



# TAI-SAW TECHNOLOGY CO., LTD.

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

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## Approval Sheet For Product Specification

Product Name: SAW IF Filter 154.1MHz

TST Parts No.: TB0415A (SMD 9.1mm x7.1 mm )

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

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ Andy Yu *Andy Yu*

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

Date: \_\_\_\_\_ 06/04 /2009

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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## IF SAW Filter 154.1MHz(BW=10MHz) SMD 9.1X7.1mm

MODEL NO.: TB0415A

REV. NO.1

### A. MAXIMUM RATING:

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

RoHS Compliant  
Lead free  
Lead-free soldering

### B. Characteristics :

1. Ambient Temperature: 25 °C

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency $F_C$ MHz	-	154.1	-	-
Minimum Insertion loss I.L. dB	-	15.3	18.0	-
1 dB Bandwidth MHz	10.0	11.9	-	-
3 dB Bandwidth MHz	12.0	12.8	-	-
20 dB Bandwidth MHz	-	14.9	15.7	-
40 dB Bandwidth MHz	-	16.4	16.7	-
Group Delay Ripple ( $F_C \pm 5.0\text{MHz}$ ) nsec	-	38	200	-
Passband Ripple ( $F_C \pm 5.0\text{MHz}$ ) dB	-	0.4	1.0	-
Relative Rejection (Reference to Minimum Insertion loss)				
1) 10MHz~140MHz dB	35	41	-	-
2) 230MHz~425MHz dB	40	43	-	-
3) 425MHz~500MHz dB	30	41	-	-
4) 500MHz~900MHz dB	40	48	-	-
Temp Coefficient ppm/° C	-	23	-	-

## C. Frequency Characteristics :

### 1. S21 Response

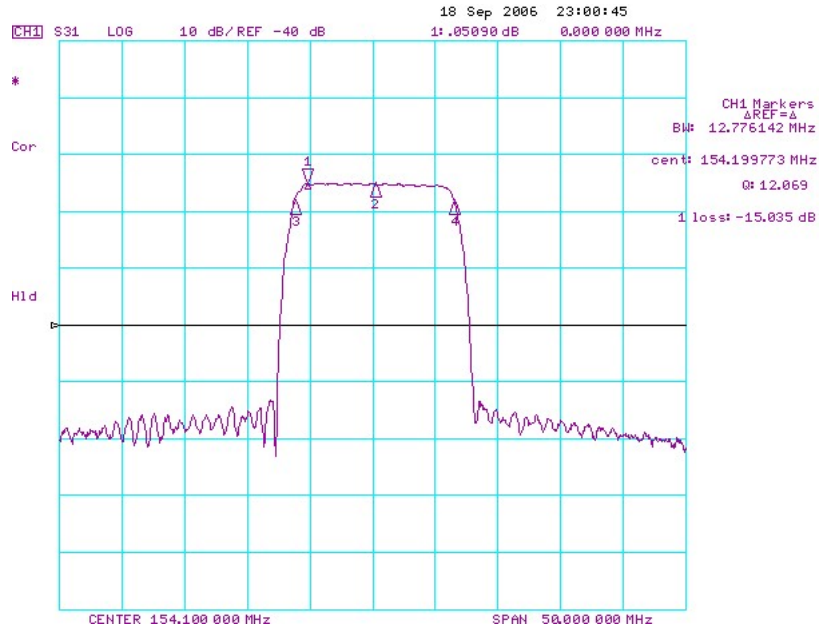


Fig1. Horizontal: 50MHz/Div Vertical: 10dB/Div

### 2. Passband Response

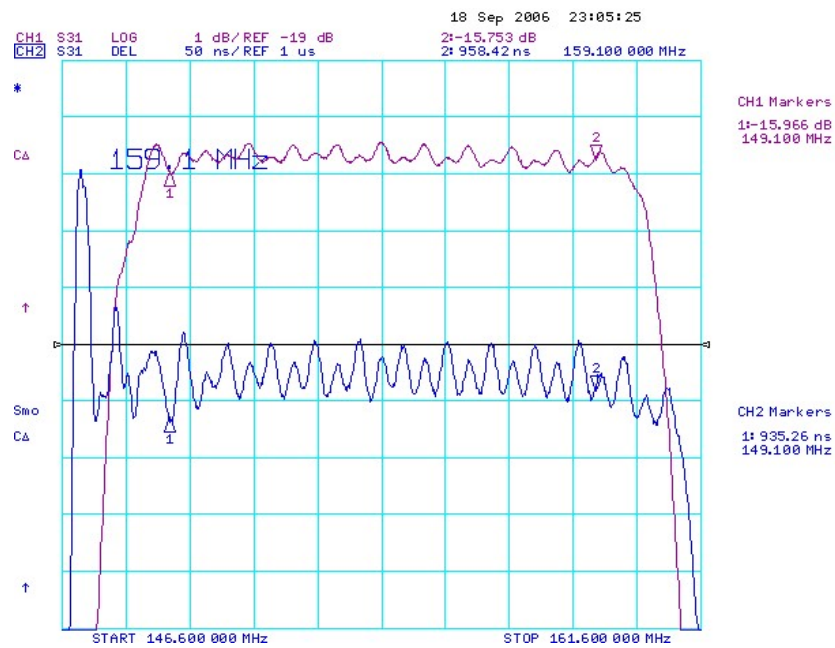
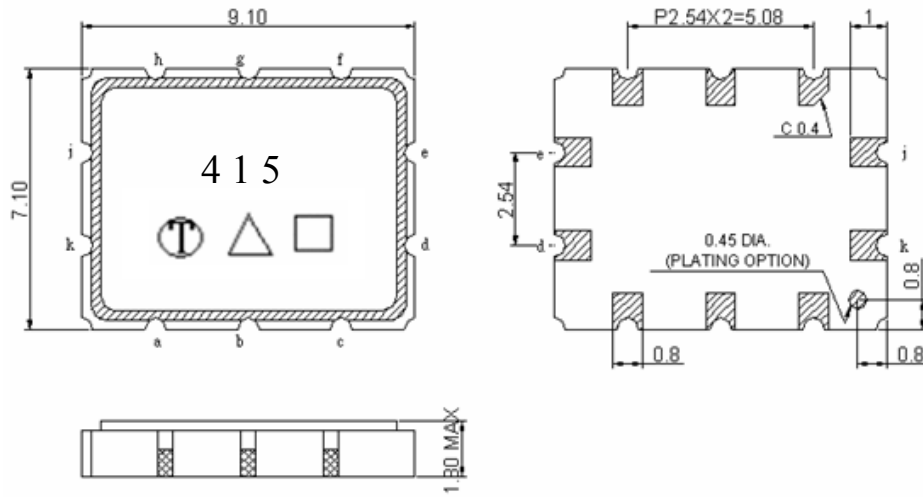


Fig2. Horizontal: 1.5MHz/Div Vertical 1: 1dB/Div  
 Vertical 2: 50nS/Div

### D. Outline Drawing:



Pin h: RF Input

Pin c: RF Output

Pin a, b, d, e, f, g, j, k: To be ground

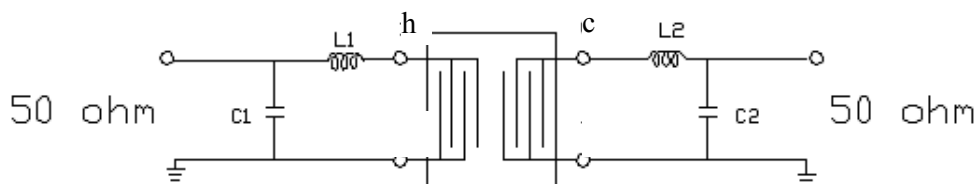
□ : Week Code (Follow the table from planner each year)

Unit : mm (week01, 02, 03...52 =>A, B, C...z)

△ : Product / Year Code

Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

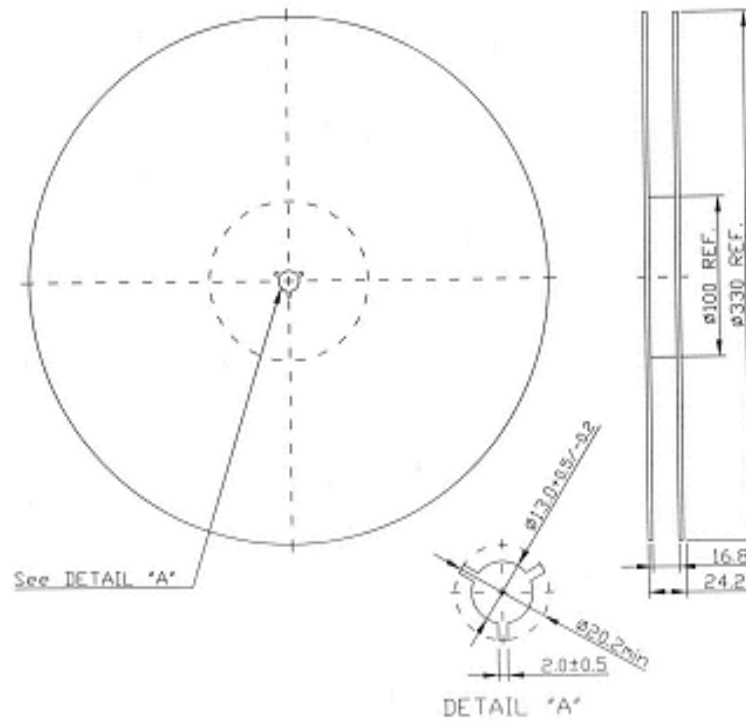
### D. Matching Circuit:



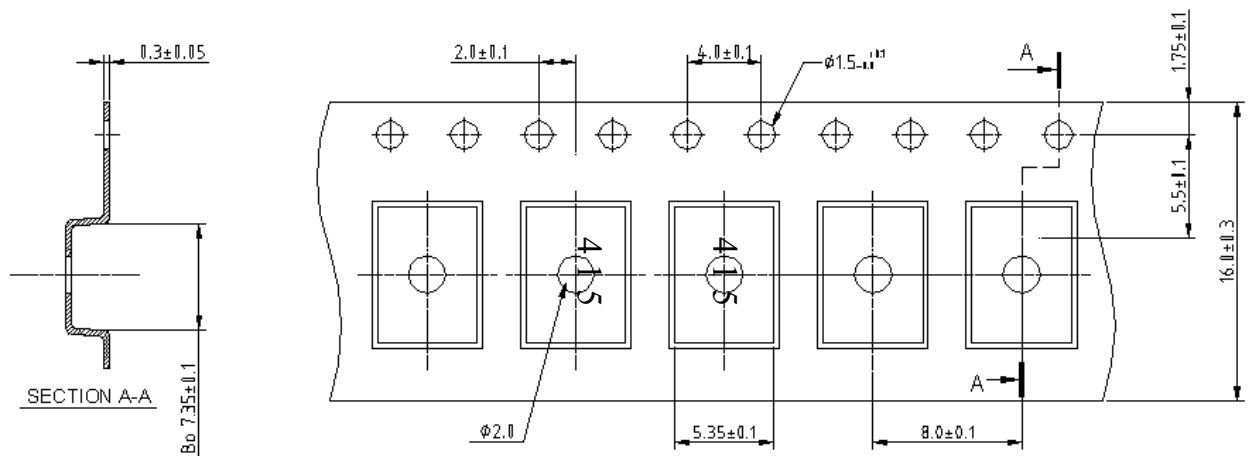
$$L1=47\text{nH}, C1=44\text{pF}, L2=56\text{nH}, C2=44\text{pF}$$

## G. Packing:

### 1. Reel Dimension



### 2. Tape Dimension



## H. Recommended Reflow Profile:

