



# 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 Filter 350MHz SMD 5.0x5.0mm

TST Parts No.:TB0706A

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

|                     |
|---------------------|
| Company: _____      |
| Division: _____     |
| Approved by : _____ |
| Date: _____         |

Checked by: Andy Yu *Andy Yu*

Approval by: Francis Chen *(Signature)*

Date: 2008/11/14



# 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)

SAW Filter 350 MHz SMD 5.0mmX5.0mm

MODEL NO.: TB0706A

preliminary

## A. MAXIMUM RATING:

1. Operating Temperature: -25°C to +70°C
2. Storage Temperature: -40°C to +85°C
3. Maximum Input Power : 10dBm

RoHS Compliant  
Lead free  
Lead-free soldering

## B. ELECTRICAL CHARACTERISTICS:

1. Ambient Temperature: 25 °

| Item                               |    | Min.   | Typical | Max. |      |
|------------------------------------|----|--------|---------|------|------|
| Center frequency                   | Fc | MHz    | -       | 350  | -    |
| Insertion loss at Fc               |    | dB     | -       | 14.6 | 18   |
| Bandwidth at -1.5dB                |    | MHz    | 31.0    | 35.1 | -    |
| Bandwidth at -6.0dB                |    | MHz    | -       | 41.4 | 43.0 |
| Bandwidth at -25.0dB               |    | MhZ    |         | 48.0 | 50.0 |
| Amplitude Ripple (Fc ± 15.0 MHz)   |    | dB     | -       | 1.1  | 1.4  |
| Group Delay Ripple (Fc ± 15.0 MHz) |    | nS     | -       | 30   | 100  |
| Absolute Group delay at Fc         |    | nS     | -       | 320  | -    |
| Temp Coefficient                   |    | ppm/°C | -       | -18  | -    |

### C. FREQUENCY CHARACTERISTICS :

#### 1.S21 wide-band Response:(span 400MHz)

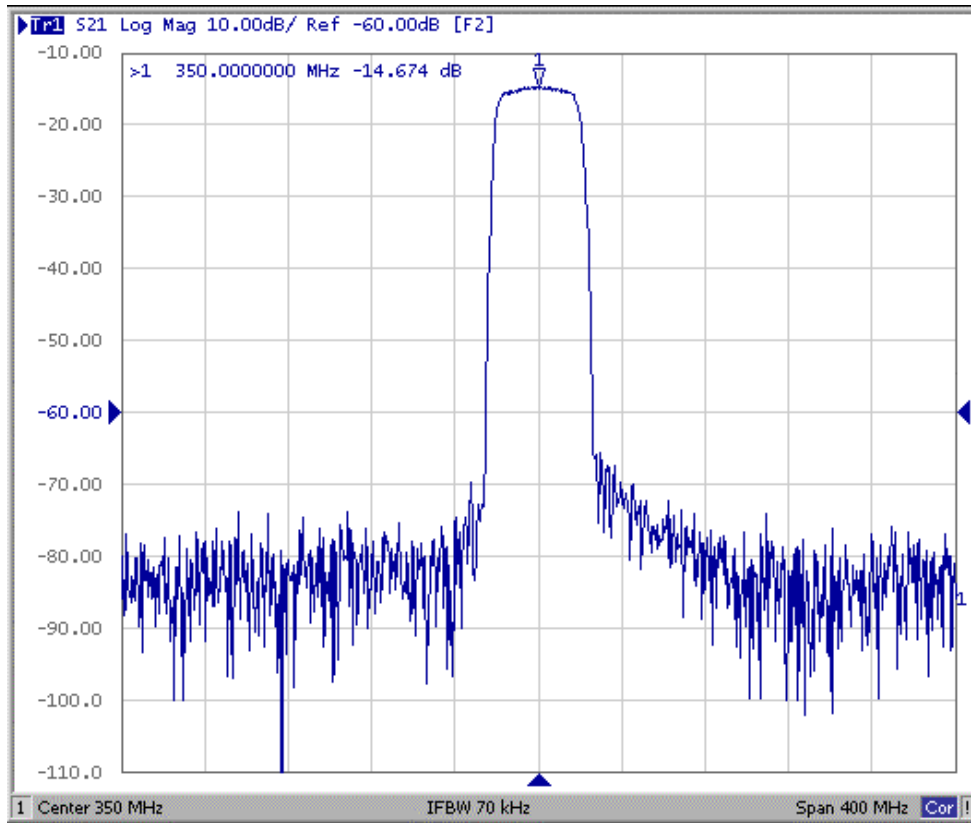


Fig1. Horizontal: 40MHz/Div Vertical: 10dB/Div

#### 2.S21 pass-band Response:(span 60MHz)

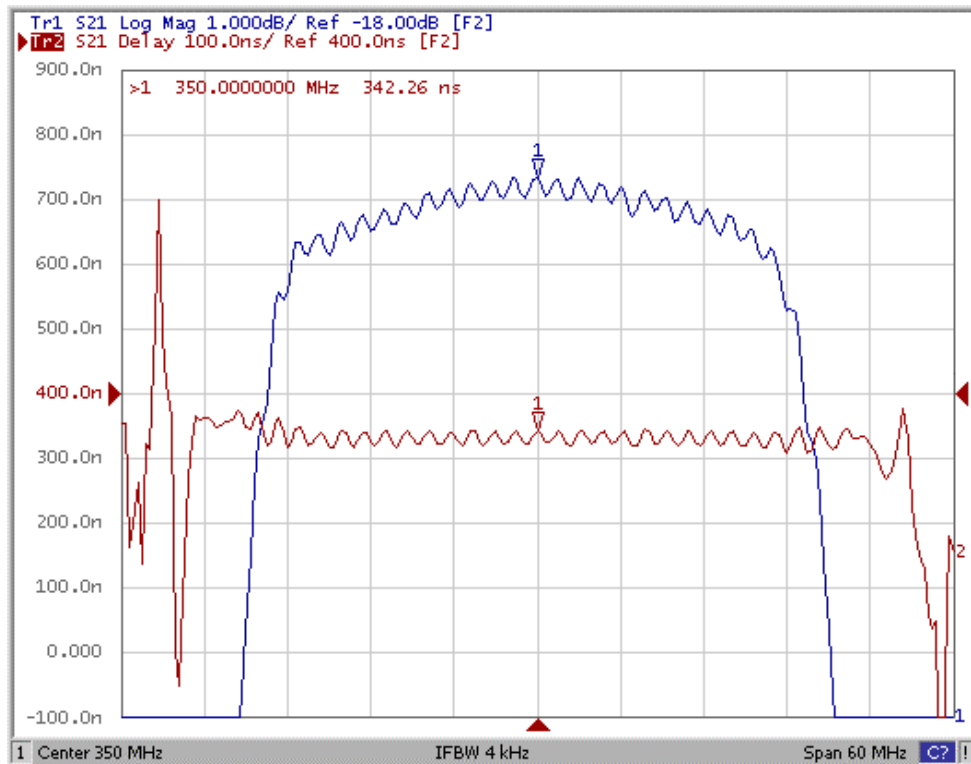
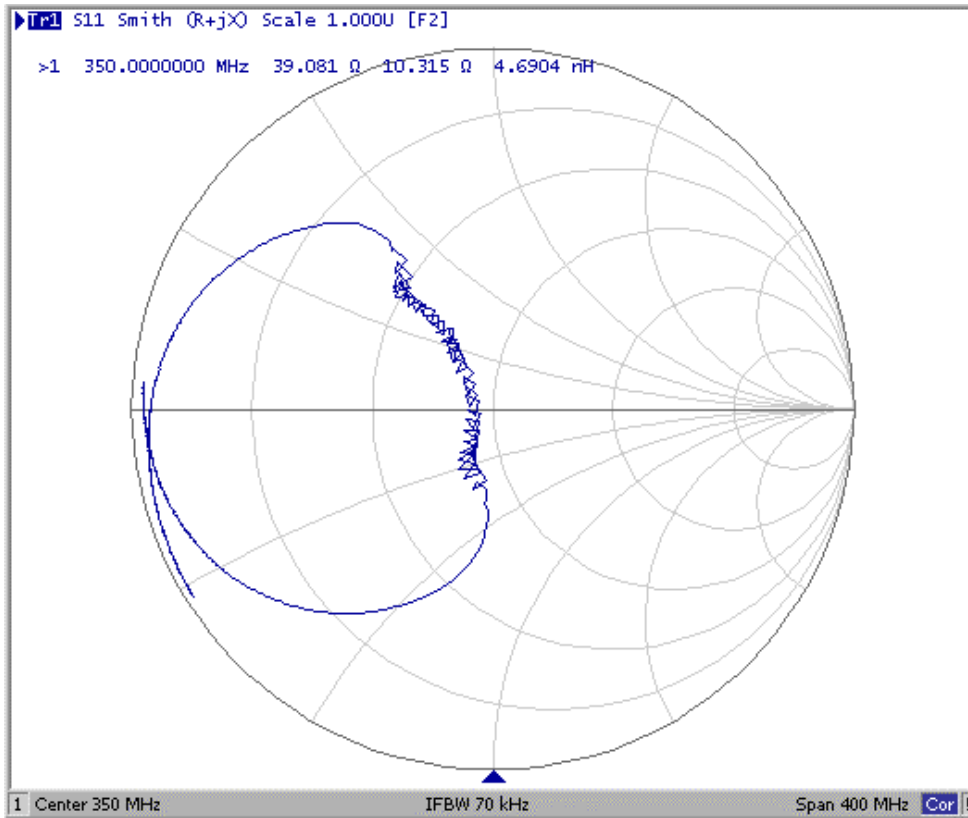
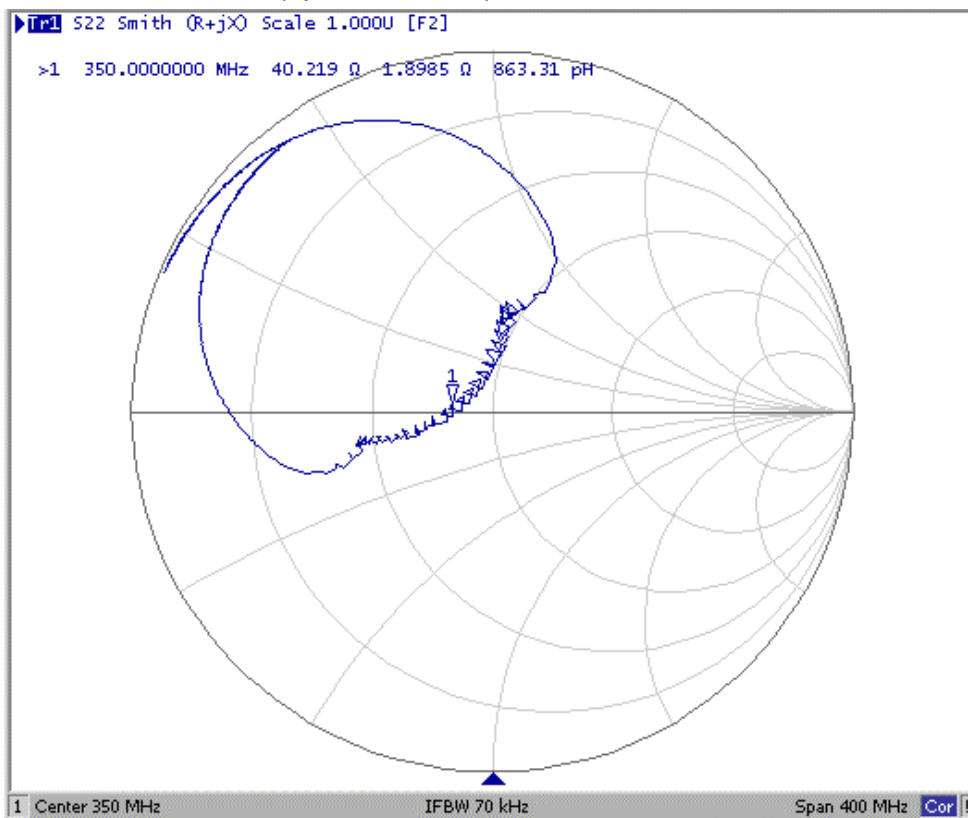


Fig2. Horizontal: 6MHz/Div Vertical: 1dB/Div

### 3.S11 Smith-Chart: (span 400MHz)

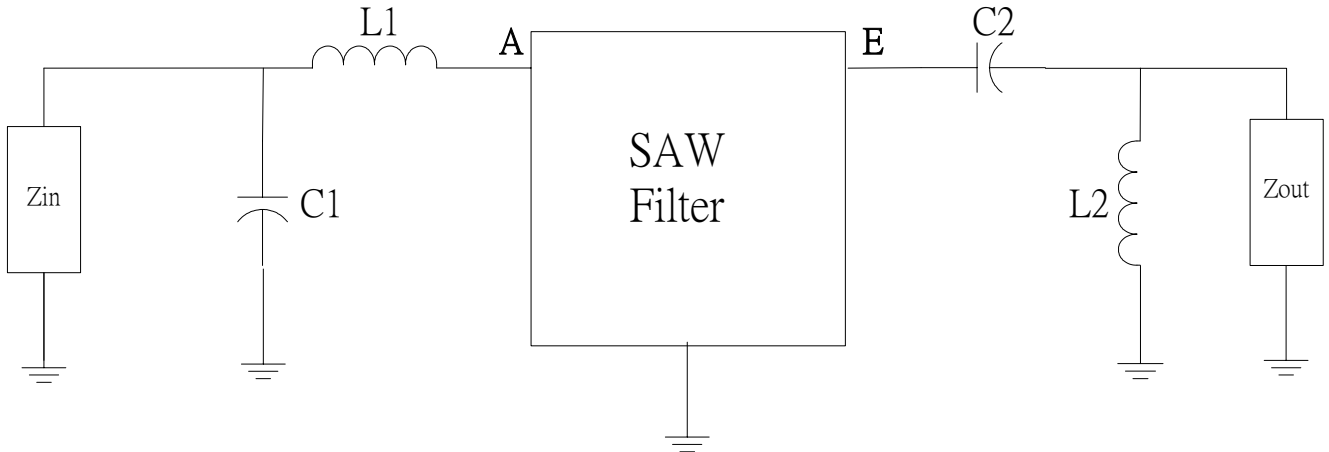


### 4.S22 Smith-Chart:(span 400MHz)



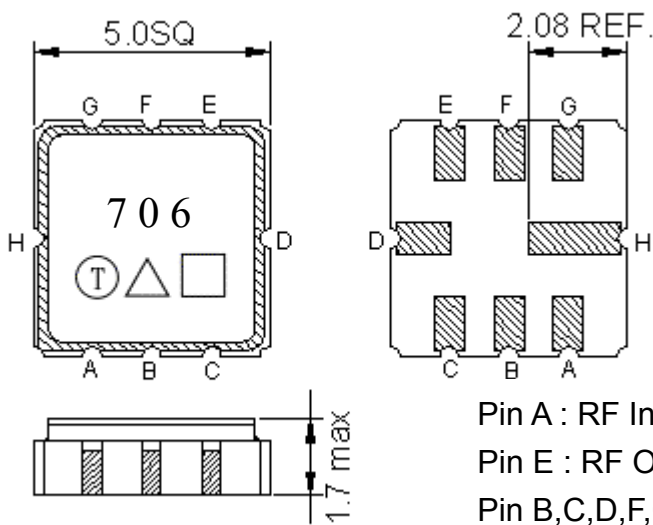
D. MEASUREMENT CIRCUIT

1. Single ended input 50 ohm to Single ended Output 50 ohm



C1=30pF, L1=6.8nH, C2=10pF, L2=5.6nH

E. OUTLINE DRAWING:



Pin A : RF Input  
 Pin E : RF Output  
 Pin B,C,D,F,G,H : Ground

Unit: mm

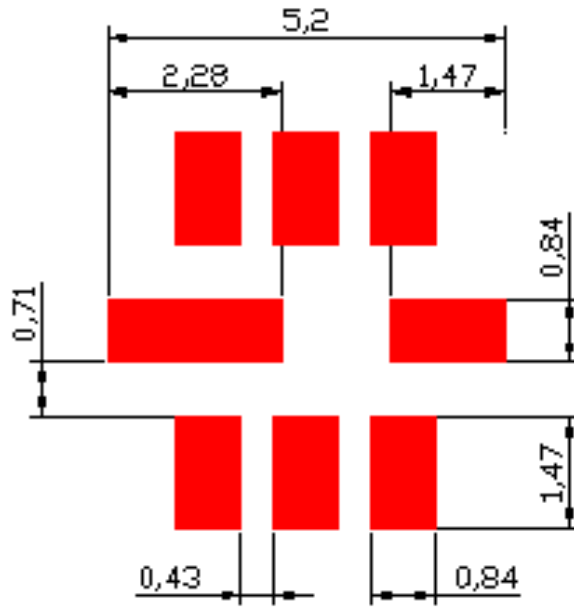
□ : Week Code (Follow the table from planner each year)

△ : 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> |
|--------------|---|---|----------|----------|

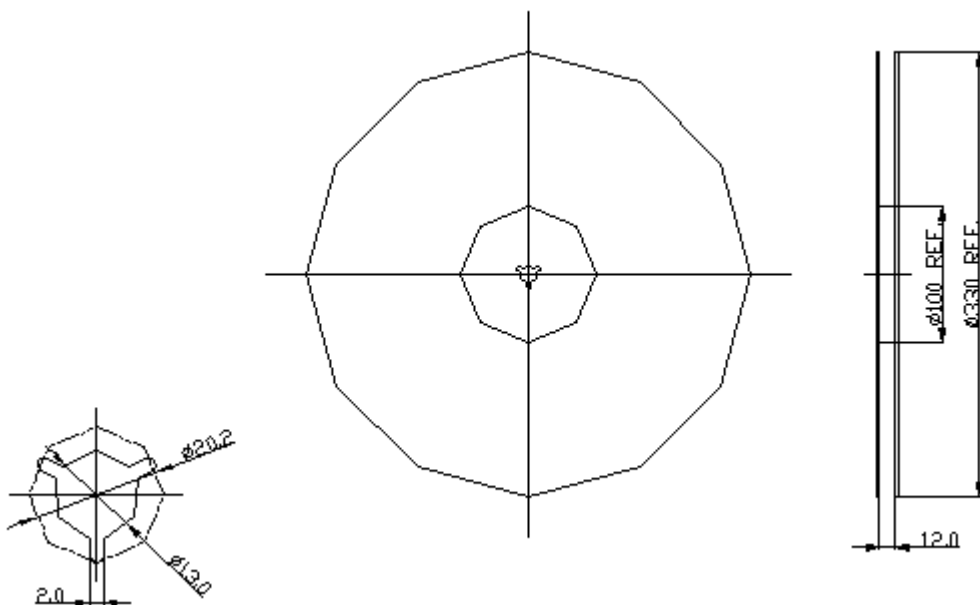
F. PCB Footprint



Unit: mm

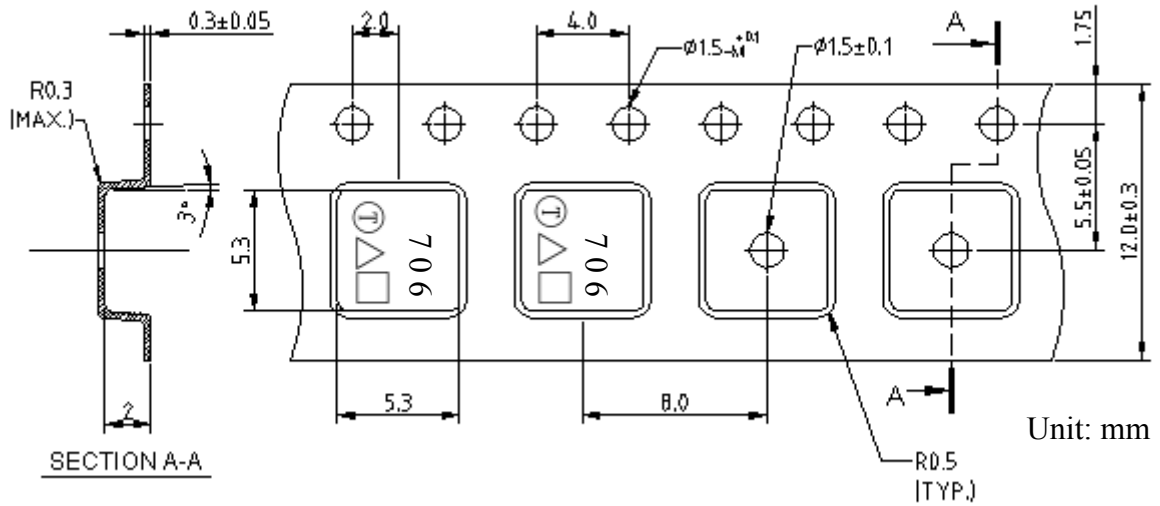
G. PACKING:

1. REEL DIMENSION



## 2. TAPE DIMENSION

Unit: mm



## H. RECOMMENDED REFLOW PROFILE :

