TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Product Name: 183 MHz 0.05MHz BW SMD 3.8 x 3.8 mm SAW IF Filter

TST Parts No.: TB1013A

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Kazuma Lee _____

Approval by:_____ Francis Chen _____

Date:_____ 11 / 17 / 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 183 MHz 0.05MHz BW (SMD 3.8×3.8 mm)
MODEL NO.: TB1013A REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -30°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level : 15 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic **S**ensitive **D**evice

B. Characteristics :

1. Ambient Temperature: 25 °C

Item	Unit	Min.	Type.	Max.
Center frequency, **Fc**	MHz	-	183.0	-
Insertion Loss, **IL** Exclude loss in matching elements *1)	dB	-	9.2	11.0
-1dB bandwidth	MHz	0.050	0.086	-
VSWR Fc+/- 0.03MHz	MHz	-	1.4	2.4
Passband Ripple Fc+/- 0.01MHz	dB	-	0.1	1.0
Attenuation:(Reference level from Min IL)				
Fc+/-500KHz	dB	40	55	
Fc+/-900KHz	dB	40	50	
Temperature Coefficient	ppm/°C^2	-	-0.036	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

*1) The matching circuit is ideal by simulation.

C. Frequency Characteristics :

(1) Wide band Response:(span 2MHz)

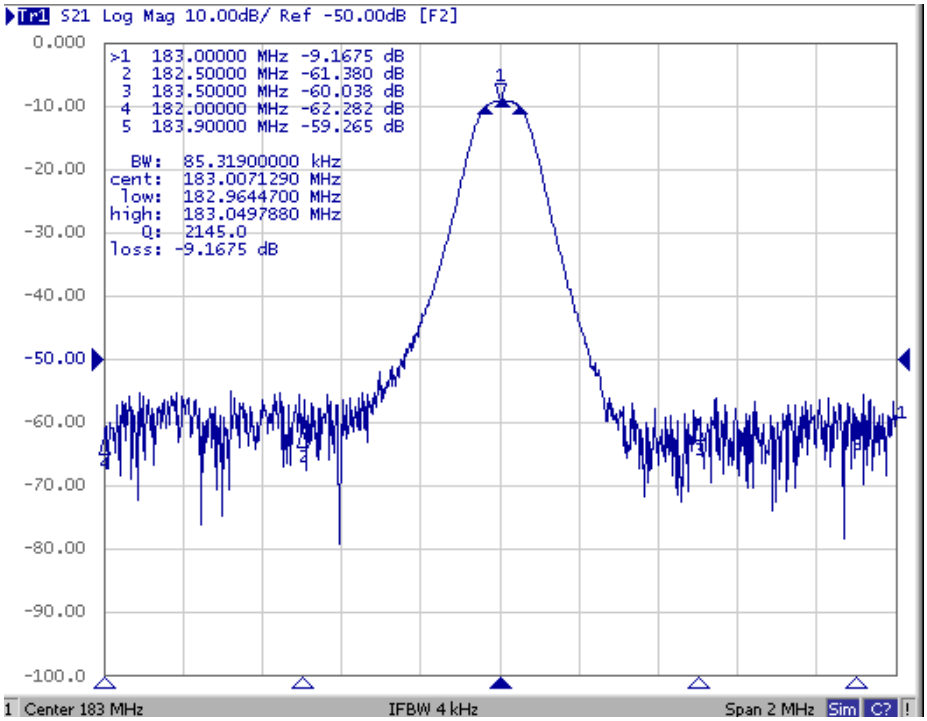
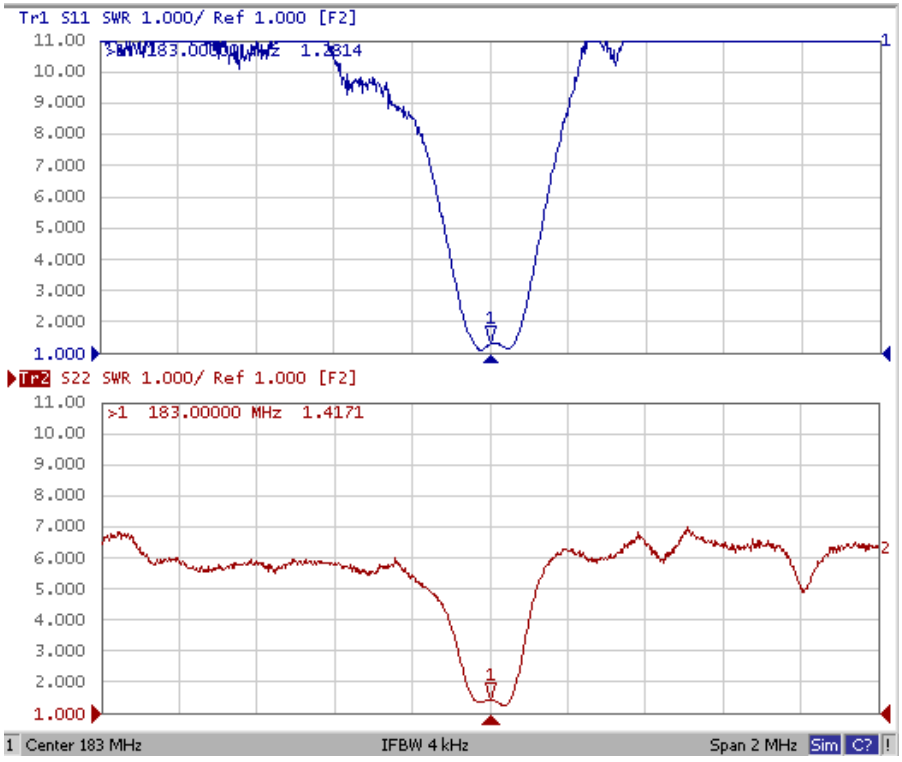
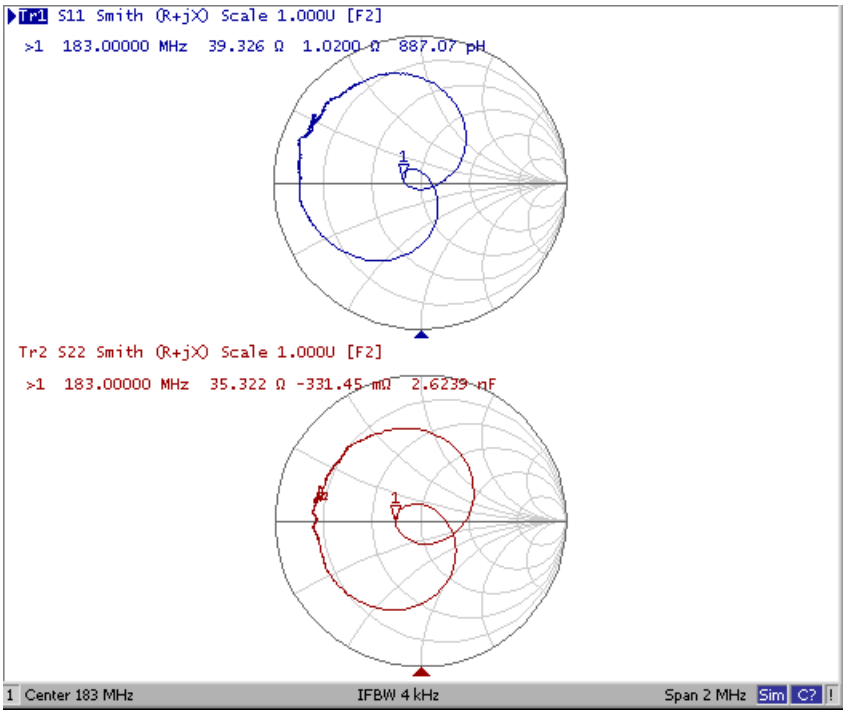


Fig1. Horizontal: 0.2MHz/Div Vertical: 10dB/Div

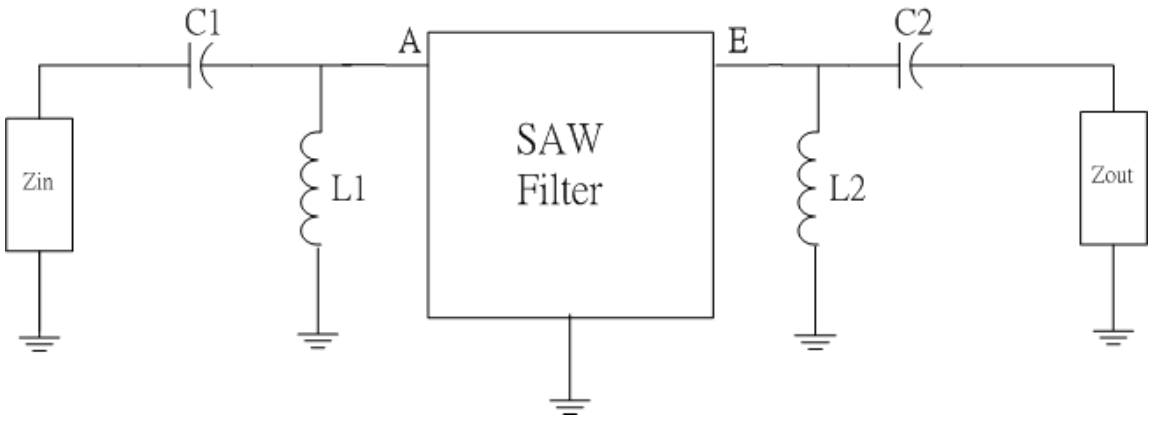
(2) VSWR:



(3) Smith Chart:

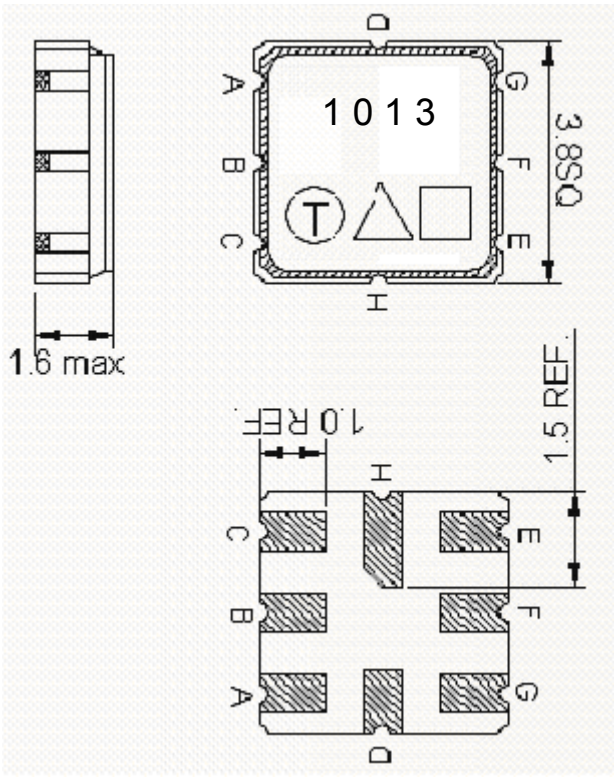


D. Matching Circuit:



C1=3.6pF L1=94nH L2=90nH C2=3.8pF

E Outline Drawing:



#A –Input

#E – Output

#B,C,D,F,G,H – Ground

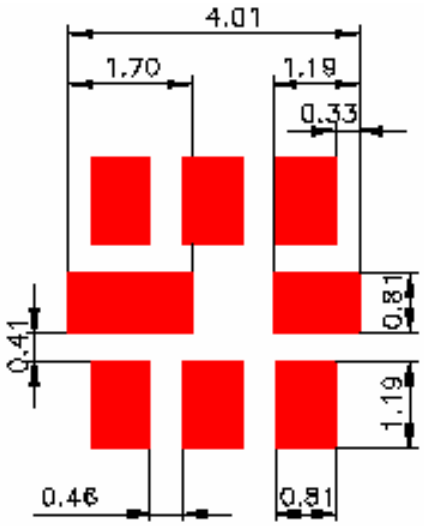
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

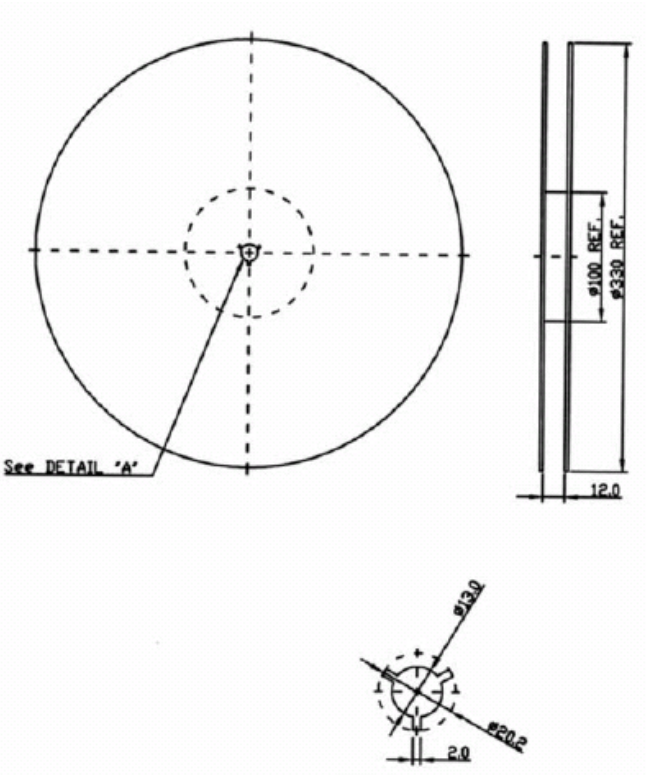
Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	B	b	B	b

F. PCB Footprint:

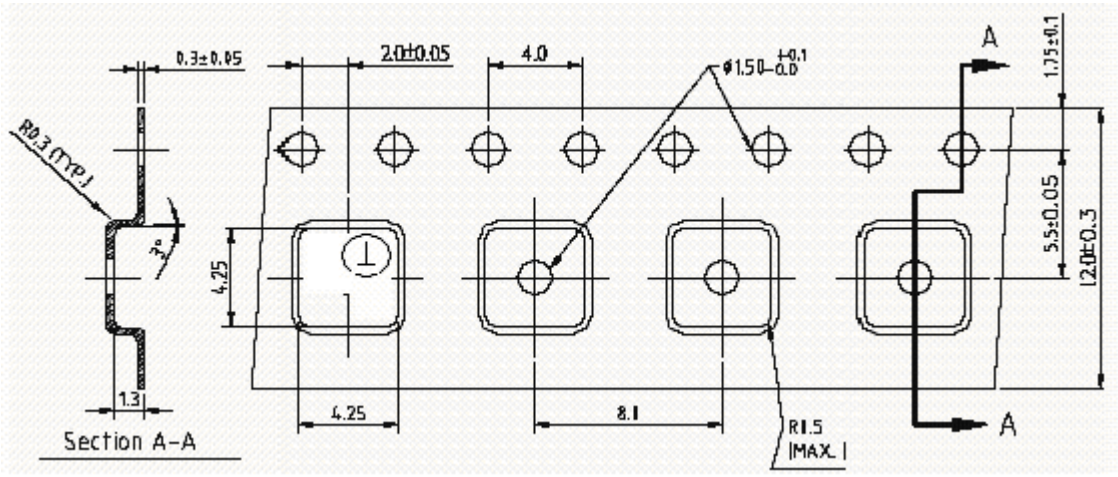


G. PACKING:

1. REEL DIMENSION:



2. TAPE DIMENSION:



H. RECOMMENDED REFLOW PROFILE :