



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: IF SAW Filter 140 MHz (SMD 13.3mmX6.5mm)

TST Parts No.:TB0541A

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

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

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

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

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

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

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

Date:\_\_\_\_\_ 2007/7/20



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## IF SAW Filter 140 MHz SMD 13.3mmX6.5mm

MODEL NO.: TB0541A

Rev. No.1

### A. MAXIMUM RATING:

1. Operating Temperature: -40 °C ~ +85 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input Power Level: 10dBm

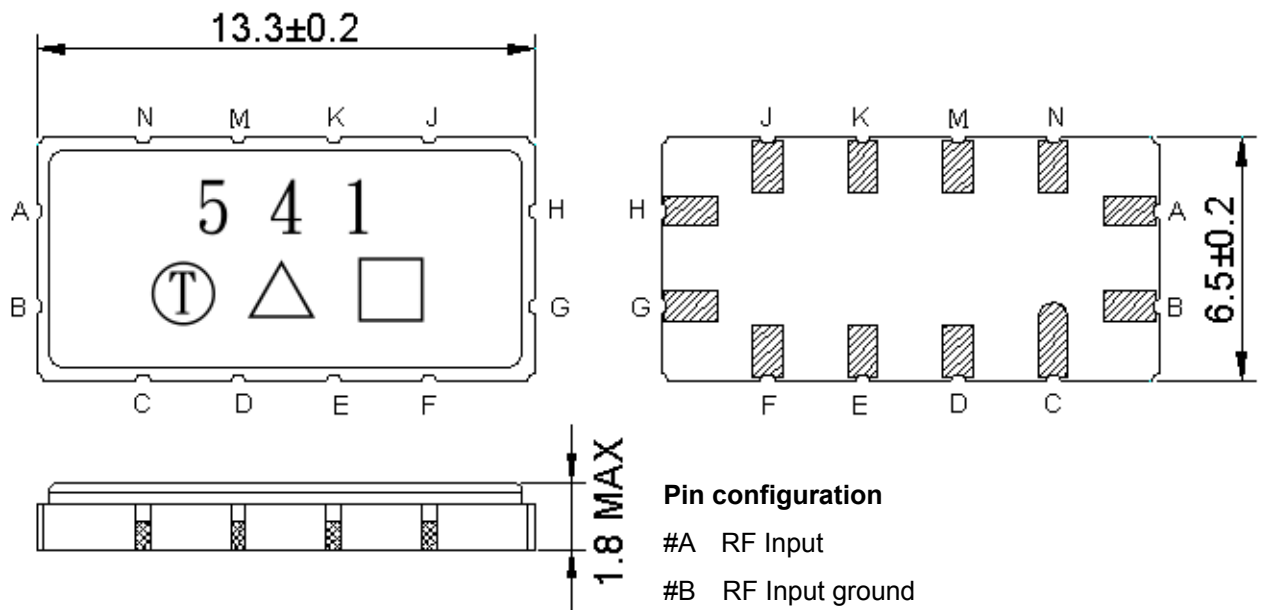
RoHS Compliant  
Lead free  
Lead-free soldering

### B. Characteristics :

1. Ambient Temperature: 25 °

| Characteristics                                       | Value |       |       | Note. |
|-------------------------------------------------------|-------|-------|-------|-------|
|                                                       | Min.  |       | Max.  |       |
| Center frequency $F_c$ MHz                            | 139.6 | 140   | 140.4 | -     |
| Maximum Insertion loss I.L. dB                        | -     | 6.8   | 7.5   | -     |
| 1dB Bandwidth MHz                                     | 5.80  | 5.95  | -     | -     |
| 3dB Bandwidth MHz                                     | 6.85  | 6.97  | -     | -     |
| 40dB Bandwidth MHz                                    | -     | 10.40 | 11.10 | -     |
| Passband Ripple ( $F_c \pm 2.4\text{MHz}$ ) MHz       | -     | 0.40  | 1.00  | -     |
| Phase Linearity ( $F_c \pm 2.4\text{MHz}$ ) (P-P) deg | -     | 3.6   | 14    |       |
| Group Delay Ripple ( $F_c \pm 2.4\text{MHz}$ ) nS     | -     | 60    | 200   | -     |
| Group Delay at $F_c$ uS                               | -     | 0.94  | -     | -     |
| Temp Coefficient ppm/°C                               | -     | -18   | -     | -     |

# C.OUTLINE DRAWING:



## Pin configuration

#A RF Input

#B RF Input ground

#G RF Output

#H RF Output ground

#C,D,E,F,J,K,M,N 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>     |

## D. Frequency Characteristics :

### 1. S21 Response

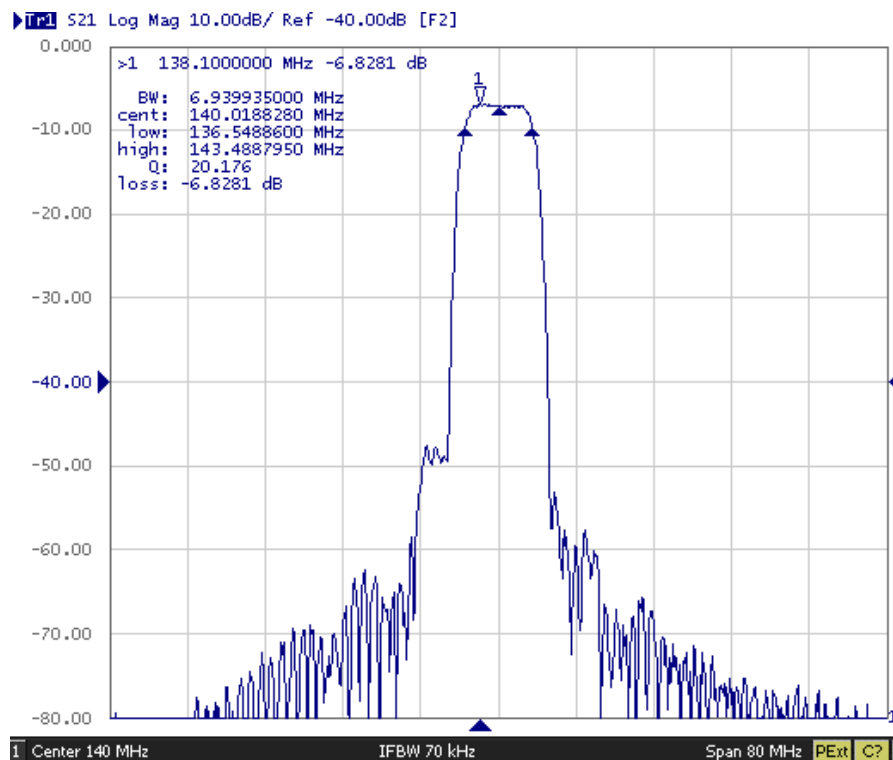


Fig1. Horizontal: 8MHz/Div Vertical: 10dB/Div

### 2. Pass band Ripple and Group Delay Ripple

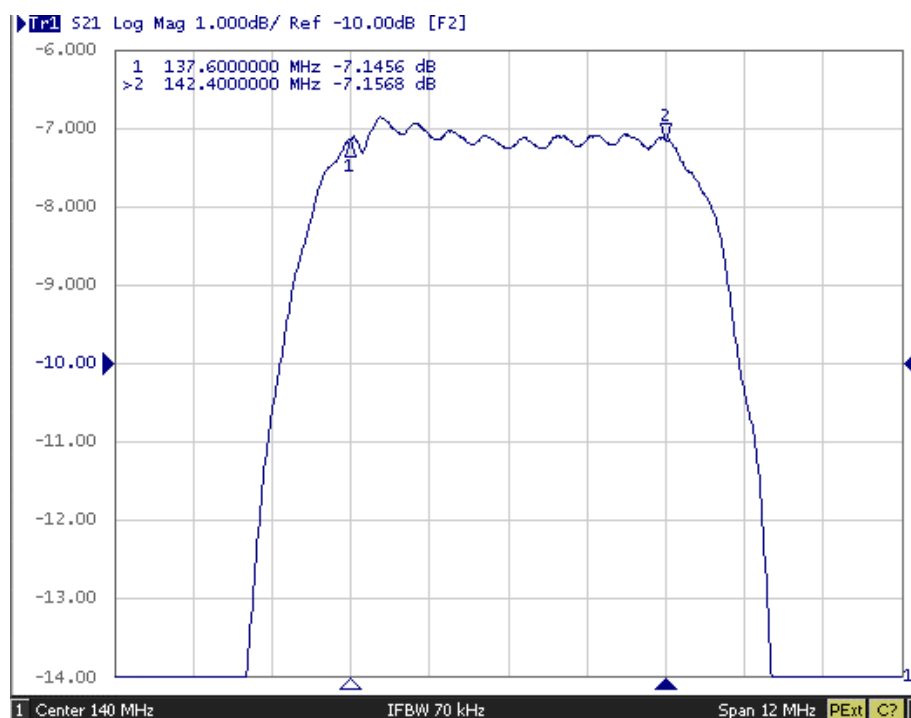


Fig2. Horizontal: 1.2MHz/Div; Vertical: 1dB/Div,

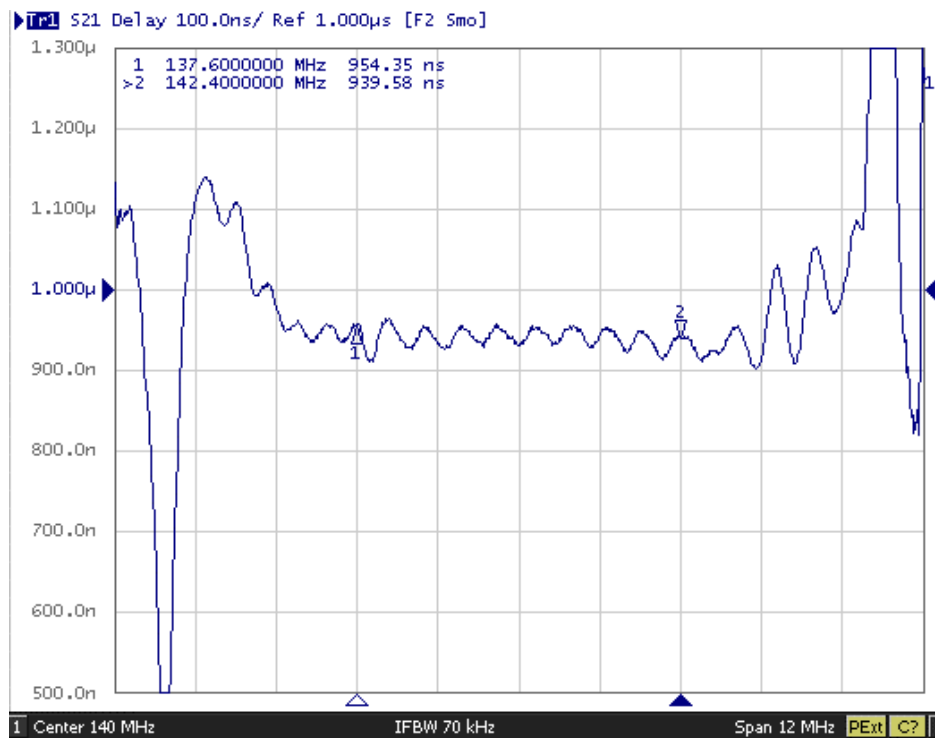


Fig3. Horizontal: 1.2MHz/Div; Vertical: 100nS/Div,

## E. TEST FIXTURE :

