



# 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: 165.74 MHz 27MHz BW SMD 13.3 x 6.5 mm SAW IF Filter

TST Parts No.: TB1014A

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

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

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

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

Date: \_\_\_\_\_ 11 / 08 / 2011

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 165.74MHz 27MHz BW (SMD 13.3×6.5 mm)

MODEL NO.: TB1014A

REV. NO.1

## A. MAXIMUM RATING:

1. Operating temperature range: -30°C to 65°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device

## B. Characteristics :

Item	Unit	Min.	Type.	Max.
Center frequency, <b>F<sub>c</sub></b>	MHz	-	165.74	-
Insertion Loss, <b>IL</b>	dB	-	11.2	16.0
1dB Band Width	MHz	27	30.6	
Amplitude Ripple <b>F<sub>c</sub>±12.5MHz</b>	dB	-	0.4	1.0
Attenuation (Reference level from typical Insertion loss )				
50 ~ 143 MHz	dB	40	48	
187MHz ~ 800 MHz	dB	40	45	
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

### C. Frequency Characteristics :

(1) Narrow band Response:(span 200MHz)

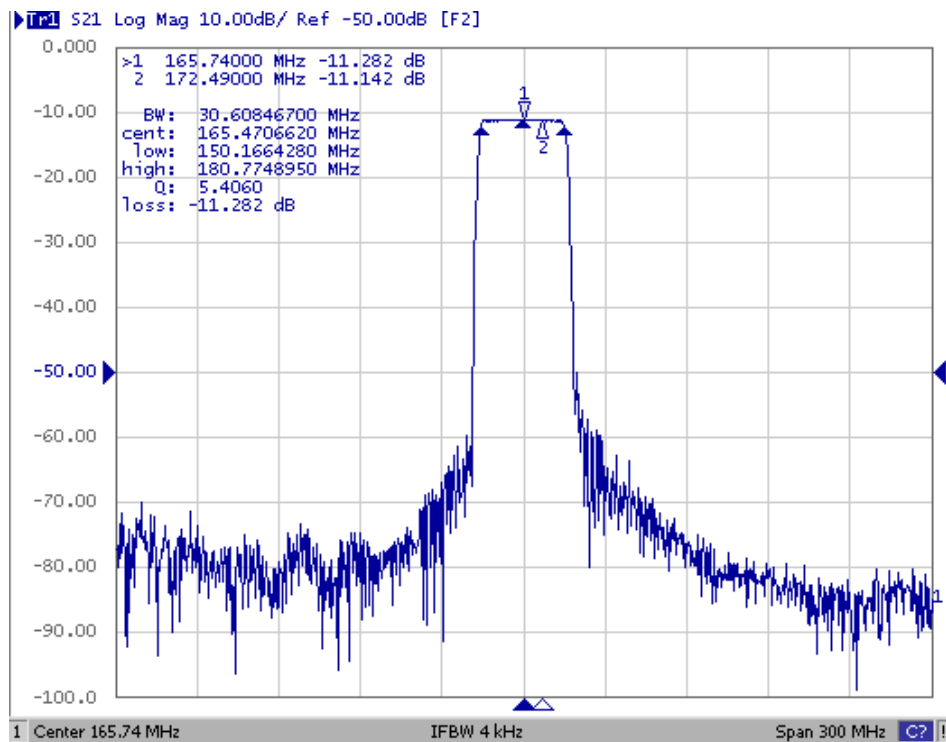


Fig1. Horizontal: 30MHz/Div Vertical: 10dB/Div

(2) Pass band Response and Group Time Delay response:

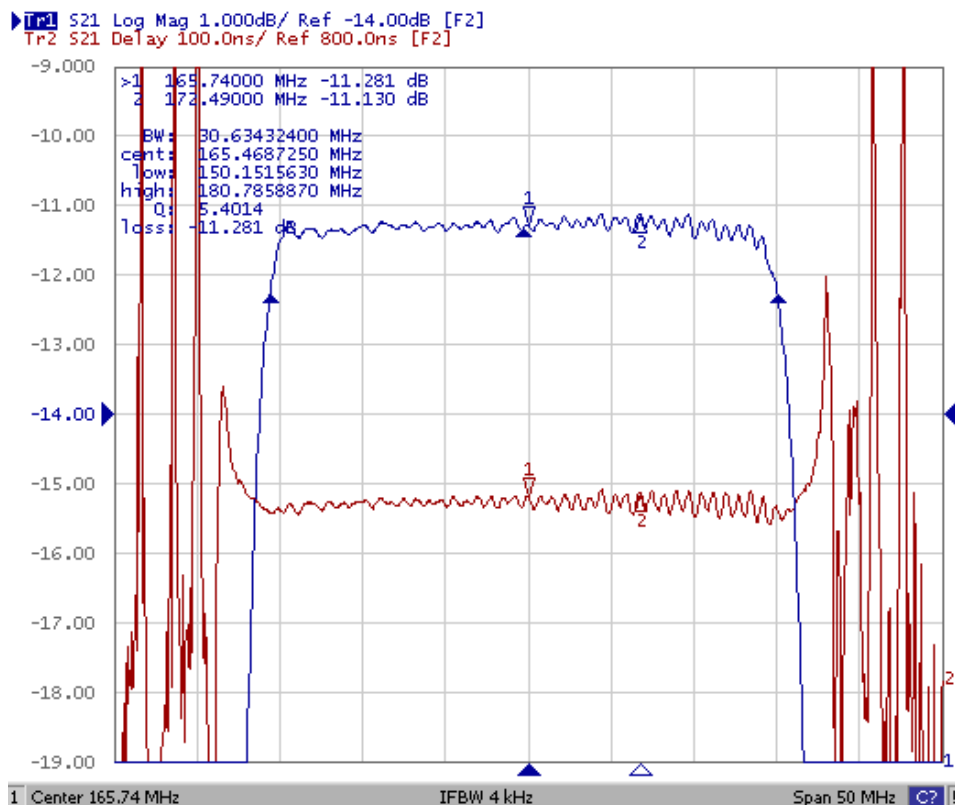


Fig2. Horizontal: 5MHz/Div Vertical: 1dB/Div  
Vertical: 100ns/Div

(3) Wide band Response:(span 800MHz)

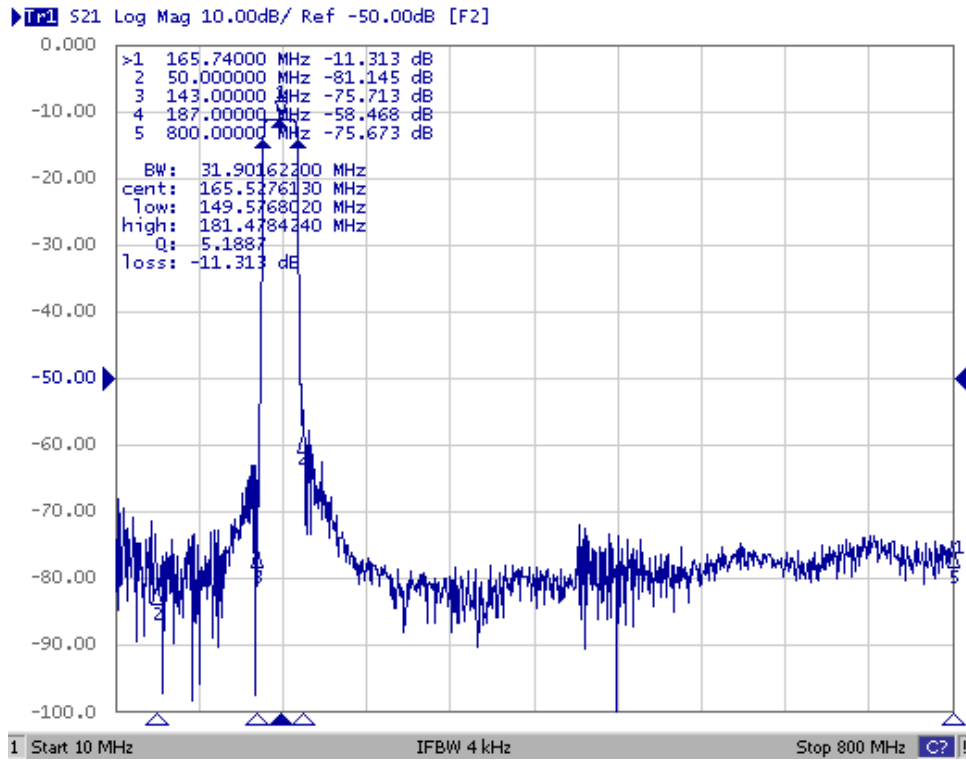
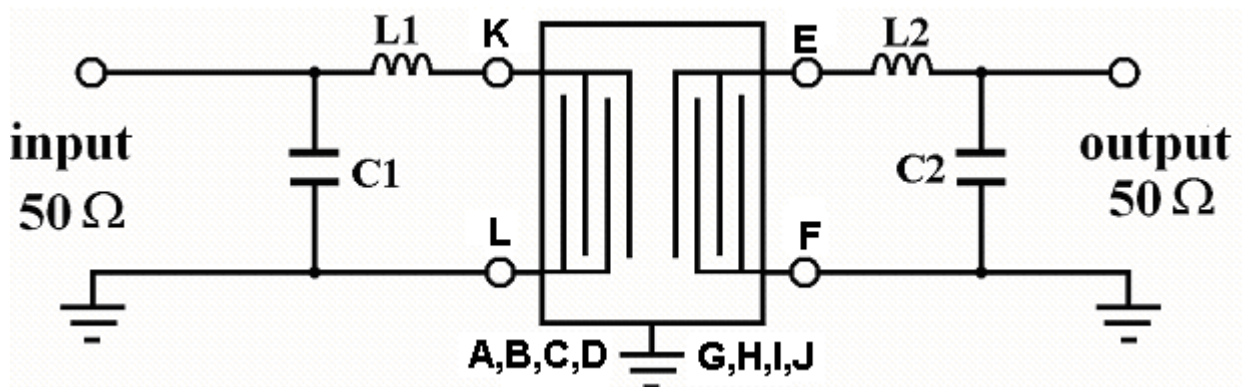


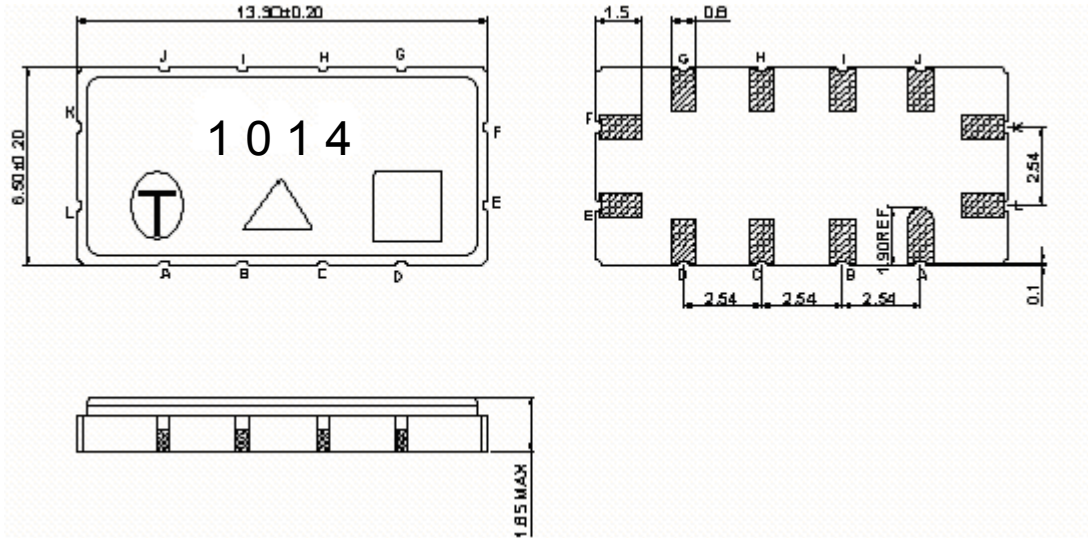
Fig3. Horizontal: 80MHz/Div Vertical: 10dB/Div

D. Matching Circuit:



L1=24nH C1=39pF L2=24nH C2=36pF

### E. Outline Drawing:



#K : Input

#L : Input Ground

#E : Output

#F : Output Ground

#A,B,C,D,G,H,I,J : Ground

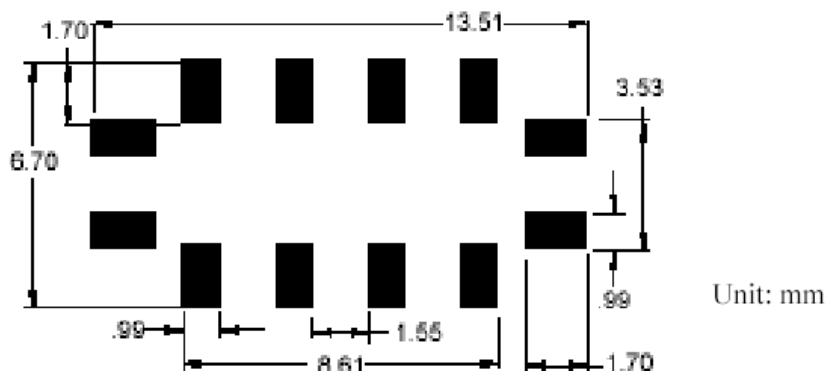
□ : Week Code (Follow the table from planner each year)

Unit: mm

△ : Product / Year Code

Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	B	b	<u>B</u>	<u>b</u>

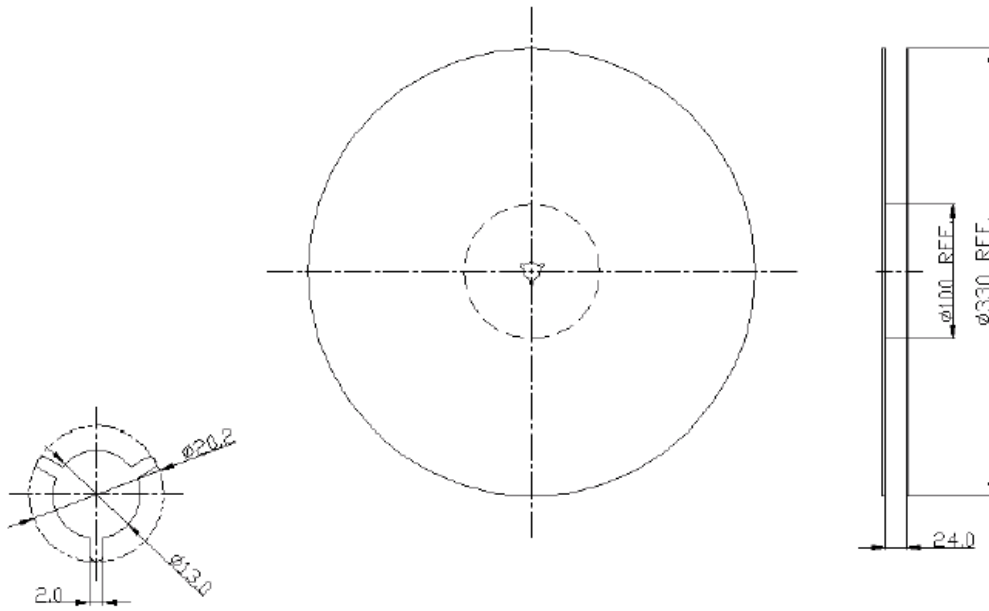
### F. PCB Footprint:



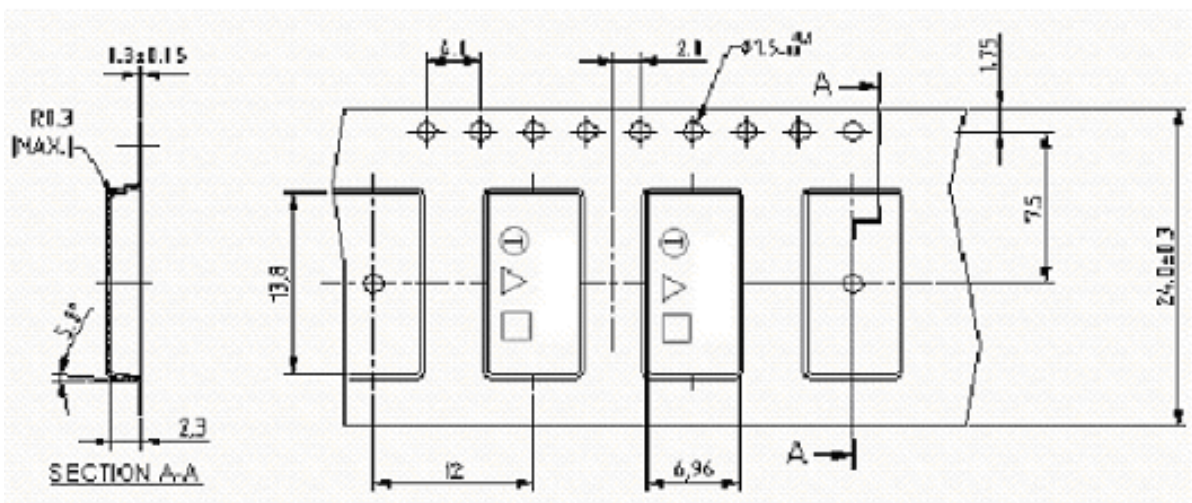
Unit: mm

G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



## H. RECOMMENDED REFLOW PROFILE :

