



# 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: 06/24/05

Product Name: SAW Filter 400 MHz SMD 3.0x3.0 mm

TST Parts No.:TB0299A

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

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

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

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

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

Checked by:\_\_\_\_\_ Asin Lin

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

Date:\_\_\_\_\_ 06/24/05



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## SAW Filter 400MHz

MODEL NO.: TB0299A

REV. NO.:1

### A. MAXIMUM RATING:

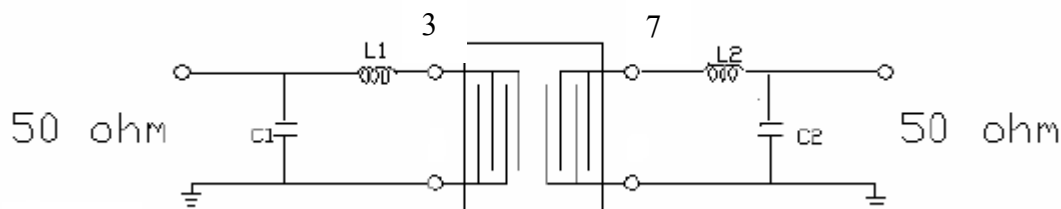
1. Input Power Level : 0 dBm
2. Operating Temperature: -40°C to 85°C
3. Storage Temperature: -40°C to 85°C

RoHS Compliant  
Lead free  
Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

| Item                                        | Unit | Min. | Type. | Max. | Note |
|---------------------------------------------|------|------|-------|------|------|
| Center frequency, <b>F<sub>c</sub></b>      | MHz  | -    | 400   | -    | -    |
| Insertion Loss, <b>IL</b>                   | dB   | -    | 7.5   | 10   | -    |
| Passband width, <b>BW<sub>3</sub></b>       | MHz  | 4.5  | 7.3   | -    | -    |
| Amplitude Ripple in $F_c \pm 1\text{MHz}$   | dB   | -    | 0.8   | 1    | -    |
| Group delay ripple in $F_c \pm 1\text{MHz}$ | nS   | -    | 70    | 100  | -    |
| Phase Linearity in $F_c \pm 1\text{MHz}$    | deg  |      | 1.7   | 4    |      |
| Attenuation:(Reference level from Min IL)   |      |      |       |      |      |
| 10 MHz to 370 MHz                           | dB   | 35   | 38    | -    | -    |
| 370 MHz to 387 MHz                          | dB   | 30   | 33    | -    | -    |
| 413 MHz to 430 MHz                          | dB   | 30   | 32    | -    | -    |
| 430 MHz to 600 MHz                          | dB   | 35   | 40    | -    | -    |

### C. MEASUREMENT CIRCUIT:



Input L1=18nH, C1=12pF  
Output L2=18nH, C2=15pF

## D. Frequency Characteristics :

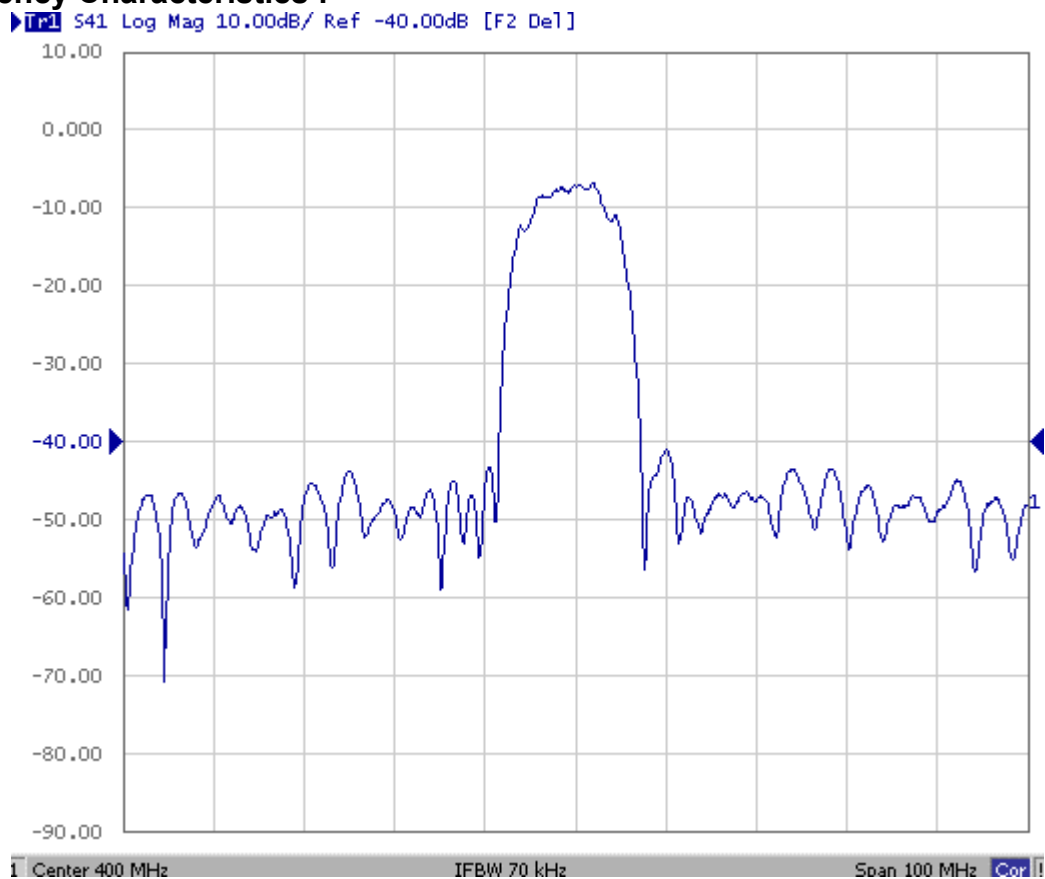


Fig-1 S21 Response Horizontal: 10MHz/Div

Vertical: 10dB/Div

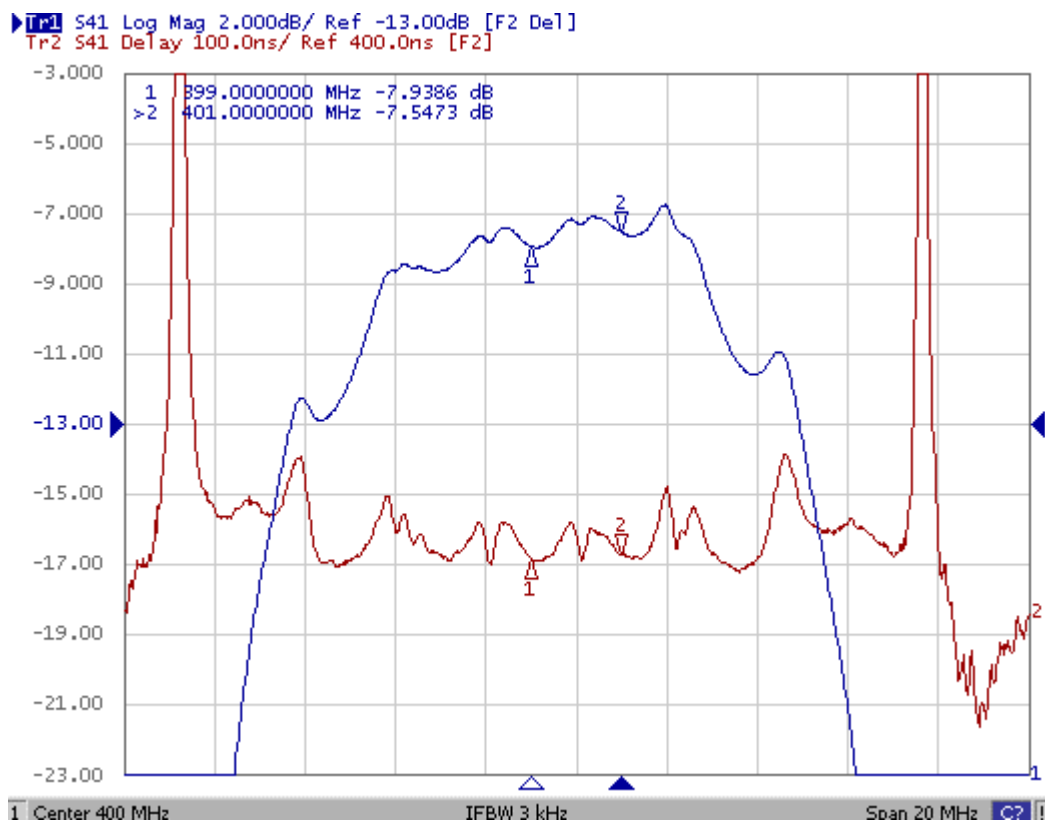
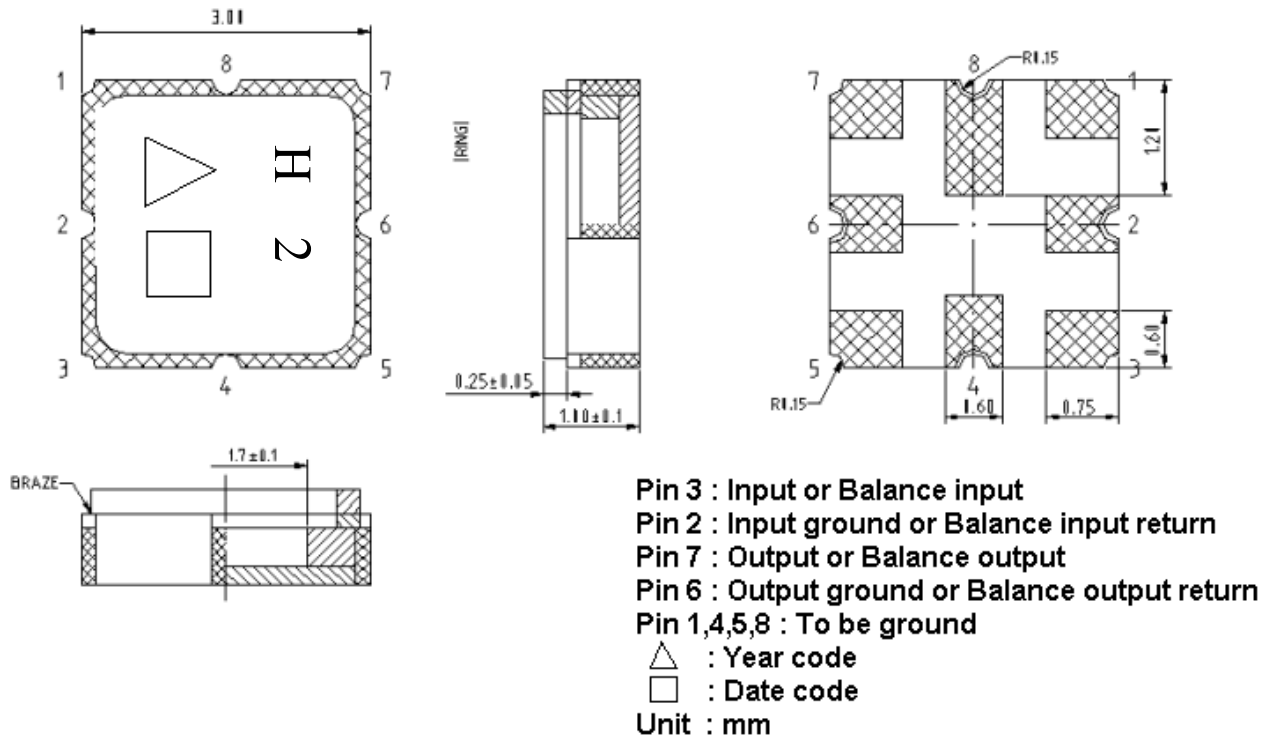


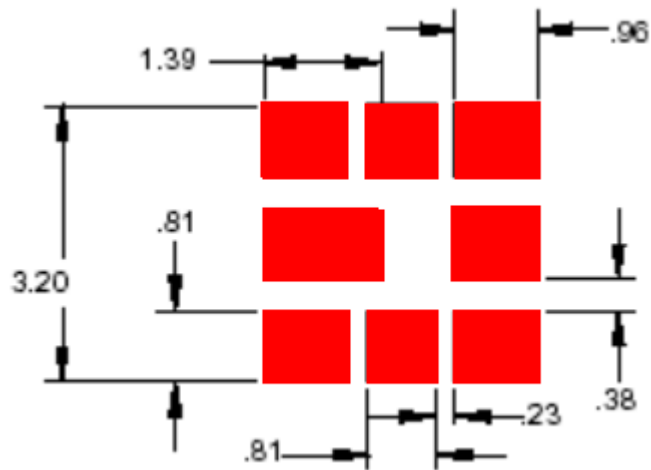
Fig-2 Horizontal: 2M Hz/Div Vertical: 2dB/Div

Vertical: 100ns/Div

## E. Outline Drawing :

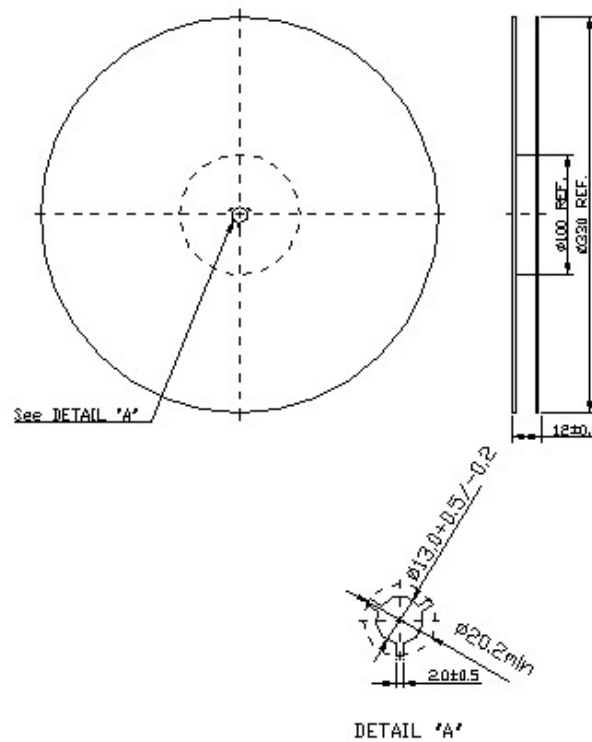


## F. PCB Footprint



## G. Packing:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION

