



## TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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### Approval Sheet For Product Specification

Issued Date:

Product Name: IF SAW Filter 200 MHz

TST Parts No.:TB0410A

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

Company:\_\_\_\_\_

Division:\_\_\_\_\_

Approved by :\_\_\_\_\_

Date:\_\_\_\_\_

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

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

Date:\_\_\_\_\_ 2007/10/29



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## IF SAW Filter 200 MHz SMD 7 X5mm

MODEL NO.: TB0410A

REV. NO.1

### A. MAXIMUM RATING:

1. Operating Temperature: -10 °C ~ 70 °C
2. Storage Temperature: -40 °C ~ +85 °C

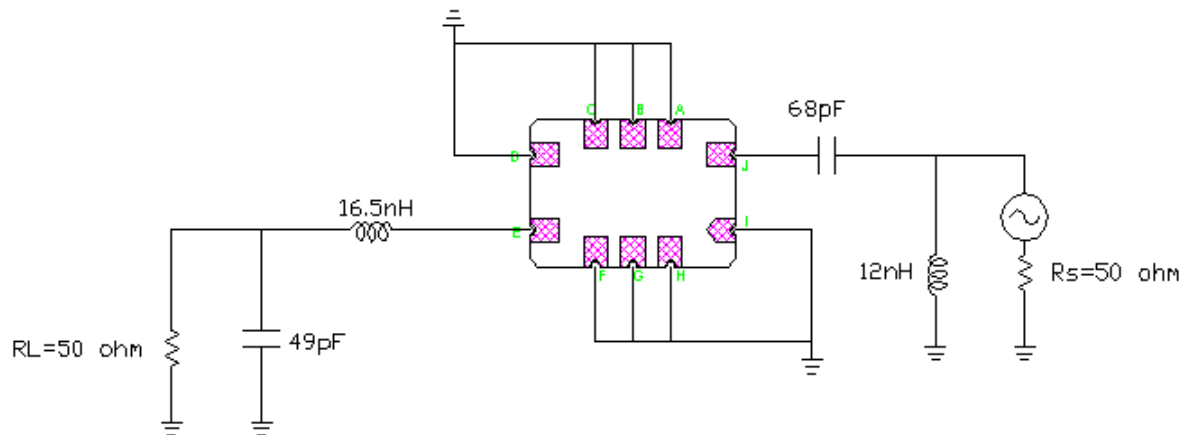
RoHS Compliant  
Lead free  
Lead-free soldering

### B. Characteristics :

1. Ambient Temperature: 25 °C

| Characteristics                                            |           | Value |      |       | Note |
|------------------------------------------------------------|-----------|-------|------|-------|------|
|                                                            |           | Min.  | Typ. | Max.  |      |
| Center frequency                                           | $F_C$ MHz | 199.9 | 200  | 200.1 | -    |
| Minimum Insertion loss                                     | I.L. dB   | 14.4  | 16.9 | 18.4  | -    |
| Passband ripple ( $F_C \pm 2.7$ MHz)                       | dB        | -     | 0.68 | 1.00  | -    |
| Phase linearity ( $F_C \pm 3.0$ MHz)(rms)                  | deg       | -     | 1.5  | 7.0   | -    |
| 1 dB Bandwidth                                             | dB        | 6.4   | 6.7  | -     | -    |
| 3 dB Bandwidth                                             | dB        | 7.3   | 7.6  | 7.9   | -    |
| 40 dB Bandwidth                                            |           | -     | 10.3 | 11.0  | -    |
| Group Delay Ripple ( $F_C \pm 3.0$ MHz)                    | nS        | -     | 74   | 120   | -    |
| Temp. Coefficient                                          | ppm/° C   | -     | -23  | -     | -    |
| Attenuation:( Reference level from minimum insertion loss) |           |       |      |       | dB   |
| 1) 10 MHz ~ 193MHz                                         | dB        | 40    | 49   | -     | -    |
| 2) 207 MHz ~ 350 MHz                                       | dB        | 38    | 43   | -     | -    |

### C. Measurement Circuit:



### D. Frequency Characteristics :

#### 1. S21 Response

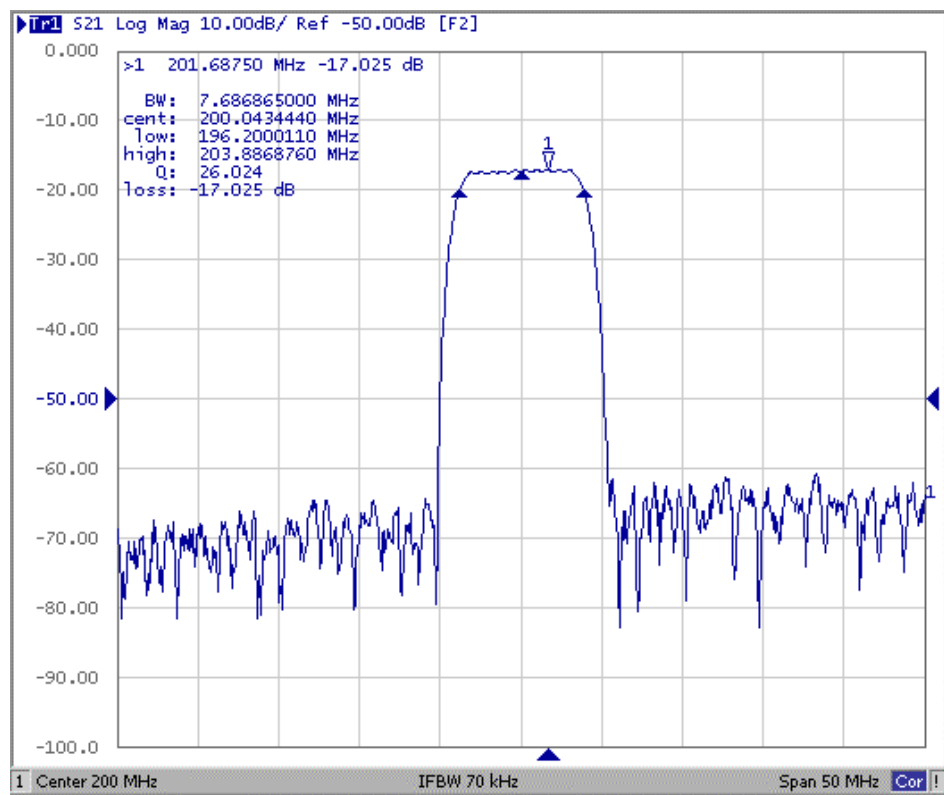


Fig1. Horizontal: 5MHz/Div Vertical: 10dB/Div

2. S21 Response (Passband)

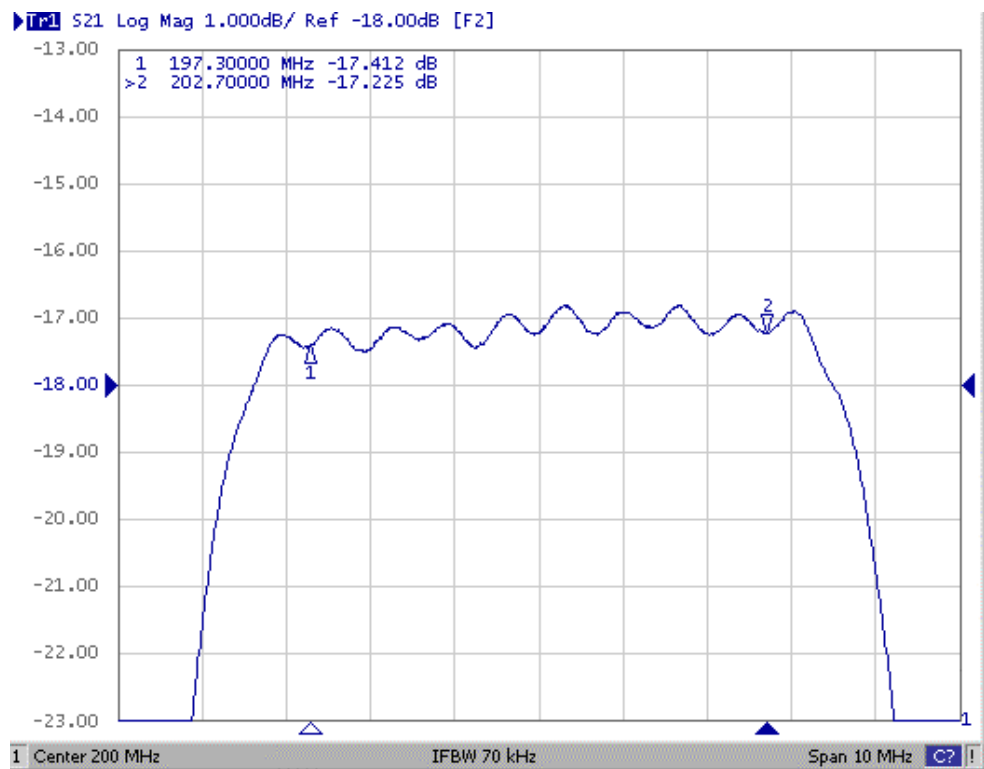


Fig2. Horizontal: 1MHz/Div; Vertical: 1dB/Div

3. S21 Response (Group delay ripple)

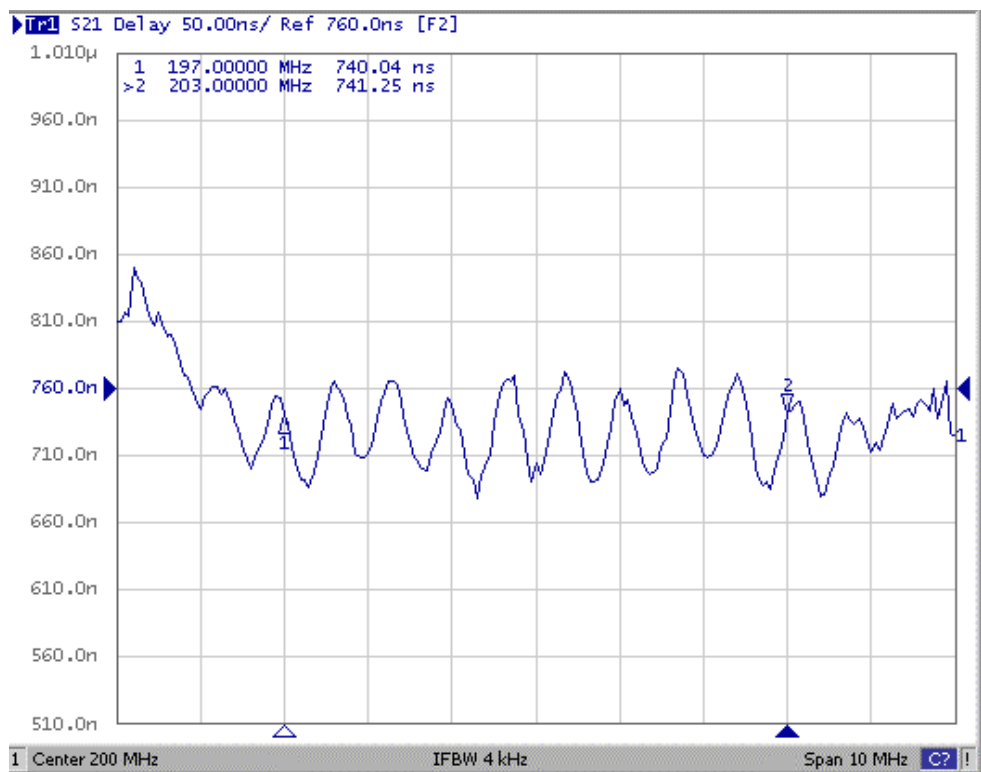
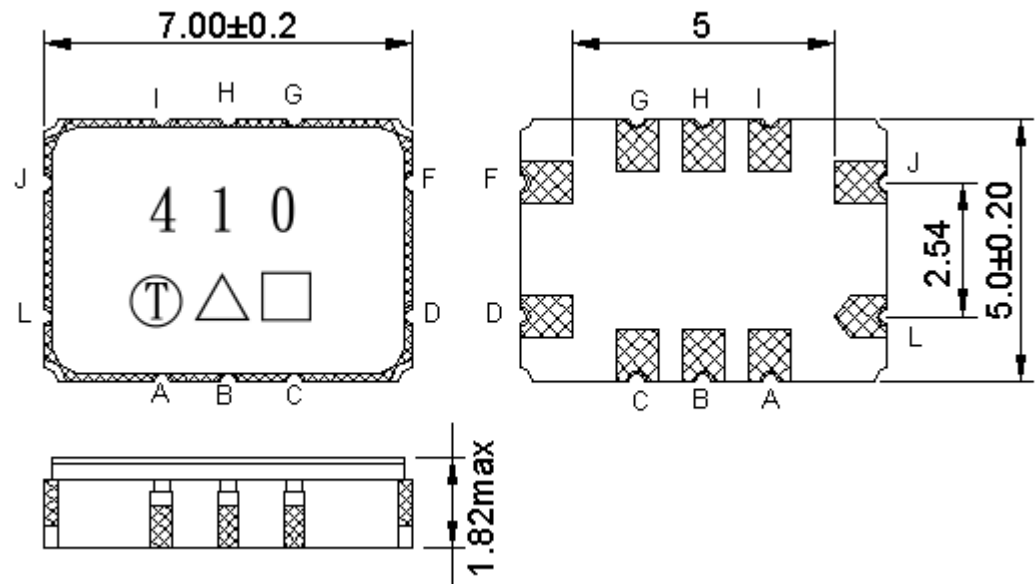


Fig2. Horizontal: 1MHz/Div; Vertical: 50ns/Div

E. Outline Drawing:



Pin J: RF Input

Pin D: RF Output

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

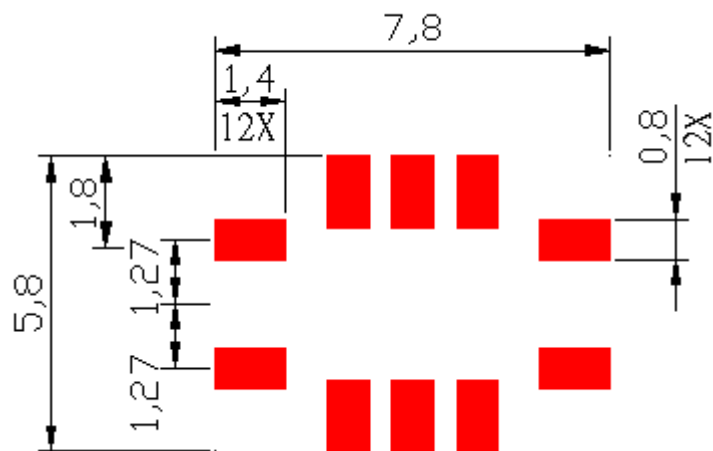
□: Week Code (Follow the table from planner each year)

Unit: mm

△ : Product / Year Code

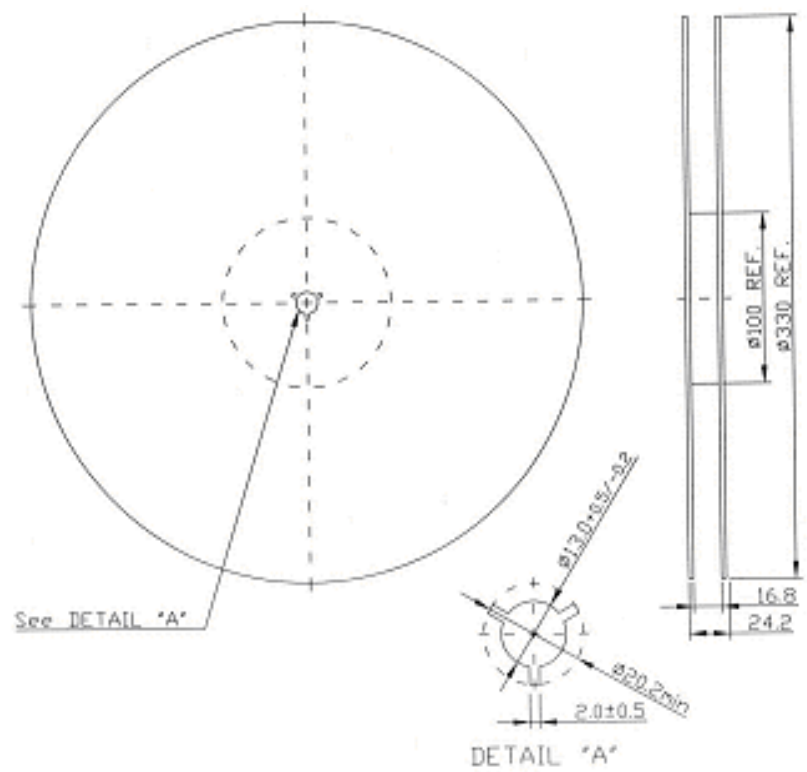
| Year         | 2005<br>2009 | 2006<br>2010 | 2007<br>2011 | 2008<br>2012 |
|--------------|--------------|--------------|--------------|--------------|
| Product Code | B            | b            | <u>B</u>     | <u>b</u>     |

F. PCB FOOTPRINT:

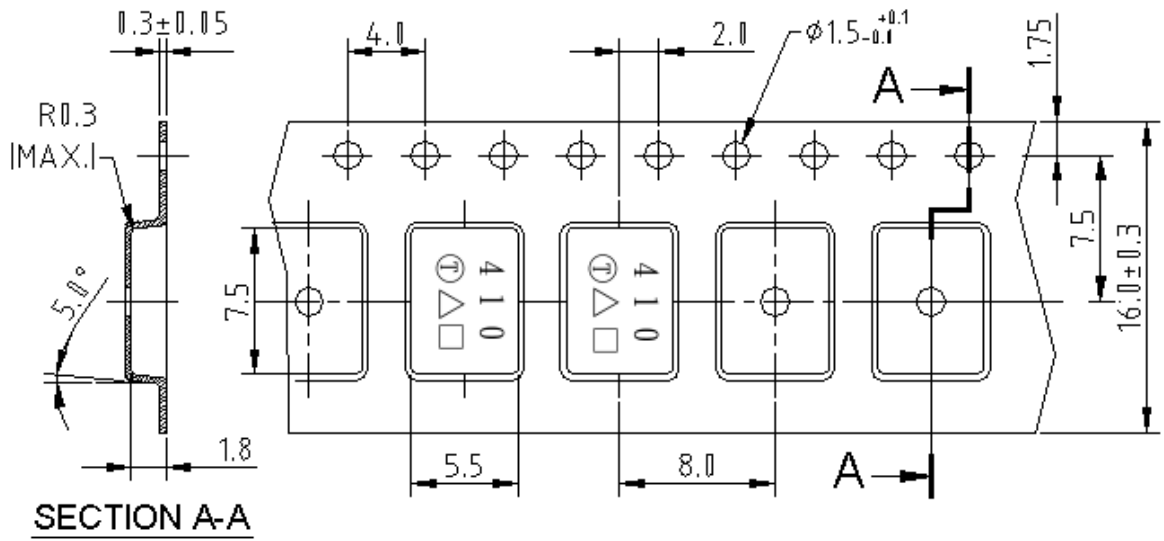


G. PACKING:

1. REEL DIMENSION



## 2. TAPE DIMENSION



## H. RECOMMENDED REFLOW PROFILE:

