



# TAI-SAW TECHNOLOGY CO., LTD.

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

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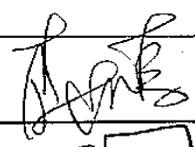
## Product Specifications Approval Sheet

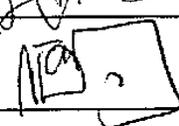
Product Name: 169.04 MHz 10.8MHz BW SMD 13.3 x 6.5 mm SAW IF Filter

TST Parts No.: TB1006A

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

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

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

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

Date: \_\_\_\_\_ 08 / 11 / 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 169.04MHz 10.8MHz BW (SMD 13.3×6.5 mm)

MODEL NO.: TB1006A

REV. NO.1

## A. MAXIMUM RATING:

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



Electrostatic Sensitive Device

## B. Characteristics :

Item	Unit	Min.	Type.	Max.
Center frequency, Fc	MHz	-	169.04	-
Insertion Loss, IL	dB	-	7.2	10.0
-1dB bandwidth	MHz	10.8	12	-
-3dB bandwidth	MHz	-	13.4	-
-40dB bandwidth	MHz	-	17.7	18.3
Passband Ripple Fc+/- 4.85MHz	dB	-	0.4	1.0
Group Delay variation Fc+/- 4.85MHz	nsec	-	45	80
Absolute Delay	unec	-	0.68	-
Ultimate	dB	40	60	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

### C. Frequency Characteristics :

(1) Wide band Response:(span 200MHz) (Typical performance at 25<sup>0</sup>C)

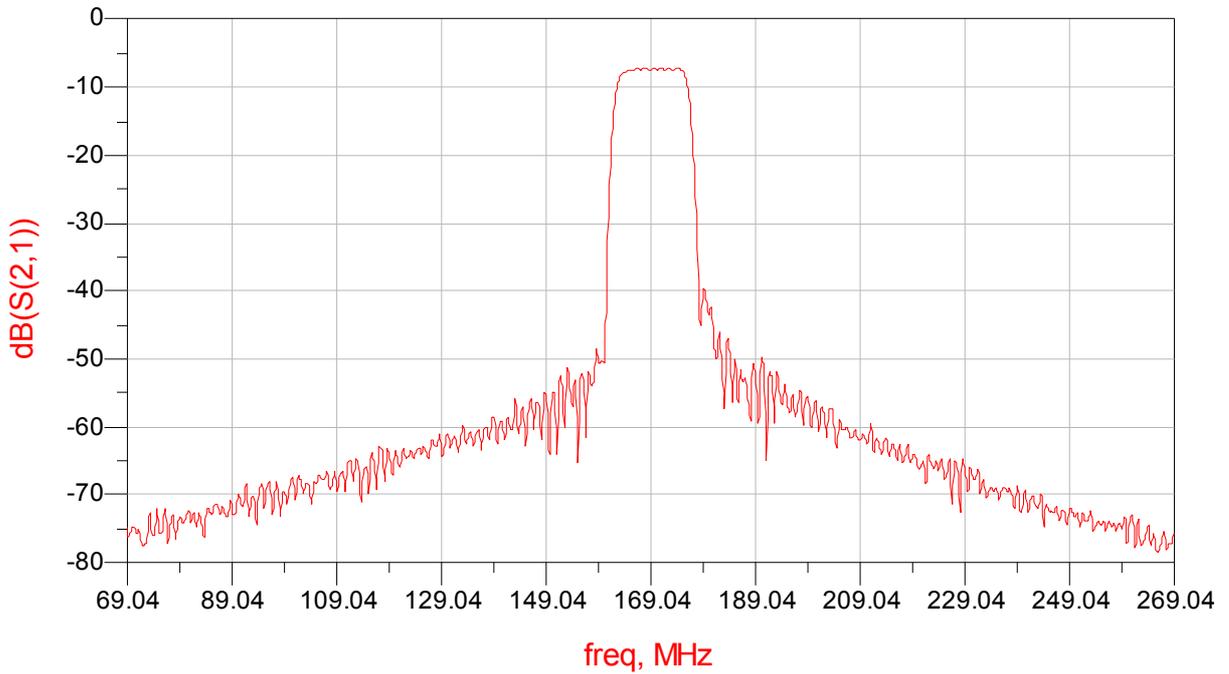


Fig1. Horizontal: 20MHz/Div Vertical: 10dB/Div

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

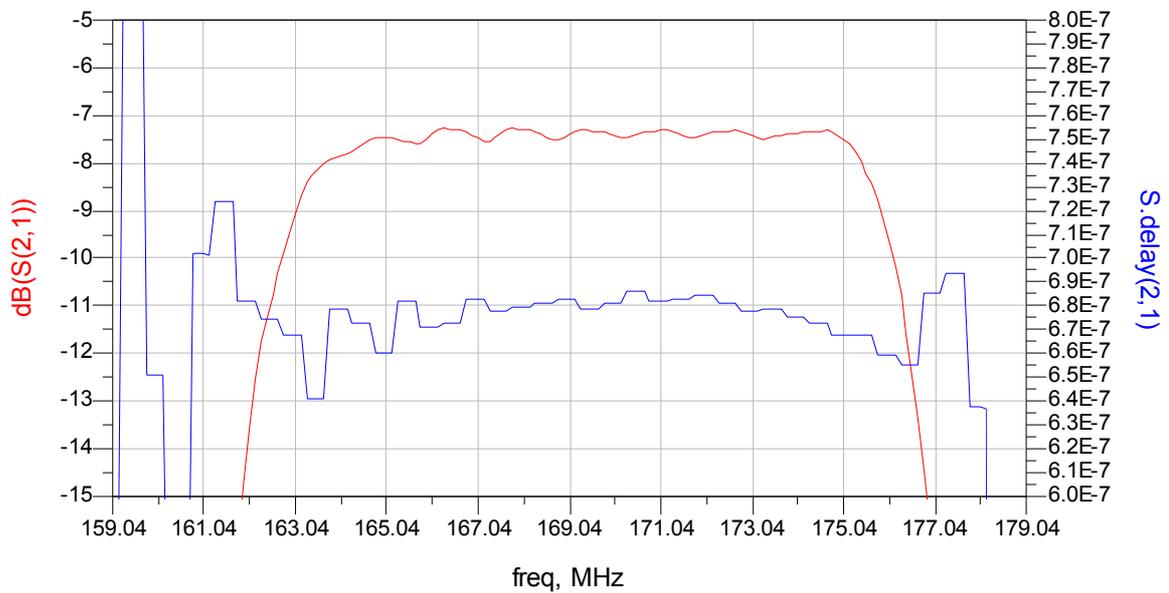
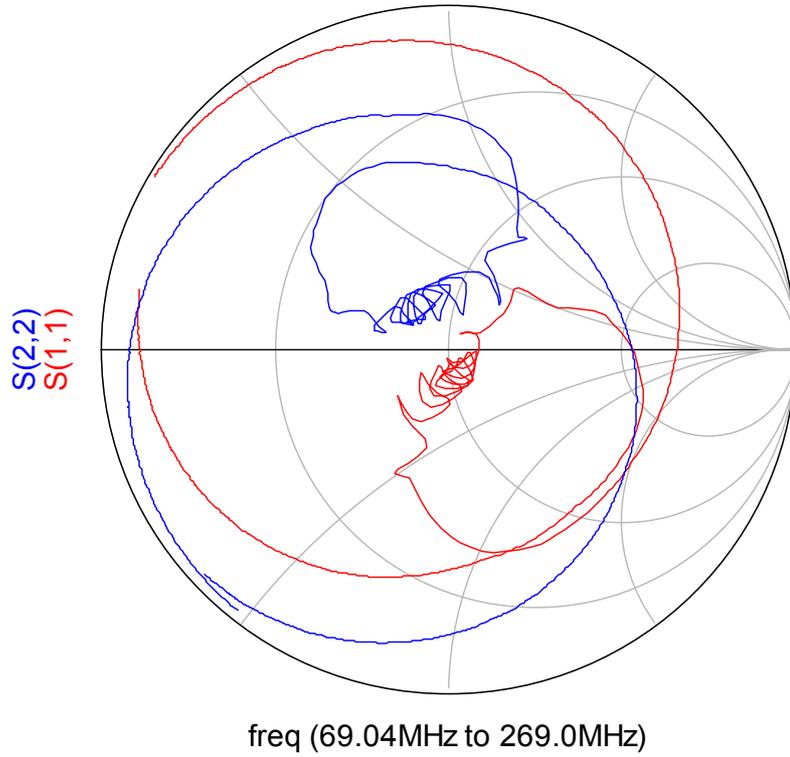


Fig2. Horizontal: 2MHz/Div Vertical: 1dB/Div  
Vertical: 100ns/Div

(3) Smith Chart:



(4) Wide Band Response:

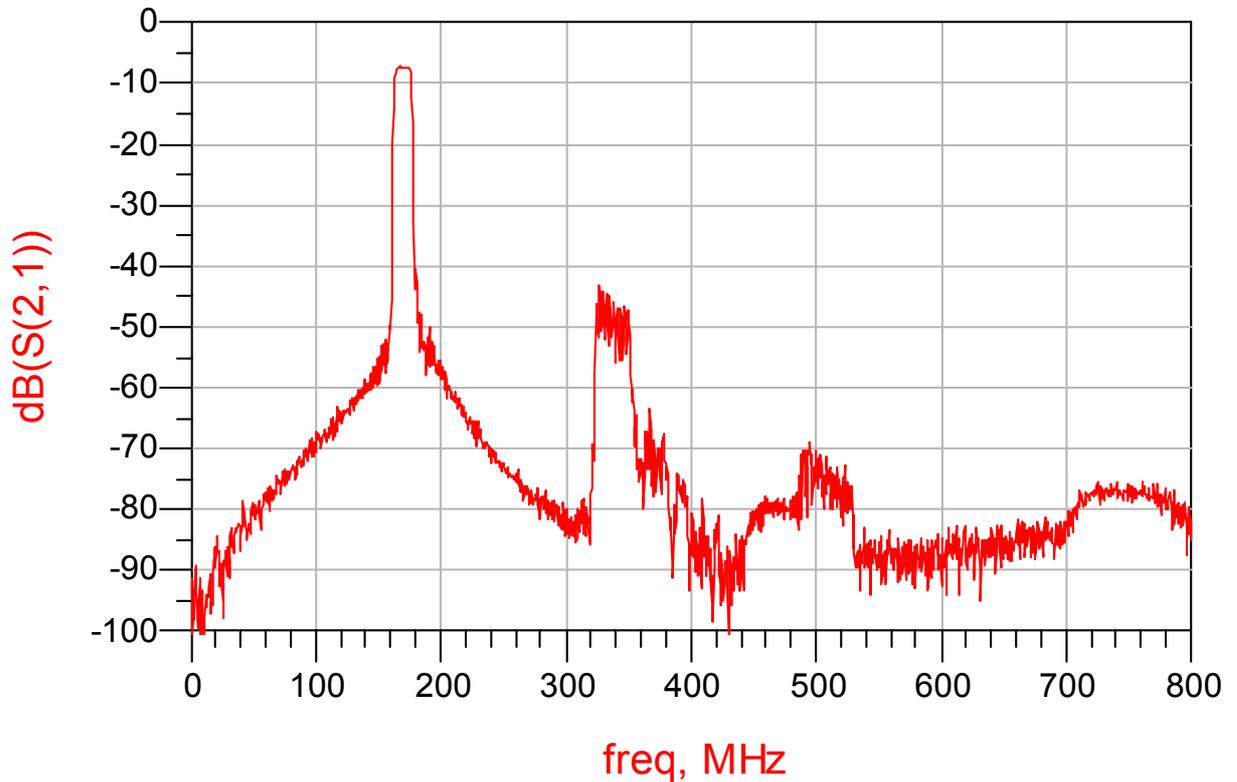
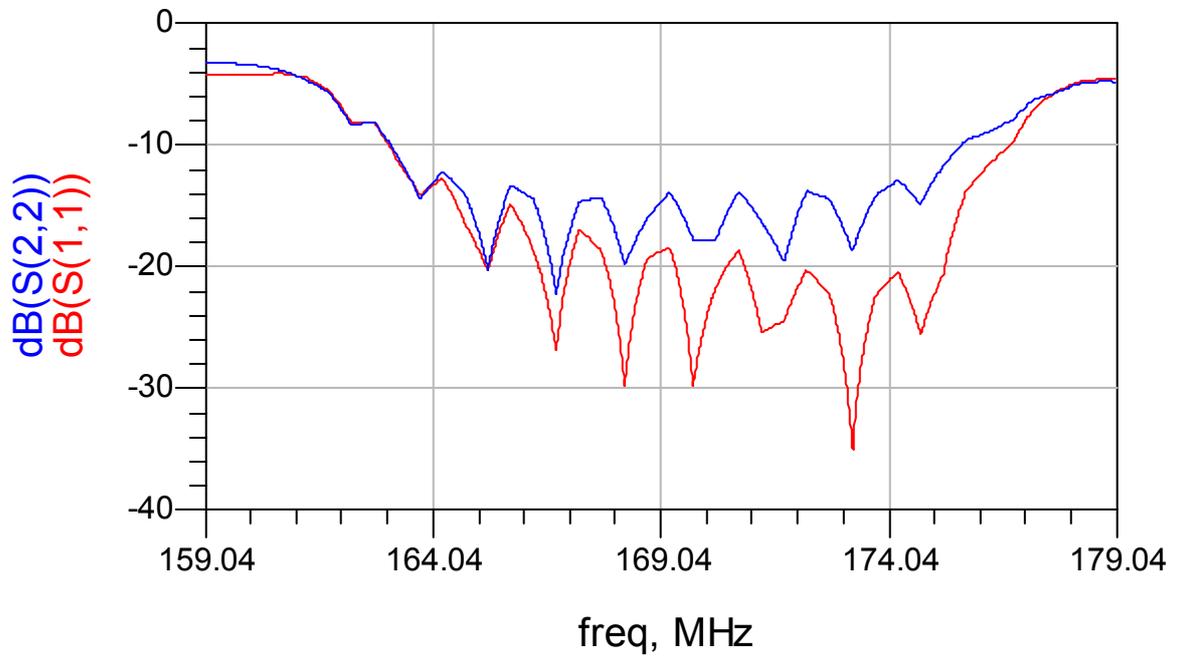
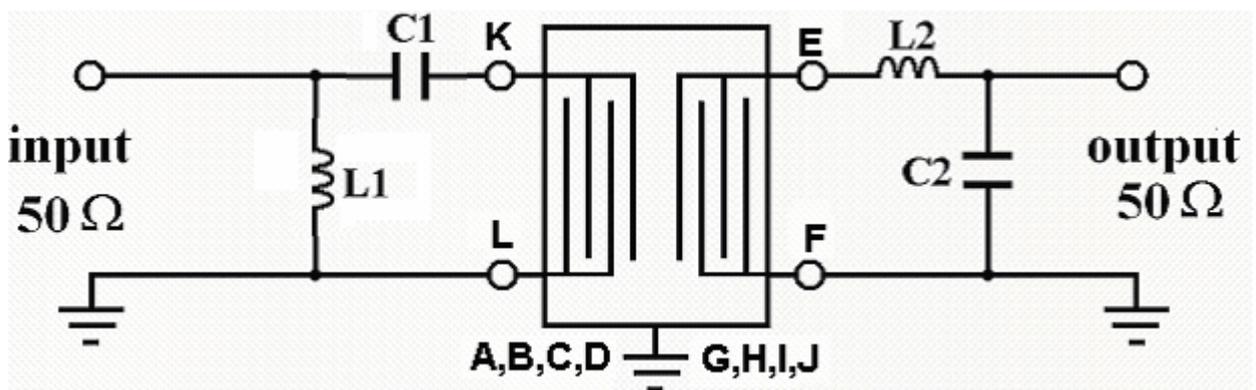


Fig4. Horizontal: 80MHz/Div Vertical: 10dB/Div

(5) Reflection Functions:

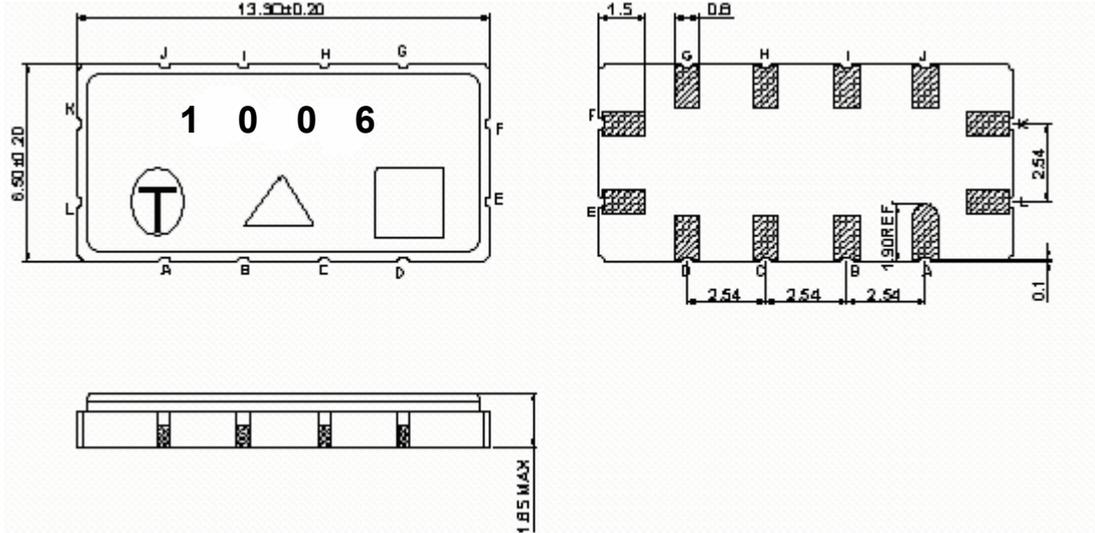


D. Matching Circuit:



$L1=24\text{nH}$   $C1=68\text{pF}$   $L2=27\text{nH}$   $C2=36\text{pF}$

**E. Outline Drawing:**



#K : Input

#L : Input Ground

#E : Output

#F : Output Ground

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

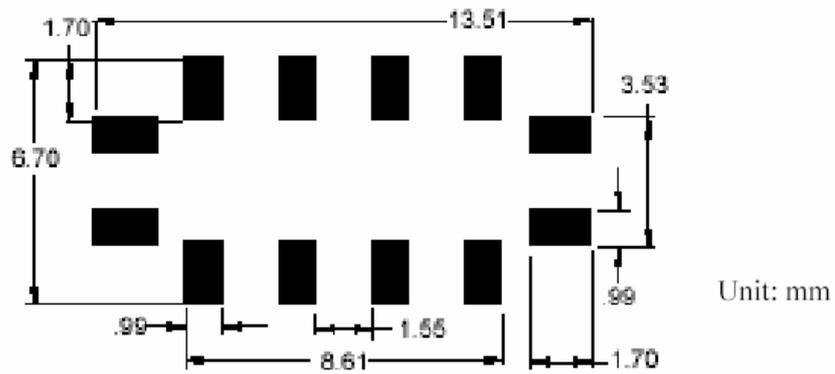
□ : Week Code (Follow the table from planner each year)

Unit: mm

△ : Product / Year Code

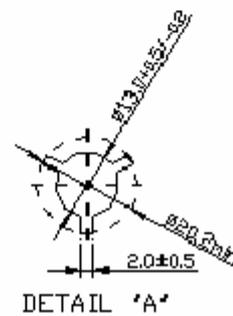
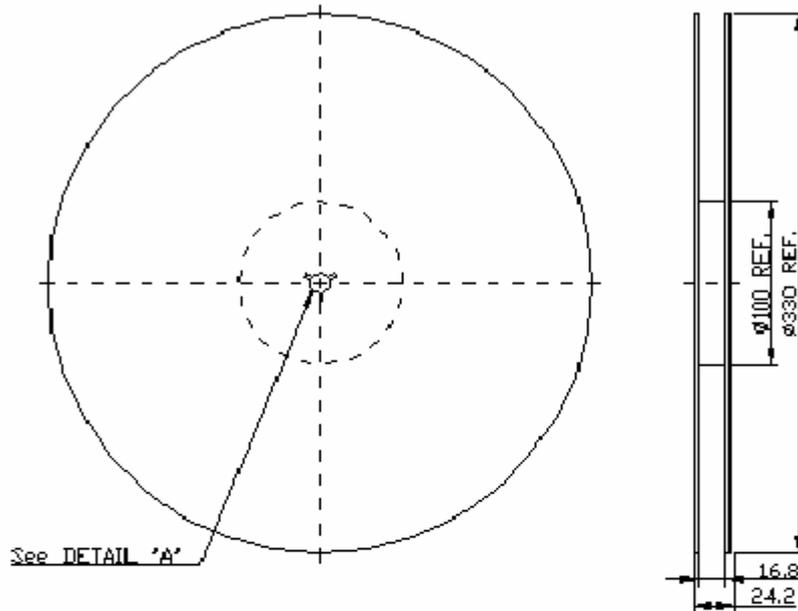
Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	B	b	<u>B</u>	<u>b</u>

**F. PCB Footprint:**

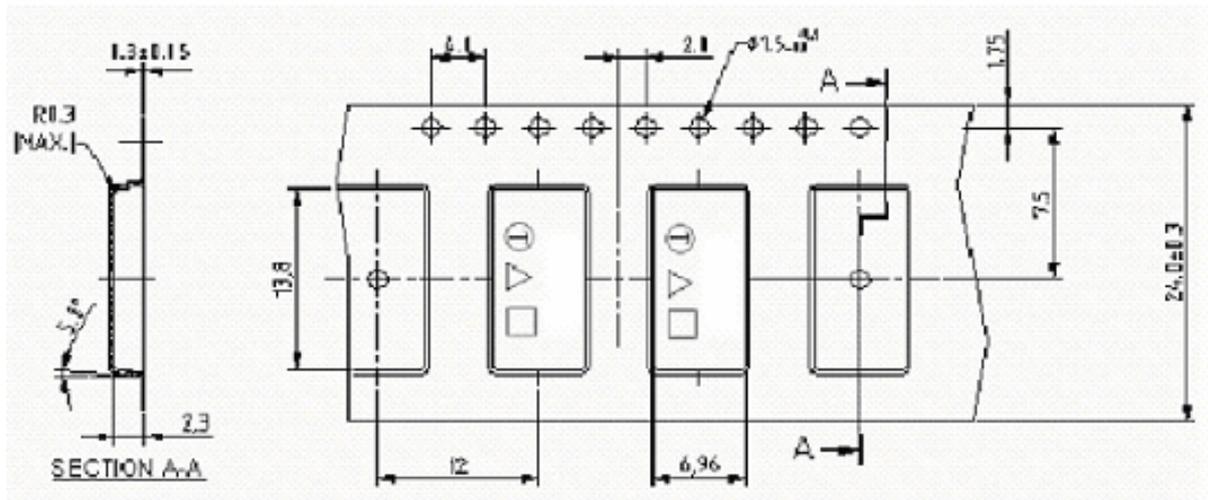


## G. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION



**I. RECOMMENDED REFLOW PROFILE:**

