



# TAI-SAW TECHNOLOGY CO., LTD.

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

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## Product Specifications Approval Sheet

Product Name: 44MHz IF SAW Filter (BW=9.24 MHz)

TST Parts No.: TB0418A

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

Customer signature required

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

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

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

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

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

Approval by: \_\_\_\_\_ Andy Yu 

Date: \_\_\_\_\_ 2018/12/10

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes



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SAW Filter 44MHz (SMD 13.3×6.5 mm)

Model No.: TB0418A

Rev. No.:2.0

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. Operating Temperature: -30°C to +80°C
3. Storage Temperature: -40°C to +85°C
4. Moisture Sensitivity Level: Level 1 (**MSL 1**)

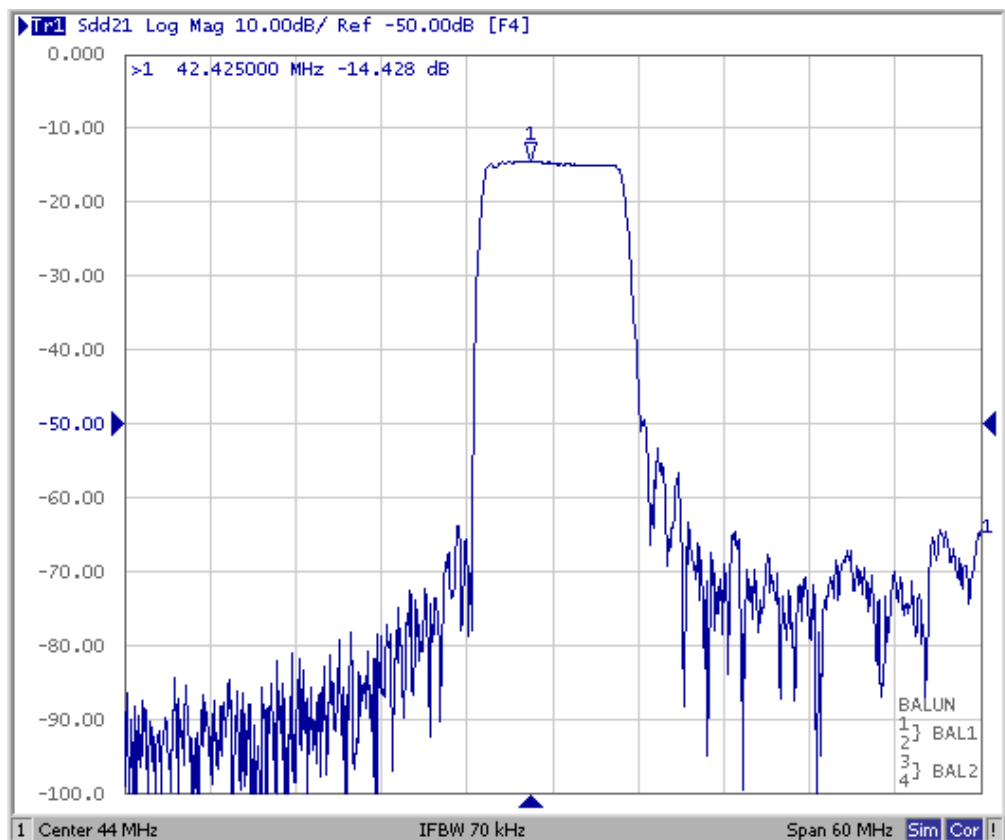
RoHS Compliant  
Lead free  
Lead-free soldering

## B. ELECTRICAL CHARACTERISTICS :

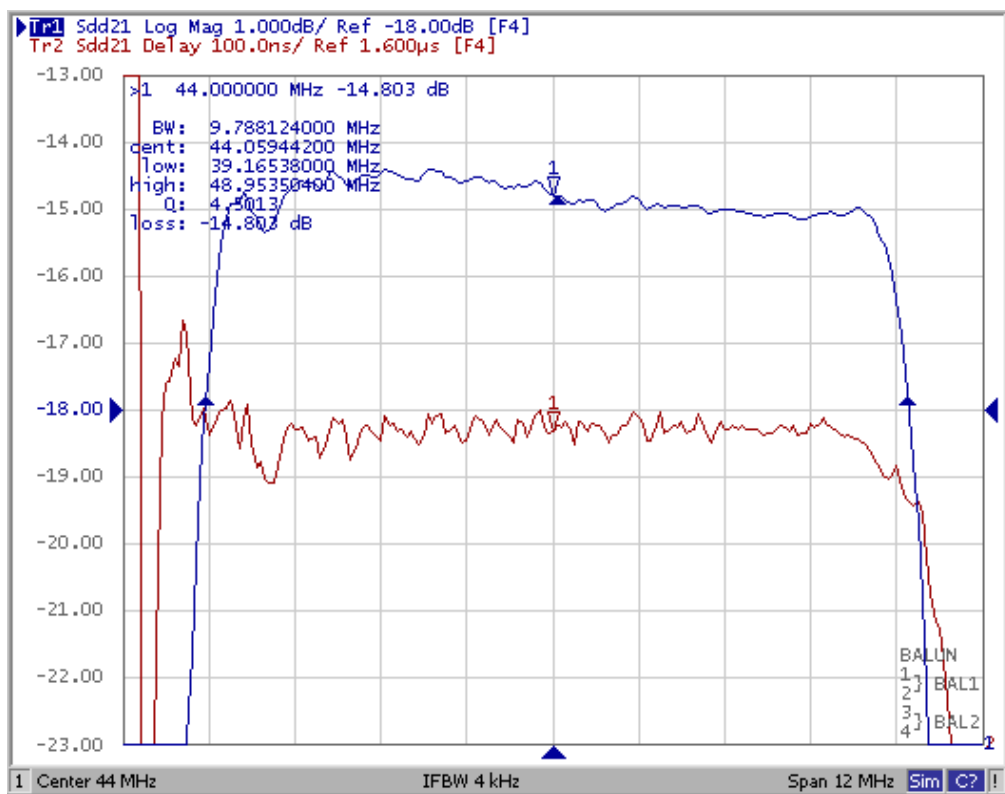
| Item                                              | Unit  | Min. | Type. | Max. |
|---------------------------------------------------|-------|------|-------|------|
| Center frequency, <b>F<sub>c</sub></b>            | MHz   | -    | 44    | -    |
| Insertion Loss, <b>IL</b>                         | dB    | -    | 14.5  | 18   |
| 1 dB Bandwidth                                    | MHz   | -    | 9.4   | -    |
| 3 dB Bandwidth                                    | MHz   | 9.24 | 9.8   |      |
| Pass band Ripple <b>F<sub>c</sub>±4.2MHz</b>      | dB    | -    | 0.8   | 1.2  |
| Relative Attenuation <b>F<sub>c</sub>±5.76MHz</b> | dB    | 15   | 24    |      |
| Relative Attenuation <b>F<sub>c</sub>±10.0MHz</b> | dB    | 40   | 50    |      |
| Relative Attenuation<br><b>25.0MHz to 34.0MHz</b> | dB    | 42.5 | 58    |      |
| Relative Attenuation<br><b>54MHz to 61.5MHz</b>   | dB    | 42.5 | 50    |      |
| Temp Coefficient                                  | ppm/K |      | -94   |      |

### C. FREQUENCY CHARACTERISTICS:

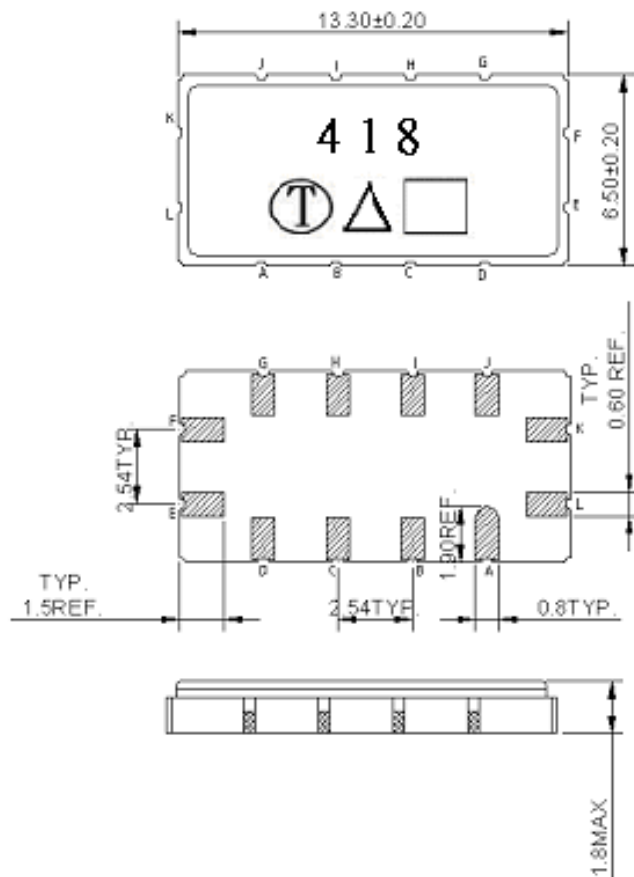
(1) wide band Response:(span 60MHz)



(2) Pass band Response and Group Delay Variation: (span 12MHz)



## D. OUTLINE DRAWING:



Pin K=L: RF input

Pin E=F: RF output

Pin A, B, C, D, G, H, I, J: To be Ground

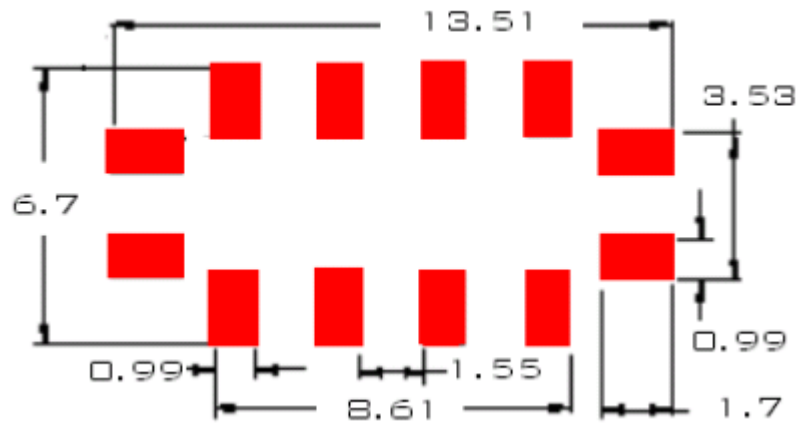
□ : Week Code (Follow the table from planner each year)

Unit : mm

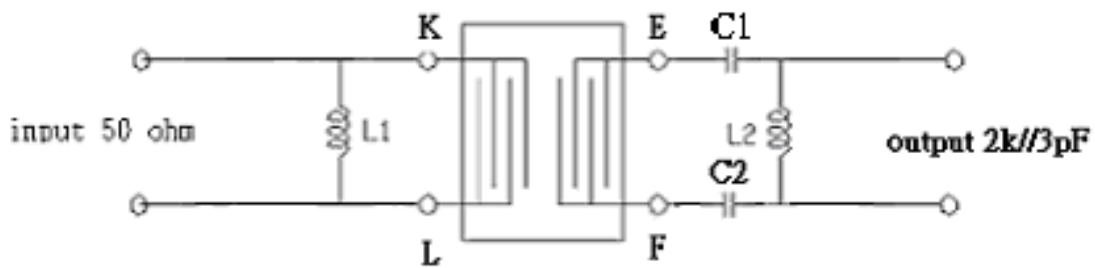
△ : Product / Year Code

| Year         | 2013<br>2017 | 2014<br>2018 | 2015<br>2019 | 2016<br>2020 |
|--------------|--------------|--------------|--------------|--------------|
| Product Code | B            | b            | <u>B</u>     | <u>b</u>     |

### E. PCB FOOTPRINT:



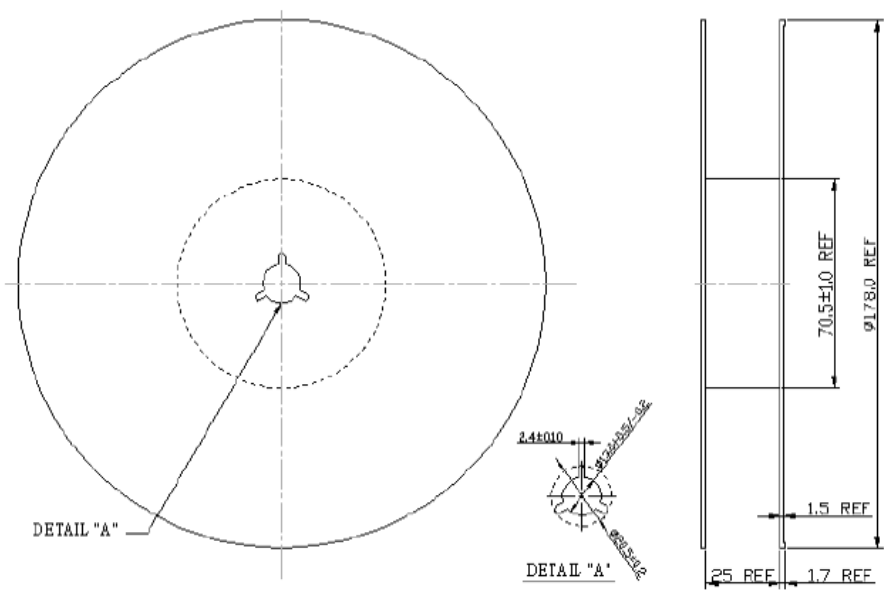
### F. MATCHING CIRCUIT:



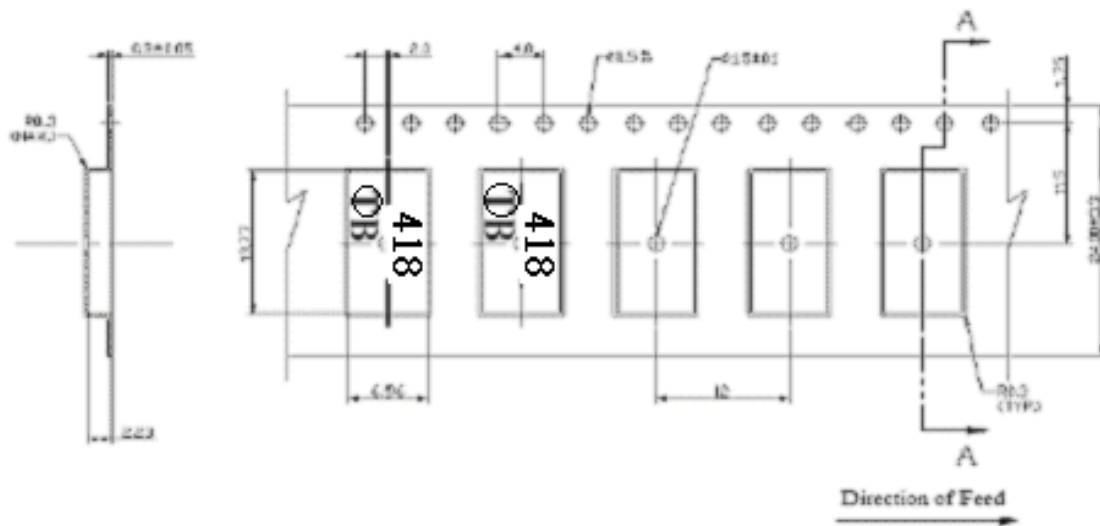
$$L1=180\text{nH}, L2=820\text{nH}, C1=C2=47\text{pF}$$

**G. PACKING:**

(1). REEL DIMENSION:



(2). TYPE DIMENSION:



**H. RECOMMENDED REFLOW PROFILE:**

