristics :

Characteristics	Value			Note.
	Min.	Typ.	Max.	
Center frequency F_C MHz	-	140.0	-	-
Maximum Insertion loss I.L. dB	-	10.8	13	-
Passband IL $F_C \pm 10.5\text{MHz}$		11.5	13	-
1dB Bandwidth MHz	-	22.9		-
3dB Bandwidth MHz	-	24.0	-	-
40dB Bandwidth MHz	-	28.0	-	-
Passband Ripple at $F_C \pm 10.5\text{MHz}$ dB	-	0.7	1.2	-
Group Delay Ripple (130 ~150MHz) nS	-	70	200	-
Group Delay at F_C uS	-	1.02	2.00	-
In/Out VSWR	-	2.4	-	-
Phase Ripple at $F_C \pm 10.5\text{MHz}$	-	6	15	-
Triple Transient Suppression	-	40	-	-
Temp Coefficient ppm/° C	-	-93	-	-
Attenuation:(Reference level from minimum insertion loss)				
1) 40~ 125 MHz dB	40	47	-	-
2) 126MHz dB	15	52	-	-
3) 155MHz ~ 350 MHz dB	36	39	-	-
4) 154MHz dB	15	35	-	-
5) 220MHz ~ 260 MHz dB	44	55	-	-

C. Frequency Characteristics :

1. S21 Response

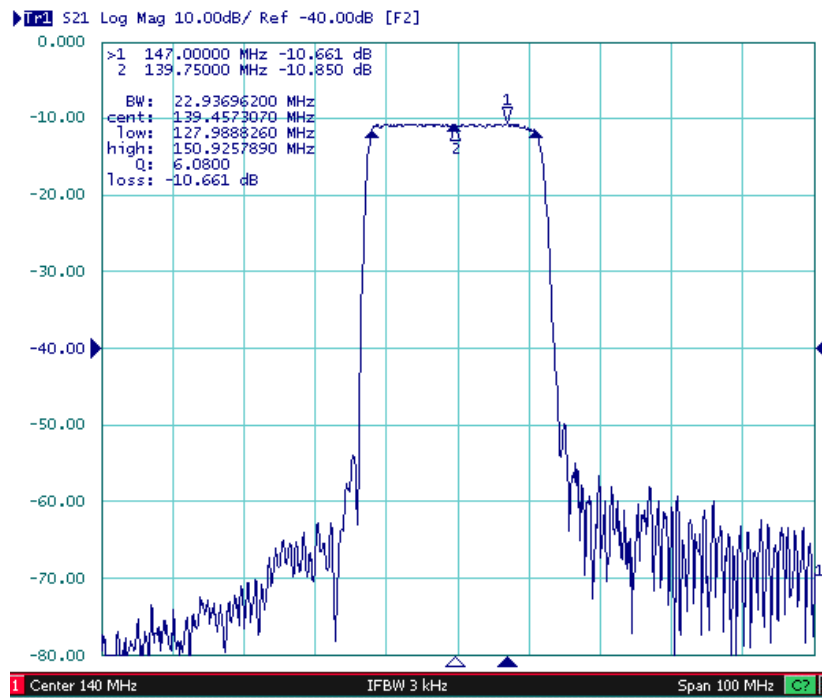


Fig. 1 S21 Response Horizontal: 10MHz/Div; Vertical: 10dB/Div

2. Pass band Ripple and Group Delay Ripple

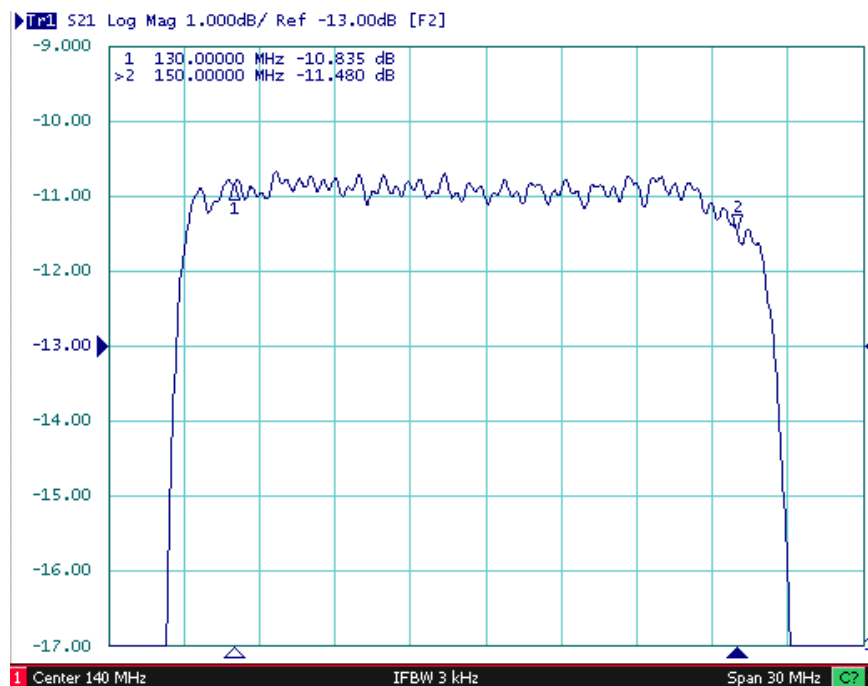


Fig. 2 Inband ripple Horizontal: 3MHz/Div; Vertical: 1dB/Div

3. Group Delay Ripple

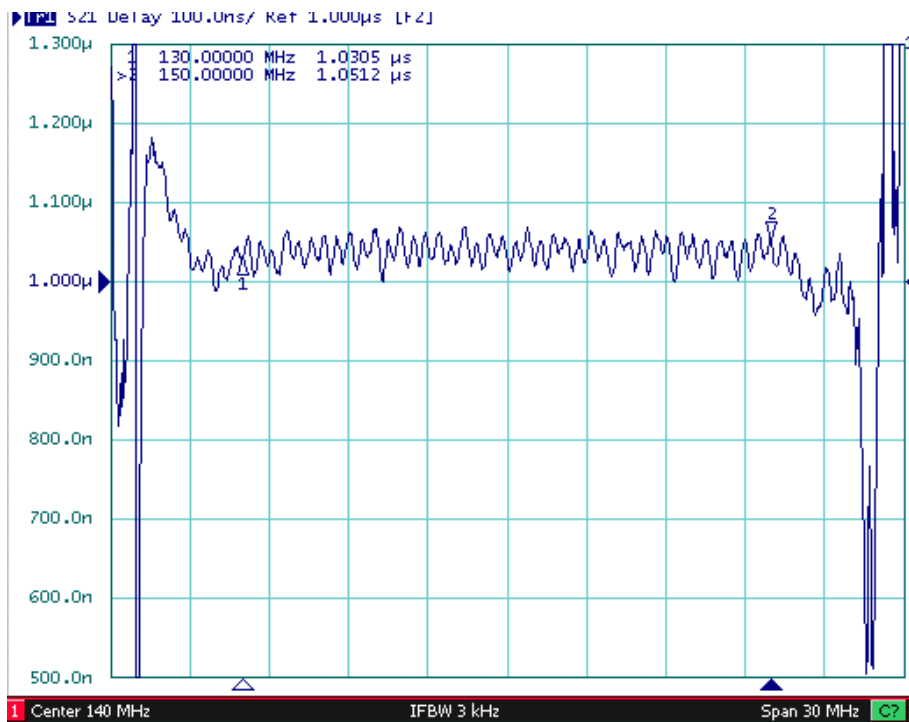


Fig. 3 Group Delay Horizontal: 3MHz/Div; Vertical: 100nS/Div

4. Phase Ripple

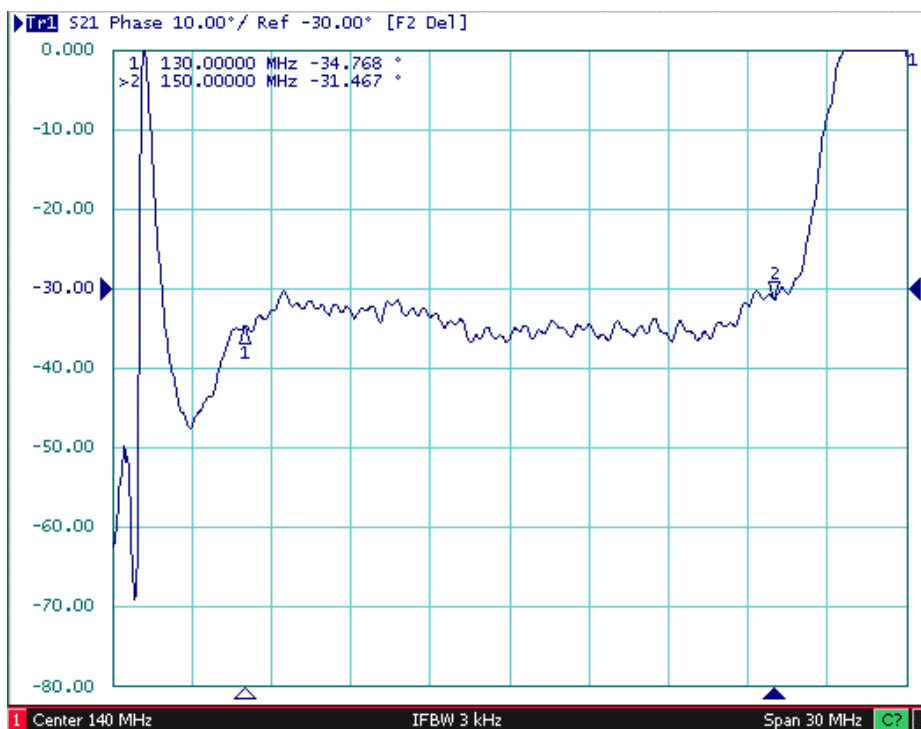


Fig. 4 Phase Ripple Horizontal: 3MHz/Div; Vertical: 10Deg/Div

5. Wide Band Response

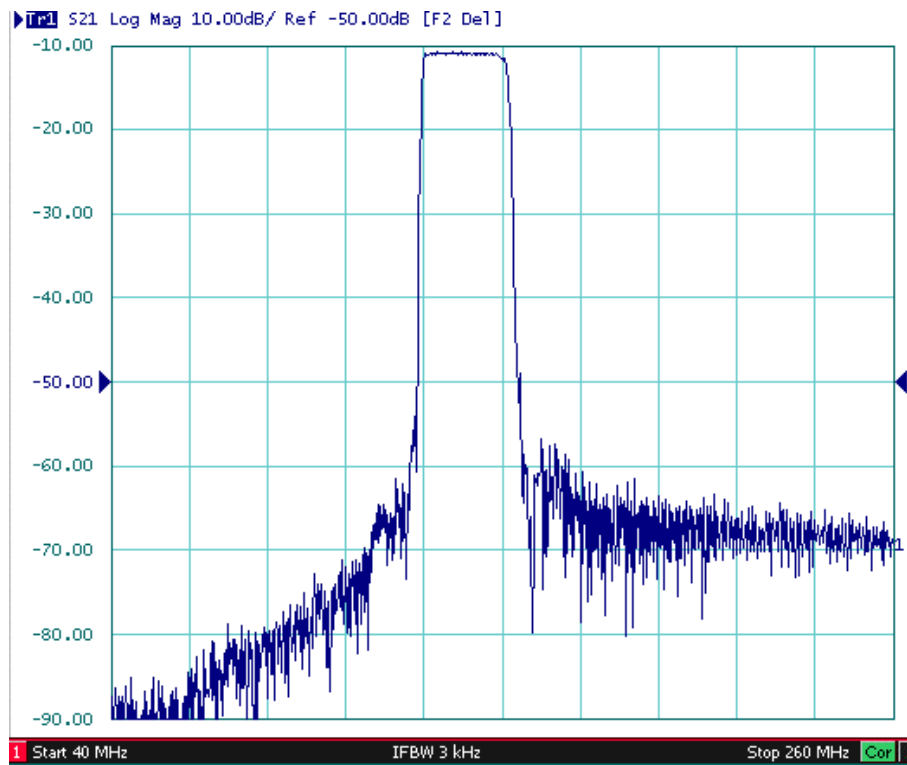
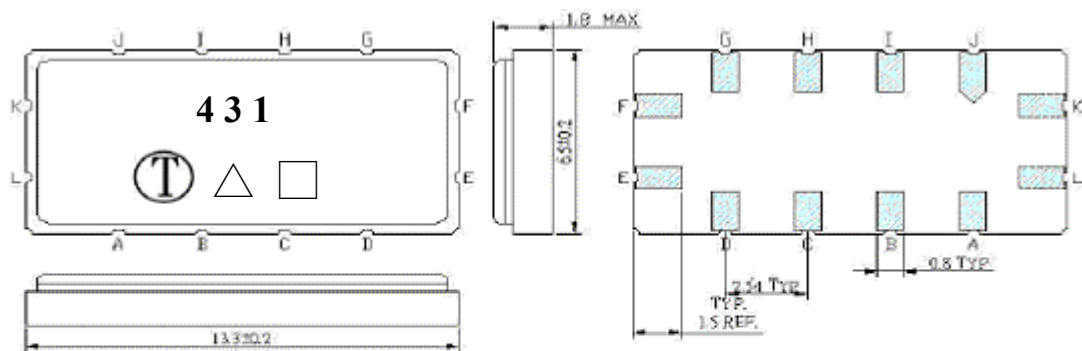


Fig. 5 Wide Band Horizontal: 40~260MHz; Vertical: 10dB/Div

D.OUTLINE DRAWING:



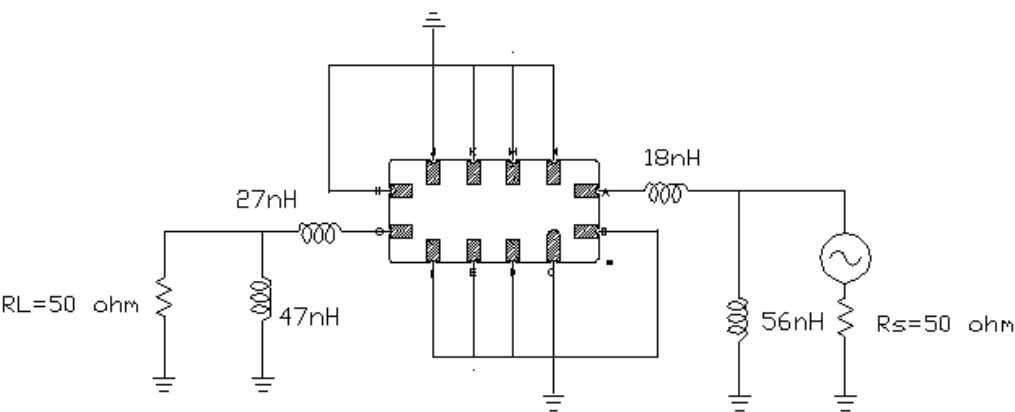
Unit: mm

Pin configuration

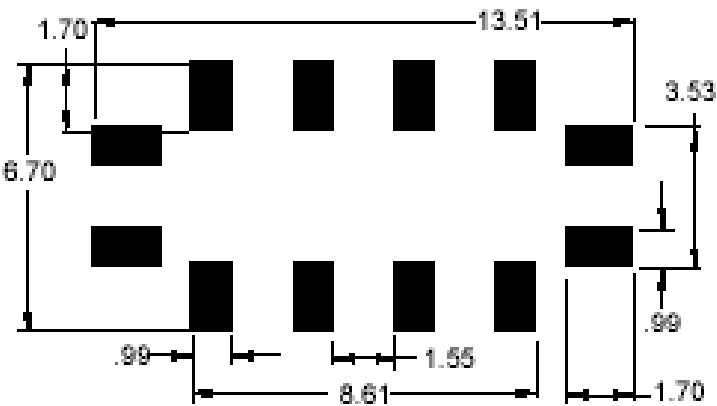
- #K RF Input
- #L RF Input ground
- #E RF Output
- #F RF Output ground
- #A,B,C,D,G,H,I,J To be ground
- : Week Code (Follow the table from planner each year)
- △ : Product / Year Code

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

E. TEST FIXTURE :

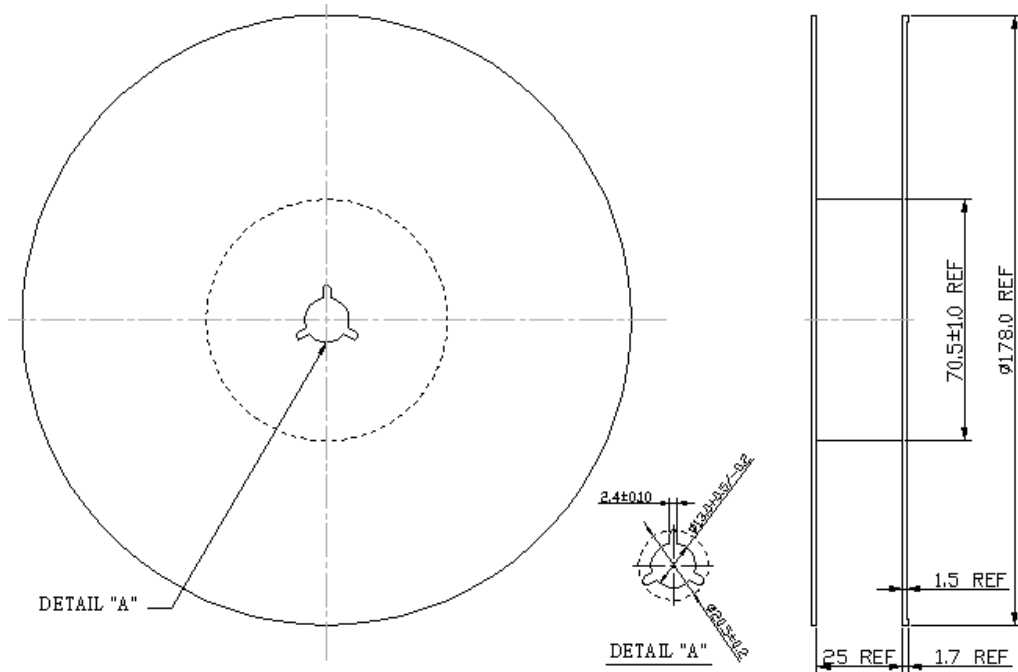


F. PCB FOOTPRINT

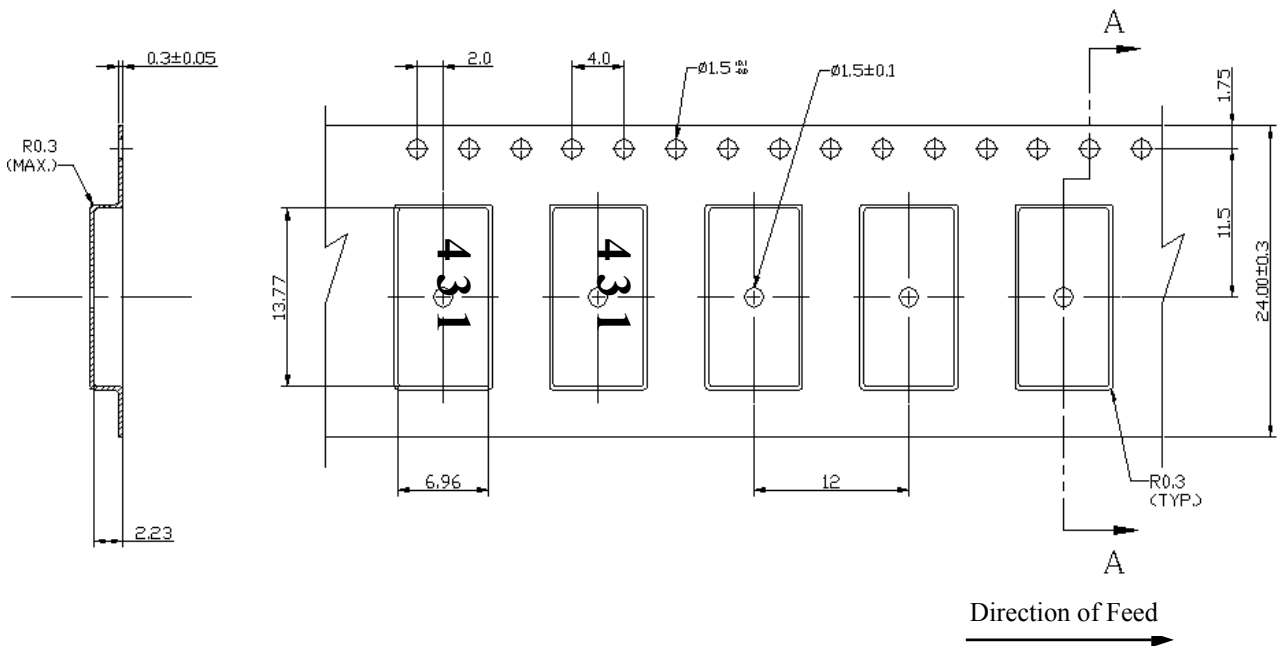


G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H. Recommended Reflow Profile:

