



# TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales@mail.taisaw.com](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW IF Filter 70MHz

TST Parts No.: TB0644A

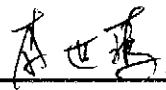
Customer Parts No.: \_\_\_\_\_

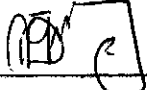
Company: \_\_\_\_\_

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

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

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

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

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

Date: \_\_\_\_\_ 2008/10/15



# TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales@mail.taisaw.com](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW IF Filter 70MHz

TST Parts No.: TB0644A

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

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

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

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

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

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

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

Date: \_\_\_\_\_ 2008/10/15



# TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038

FAX: 886-3-4697532

E-mail: [tstsales3@mail.taisaw.com](mailto:tstsales3@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

SAW Filter 70MHz 0.1MHz BW (SMD 13.3×6.5 mm)

MODEL NO.: TB0644A

REV. NO.1

## A. MAXIMUM RATING:

1. Operating temperature range: -30°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Maximum Input Power : 10dBm
4. Maximum DC Voltage : 10V

## B. Characteristics :

| Item                                       | Unit                | Min.               | Typ. | Max. |
|--------------------------------------------|---------------------|--------------------|------|------|
| Center frequency, <b>F<sub>c</sub></b>     | MHz                 | -                  | 70   | -    |
| Insertion Loss, <b>IL</b>                  | dB                  | -                  | 5.4  | 7.0  |
| 1dB Passband width                         | kHz                 |                    | 173  | -    |
| 3dB Passband width                         | kHz                 | 100                | 270  | -    |
| 10dB Passband width                        | kHz                 |                    | 430  | -    |
| 20dB Passband width                        | kHz                 |                    | 500  | -    |
| 30dB Passband width                        | kHz                 |                    | 600  | -    |
| Amplitude Ripple F <sub>c</sub> +/-50kHz   | P-P dB              | -                  | 0.4  | 1.0  |
| Group delay ripple F <sub>c</sub> +/-50kHz | usec                | -                  | 0.8  | 2    |
| Temperature Coefficient                    | ppm/°C <sup>2</sup> | -0.036<br>50<br>50 |      |      |
| Source Impedance (Balanced)                | Ohm                 |                    |      |      |
| Load Impedance (Balanced)                  | Ohm                 |                    |      |      |

## C. Frequency Characteristics :

### 1. S21 Response

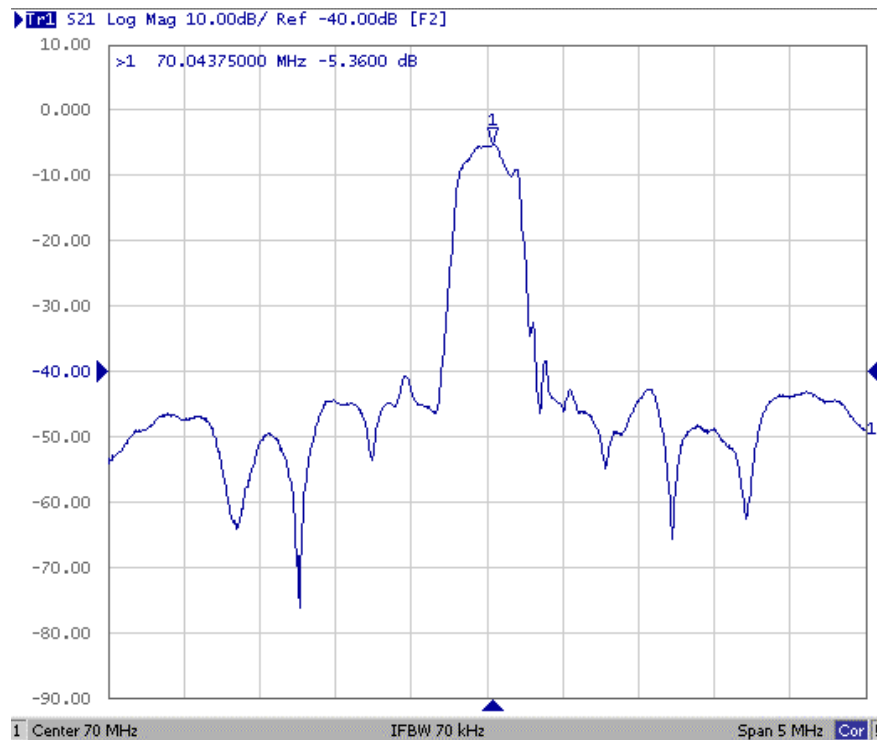


Fig1. Horizontal: 0.5MHz/Div Vertical: 10dB/Div

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

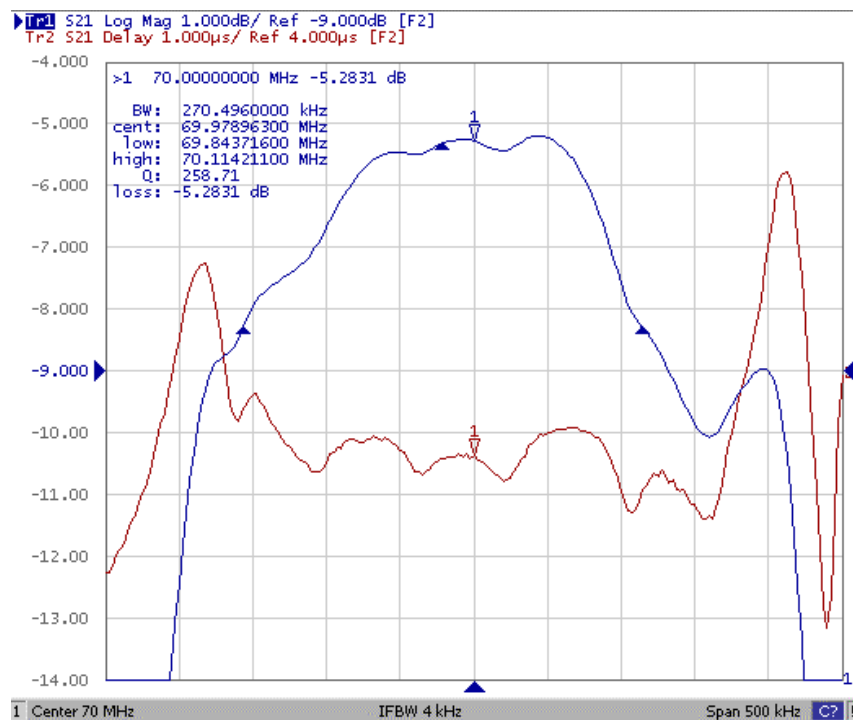
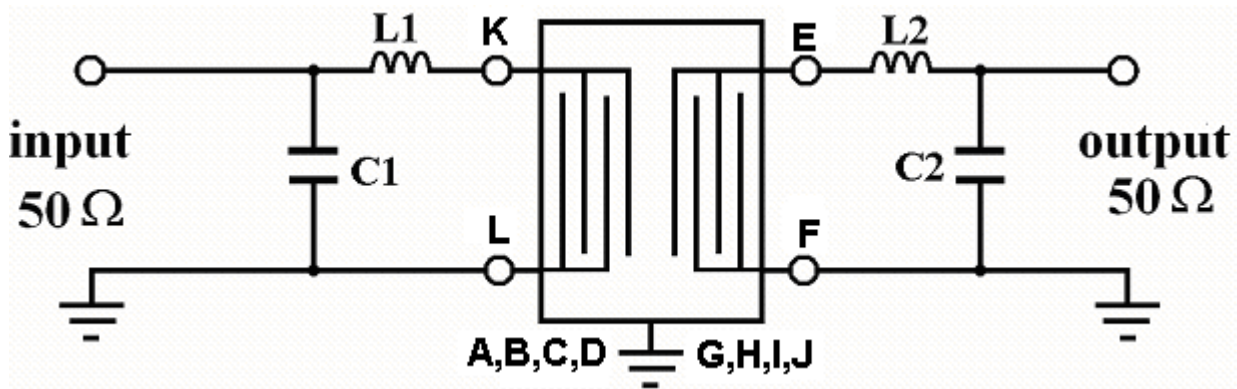


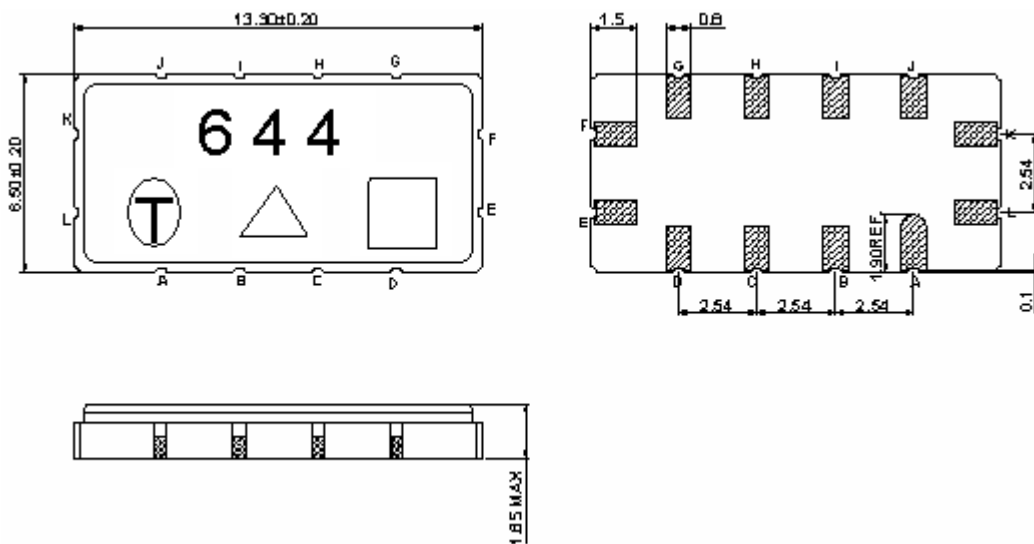
Fig2. Horizontal: 50KHz/Div Vertical: 1dB/Div  
Vertical: 1000nS/Div

#### D. Matching Circuit:



$$L1=377\text{nH} \quad C1=62\text{pF} \quad L2=317\text{nH} \quad C2=68\text{pF}$$

#### E. Outline Drawing:



#K : Input

#L : Input Ground

#E : Output

#F : Output Ground

#A,B,C,D,G,H,I,J : Ground

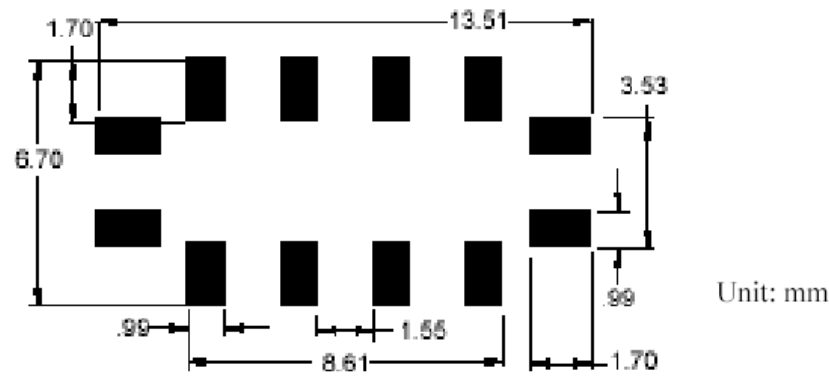
□: Week Code (Follow the table from planner each year)

Unit: mm

△ : Product / Year Code

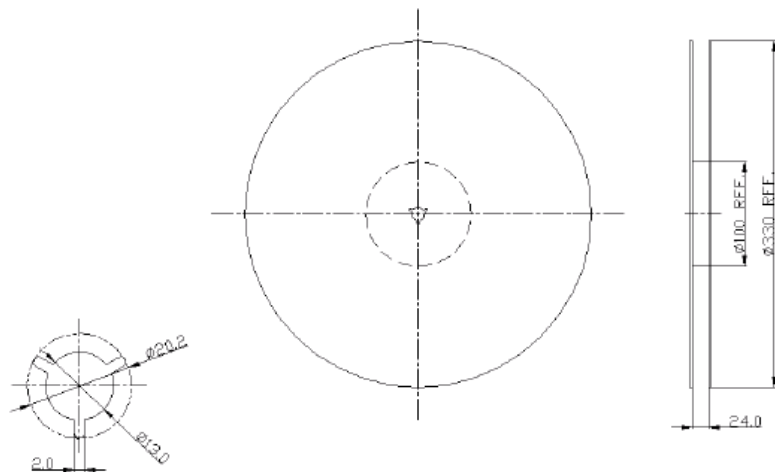
| Year         | 2005<br>2009 | 2006<br>2010 | 2007<br>2011 | 2008<br>2012 |
|--------------|--------------|--------------|--------------|--------------|
| Product Code | B            | b            | <u>B</u>     | <u>b</u>     |

F. PCB FOOTPRINT:



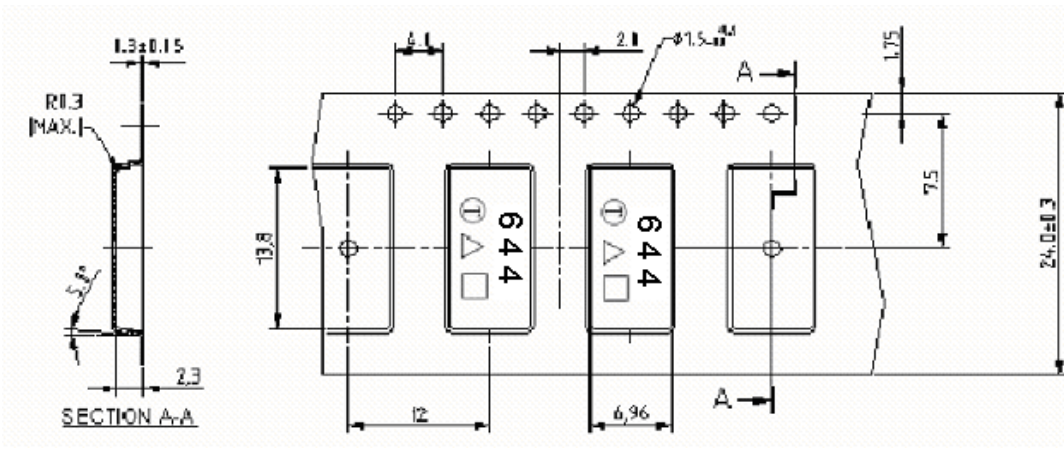
G. PACKING:

1. REEL DIMENSION



Unit: mm

2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

