



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW IF Filter 453MHz (SMD 3.8×3.8 mm)

TST Parts No.: TB0205A

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

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

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

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

Date: \_\_\_\_\_ 6,25 ,2004



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SAW Filter 453MHz (SMD 3.8×3.8 mm)

MODEL NO.: TB0205A

REV. NO.:1

## A. MAXIMUM RATING:

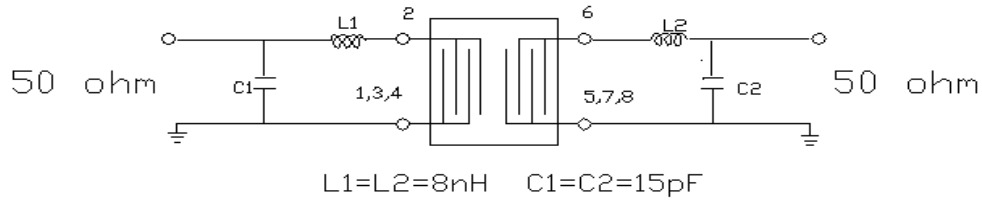
1. Input Power Level: 15 dBm
2. Operating Temperature: -40°C to 85°C
3. Storage Temperature : -40°C to 85°C
- 4 DC Voltage : 0V

RoHS Compliant  
Lead free  
Lead-free soldering

## B. ELECTRICAL CHARACTERISTICS:

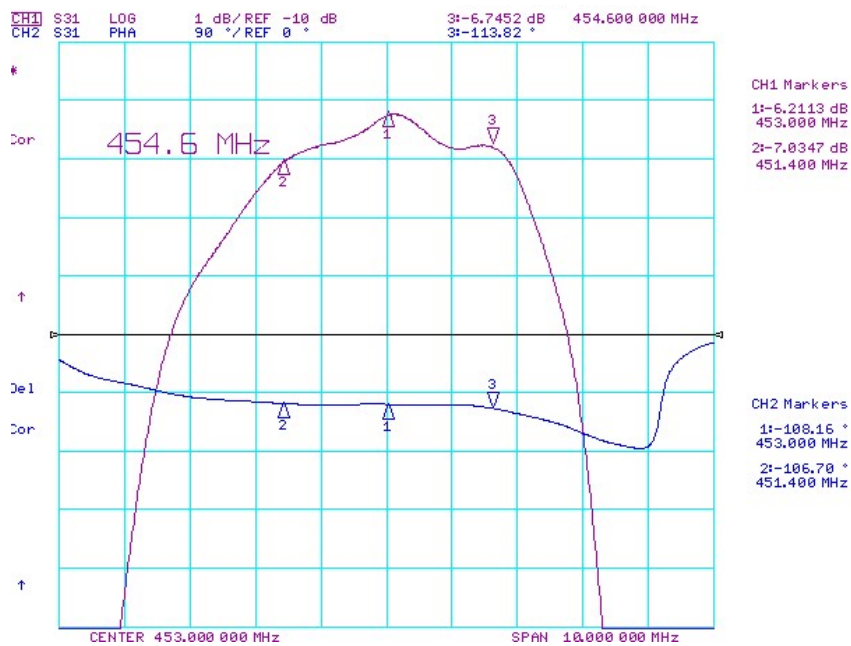
| Characteristics                                    | Value |       |       |
|--|-------|-------|-------|
|  | Min.  | Typ.  | Max.  |
| Center frequency $F_C$ (MHz)                       | 452.3 | 452.7 | 453.7 |
| 3dB Bandwidth (MHz)                                | 5     | 5.6   | -     |
| 10dB Bandwidth (MHz)                               | -     | 7.5   | 8.6   |
| 20dB Bandwidth (MHz)                               | -     | 8.8   | 16    |
| Minimum insertion loss. (dB)                       | -     | 6     | 7     |
| Ripple at 451.4~454.6MHz (P-P dB)                  | -     | 0.7   | 1     |
| Phase linearity at 451.4 MHz~454.6 MHz (P-P°)      | -     | 3.5   | 6     |
| Group delay ripple at 451.4 MHz~454.6 MHz (P-P nS) | -     | 50    | 100   |
| Absolute Group Delay at 451.4 MHz~454.6 MHz (nS)   | -     | 300   | 1000  |
| Return Loss (Input and Output) (dB)                | 8     | 9     | -     |
| Triple Transit Suppression (dB)                    | 35    | 40    | -     |
| Attenuation:( Reference level from Minimum IL)     |       |       |       |
| (1) 415MHz~437MHz (dB)                             | 30    | 40    |       |
| (2) 437MHz~447MHz (dB)                             | 20    | 30    |       |
| (3) 459MHz~469MHz (dB)                             | 20    | 25    |       |
| (4) 469MHz~485MHz (dB)                             | 30    | 35    |       |

**C. MEASUREMENT CIRCUIT:**

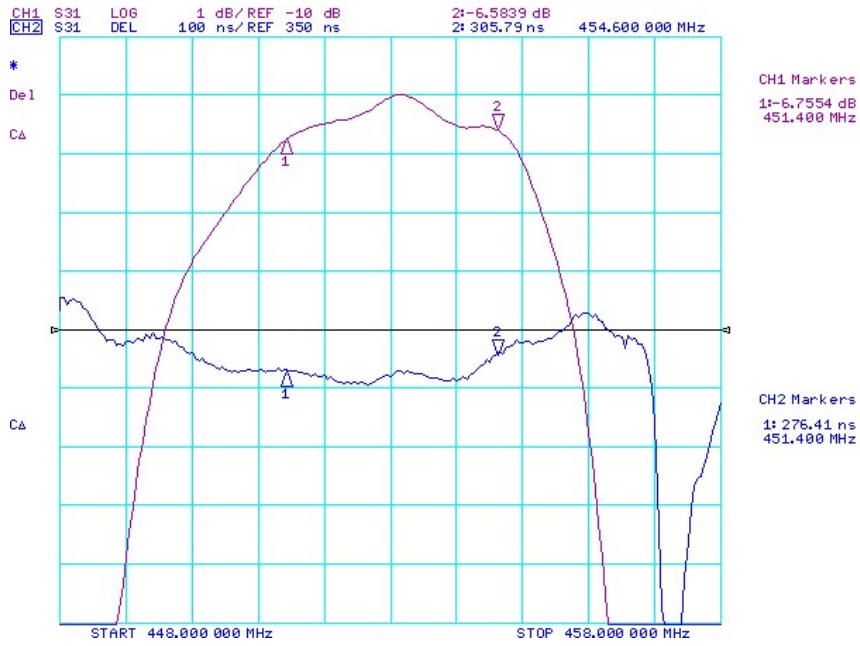


**D. FREQUENCY CHARACTERISTICS:**

(1) Passband of Response:

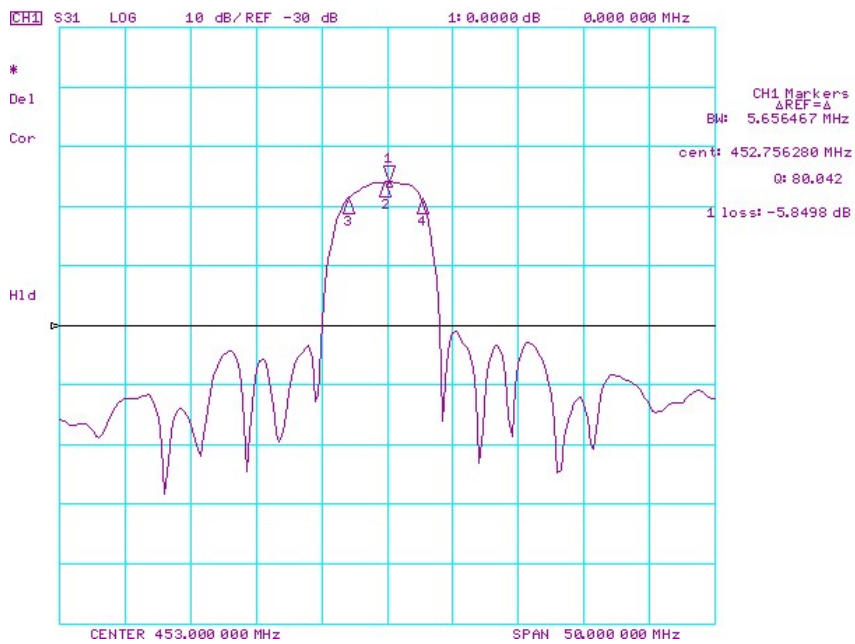


Phase linearity, Horizontal: 1 MHz/Div  
 Vertical 1: 1 dB/Div    Vertical 2 : 90 degree/Div



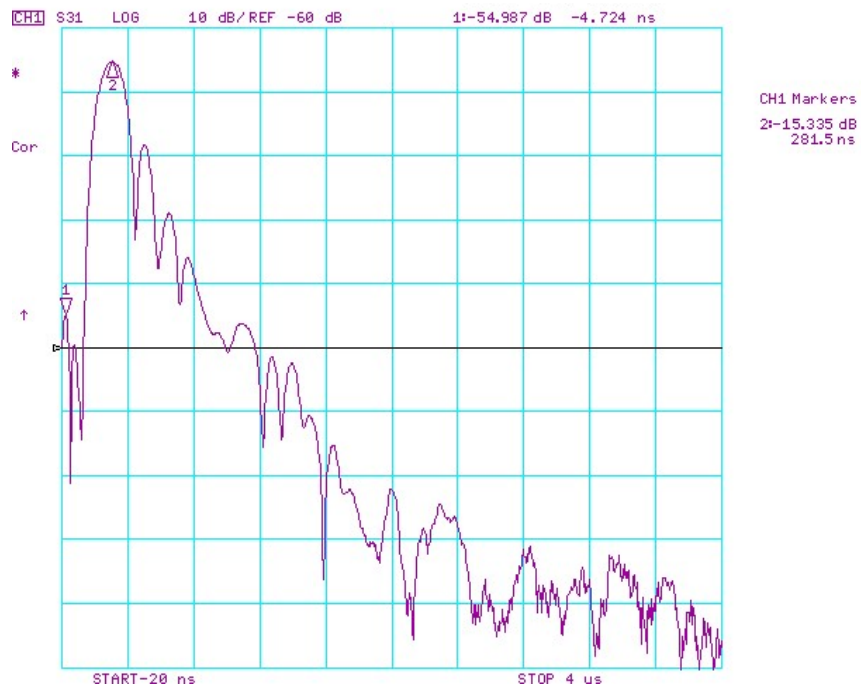
Group Delay and Ripple, Horizontal:1 MHz/Div  
 Vertical 1: 1 dB/Div Vertical 2: 100 ns/Div

(2) wide band Response:

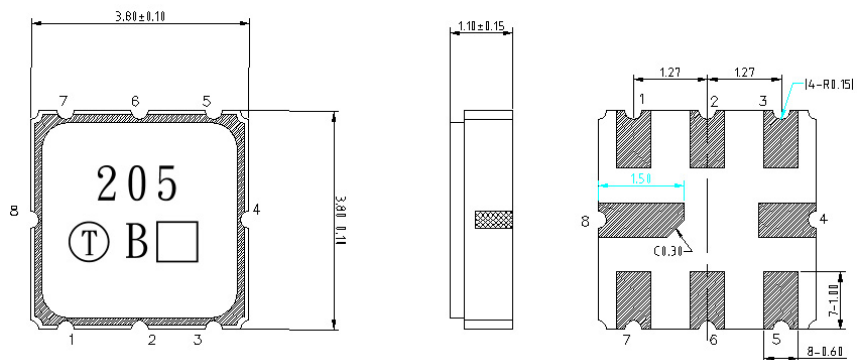


Horizontal: 5MHz/Div  
 Vertical: 10dB/Div  
 Reference: -30dB

### (3). Triple Transit Suppression

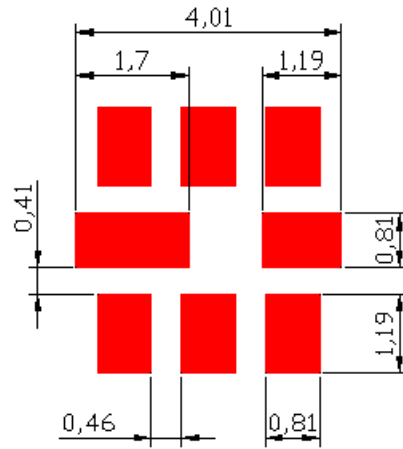


### E. OUTLINE DRAWING:



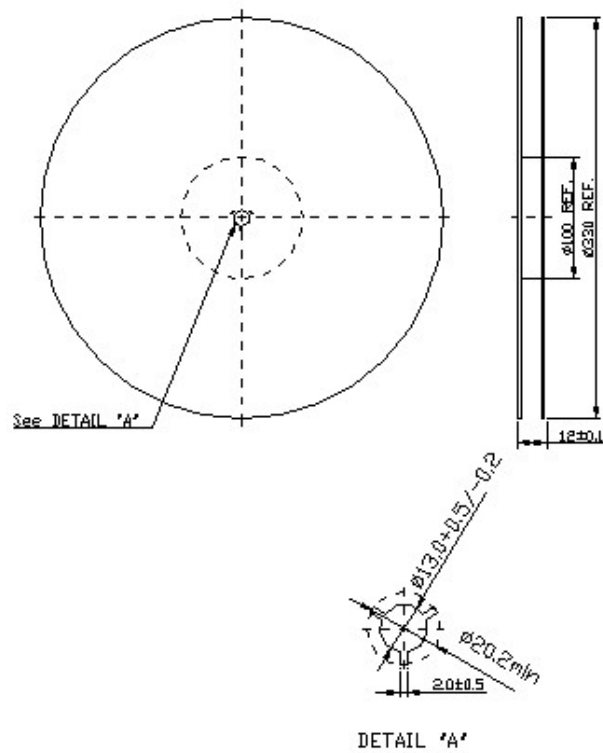
Pin 2 : RF input  
 Pin 6 : RF output  
 Pin 1, 3, 4, 5, 7, 8 : To be Ground  
 □ : Date code  
 Unit : mm

## F. PCB FOOTPRINT



## G. PACKING:

### 1. REEL DIMENSION



2.TAPE DIMENSION

