



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW IF Filter 110 MHz

TST Parts No.: TB0681A ( package 9.1mm x7.1 mm )

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

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

Checked by: \_\_\_\_\_ Kazuma Lee 

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

Date: \_\_\_\_\_ 11 / 26 / 2008



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IF SAW Filter 110MHz(BW=200KHz) SMD 9.1X7.1mm

MODEL NO.: TB0681A

REV. NO.3

## A. MAXIMUM RATING:

1. Operating Temperature: -10 °C ~ 50 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant  
Lead free  
Lead-free soldering

## B. Characteristics :

1. Ambient Temperature: 25 °C

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency FC MHz	-	110	-	-
Minimum Insertion loss I.L. dB	-	7.7	12	-
1 dB Bandwidth KHz	-	297	-	-
3 dB Bandwidth KHz	200	450	-	-
Group Delay Ripple ( $F_c \pm 100\text{KHz}$ ) nsec	-	70	400	-
Relative Rejection (Reference to Minimum Insertion loss)				
1) $F_c \pm 1.0\text{MHz}$ dB	15	33	-	-
2) $F_c \pm 4.0\text{MHz}$ dB	35	53	-	-
Temp Coefficient ppm/ $K^2$	-	-0.036	-	-

## C. Frequency Characteristics :

### 1. S21 Response

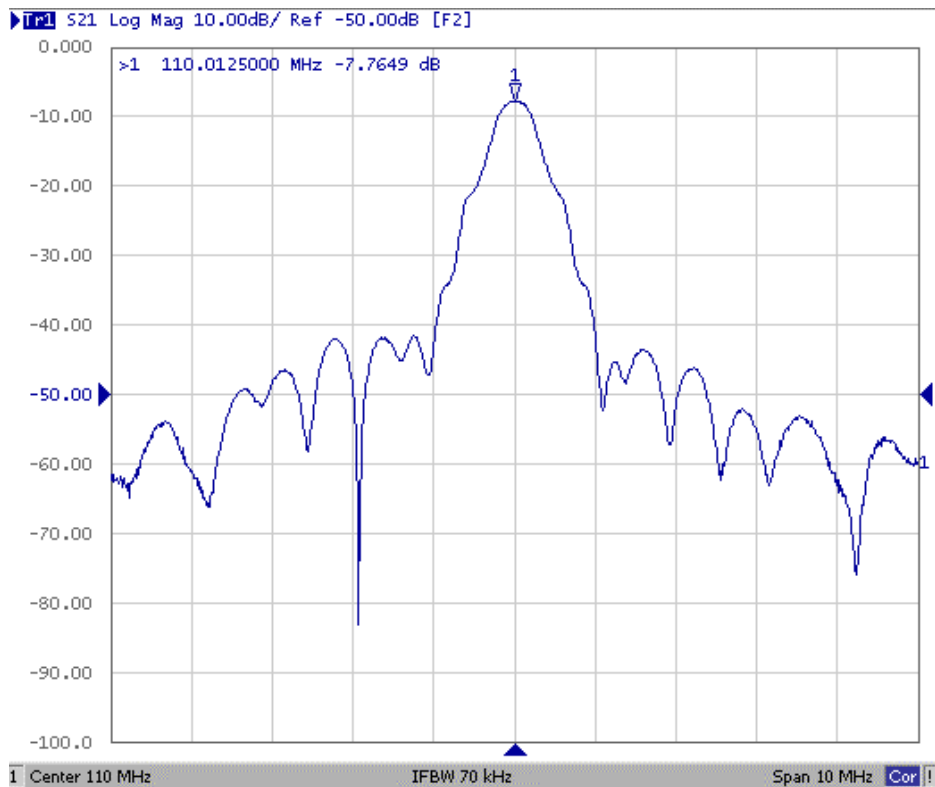


Fig1. Horizontal: 1MHz/Div Vertical: 10dB/Div

### 2. Passband Response and Group Delay Response

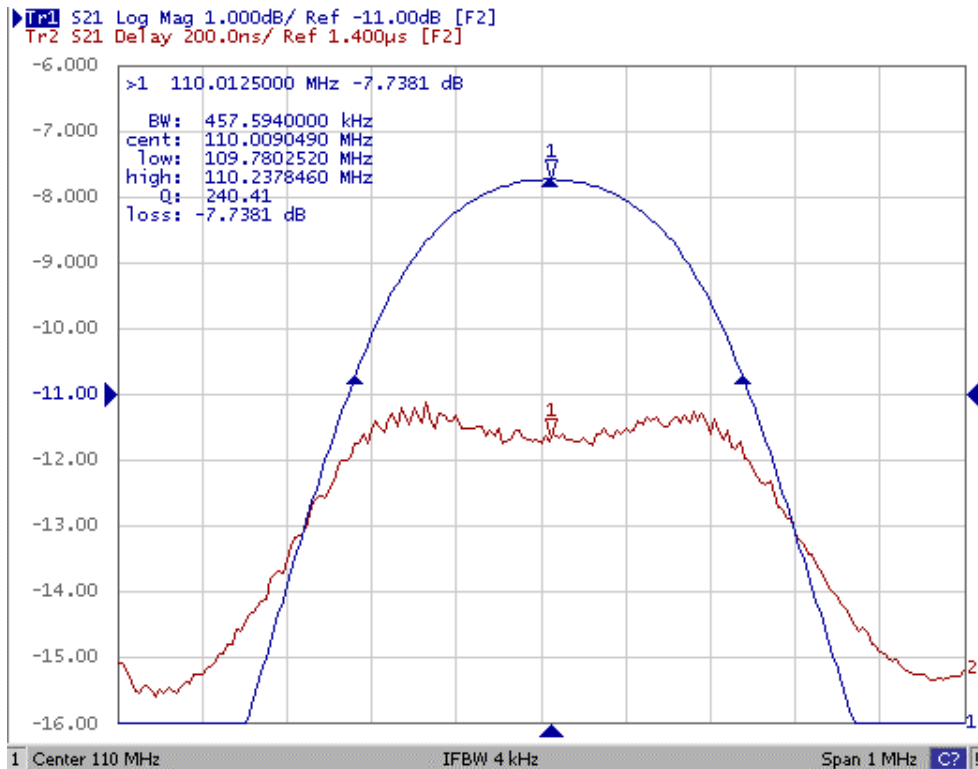
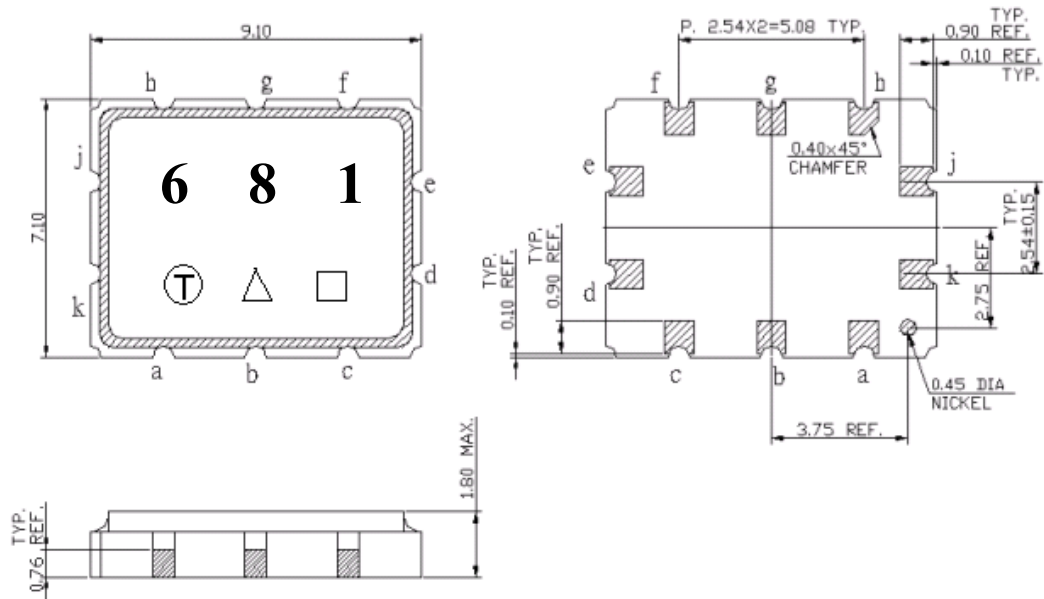


Fig2. Horizontal: 0.1MHz/Div Vertical 1: 1dB/Div  
Vertical 2: 200nS/Div

**D. Outline Drawing:**



Pin h: RF Input

Pin c: RF Output

Pin a, b, d, e, f, g, j, k : To be ground

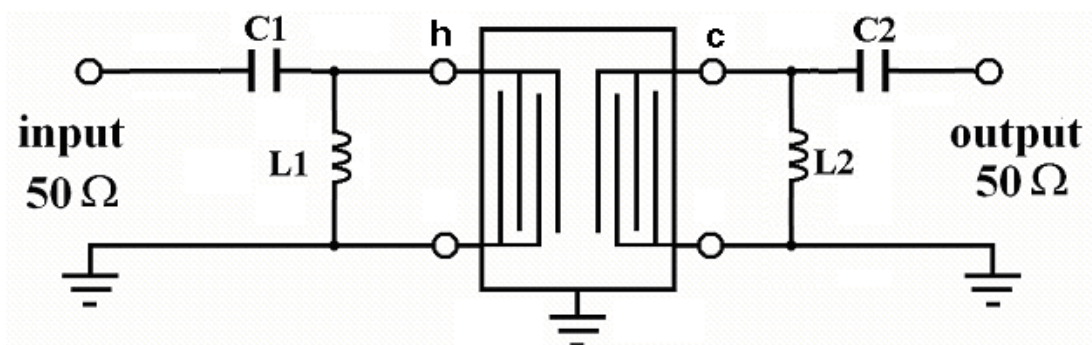
Unit : mm

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

△ : Product / Year Code

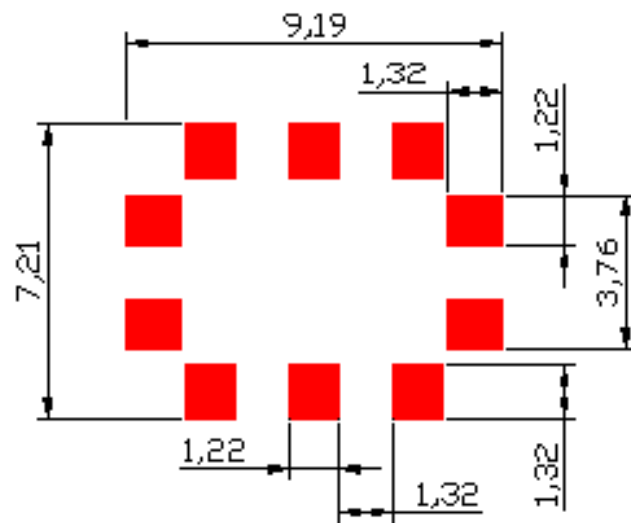
Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

**E. Matching Circuit:**



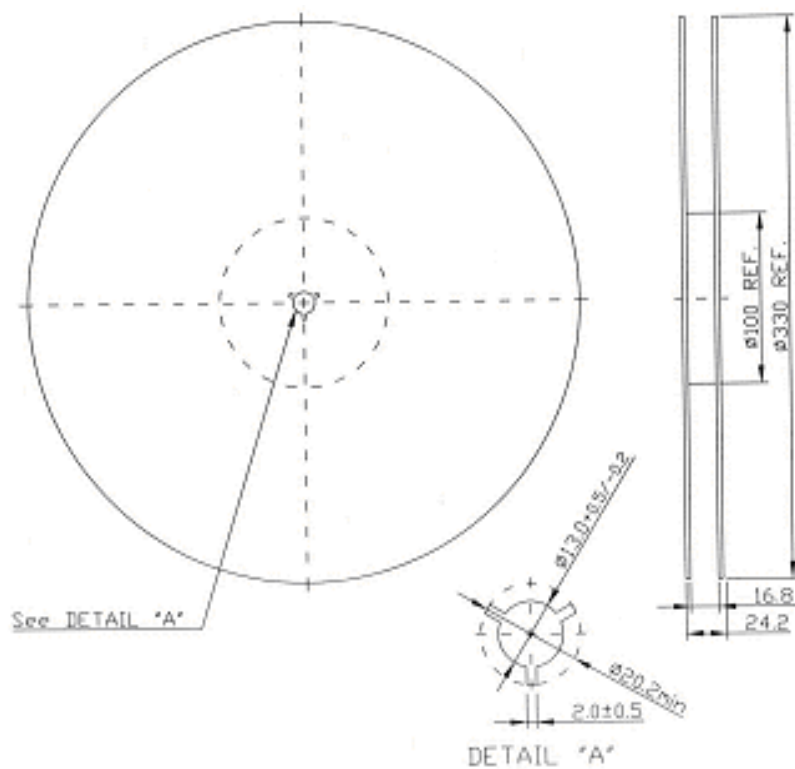
L1=82nH, C1=8pF, L2=100nH, C2=8pF

## F. PCB Footprint:

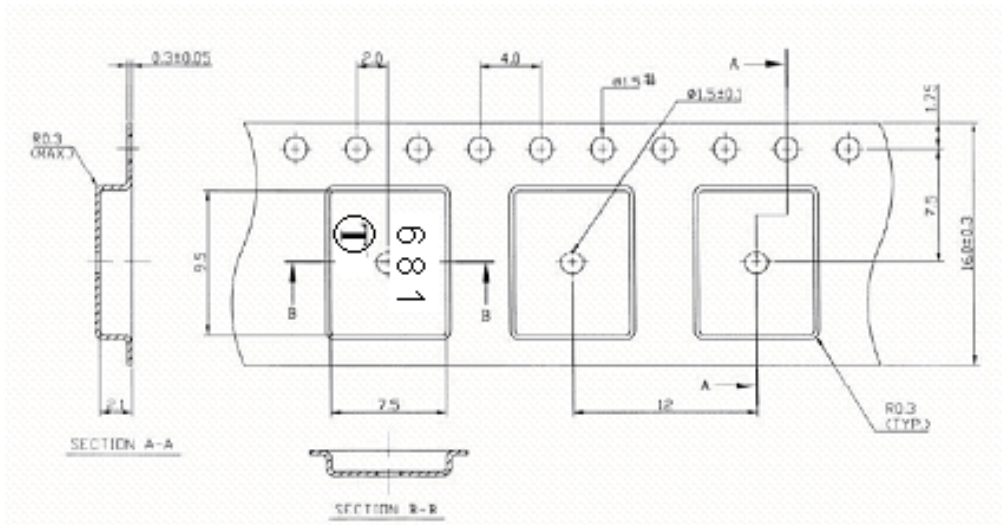


## G. Packing:

### 1. Reel Dimension



## 2. Tape Dimension



## H. RECOMMENDED REFLOW PROFILE :

