



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 Description: SAW Filter 403.5 MHz SMD 1.6×1.4 mm (BW=3 MHz)

TST Part No.: TA1994A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ David Chang 

Approved by: _____ Bob Chau 

Date: _____ 10/21/2016

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 403.5 MHz

MODEL NO.: TA1994A

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 15 dBm
2. DC Voltage : 3V
3. Operating Temperature: 0°C to +55°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

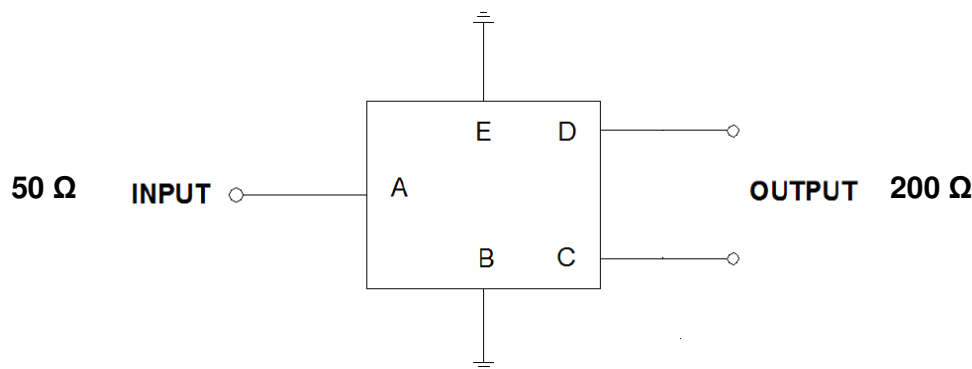
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : $Z_s = 50 \Omega$ (single)

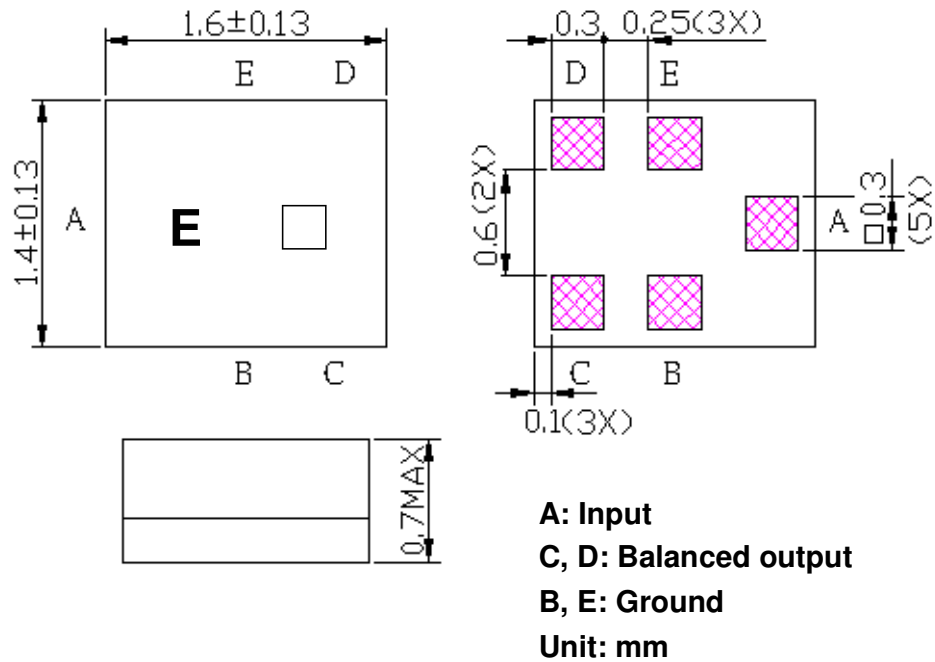
Terminating load impedance : $Z_L = 200 \Omega$ (balanced)

Item	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	403.5	-
Insertion Loss (402~405 MHz) IL	dB	-	1.7	3.0
-1.5dB Band Width BW	dB	3.0	6.5	-
Amplitude ripple (402~405 MHz)	dB	-	0.3	1.4
Input VSWR (402~405 MHz)	-	-	1.4	2.0
Output VSWR (402~405 MHz)	-	-	1.5	2.0
Attenuation (Reference level from 0 dB)				
D.C ~ 380 MHz	dB	30	56	-
380 ~ 398 MHz	dB	15	19	-
412 ~ 430 MHz	dB	20	27	-
430 ~ 2000 MHz	dB	30	37	-
Temperature Coefficient of Frequency	ppm/°C	-	-36	-

C. MEASUREMENT CIRCUIT:



D. OUTLINE DRAWING:



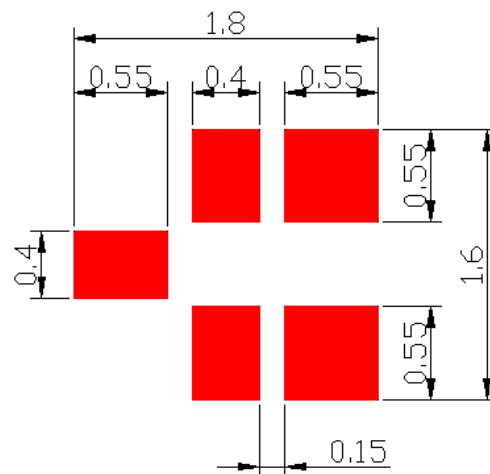
Marking name:

☐ Date code: Please refer to our date code blank as below.

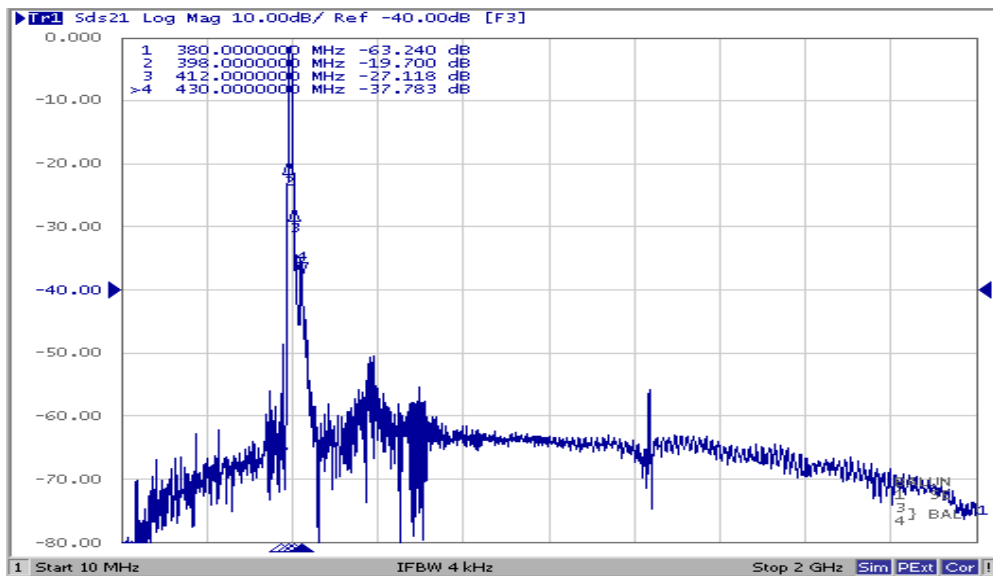
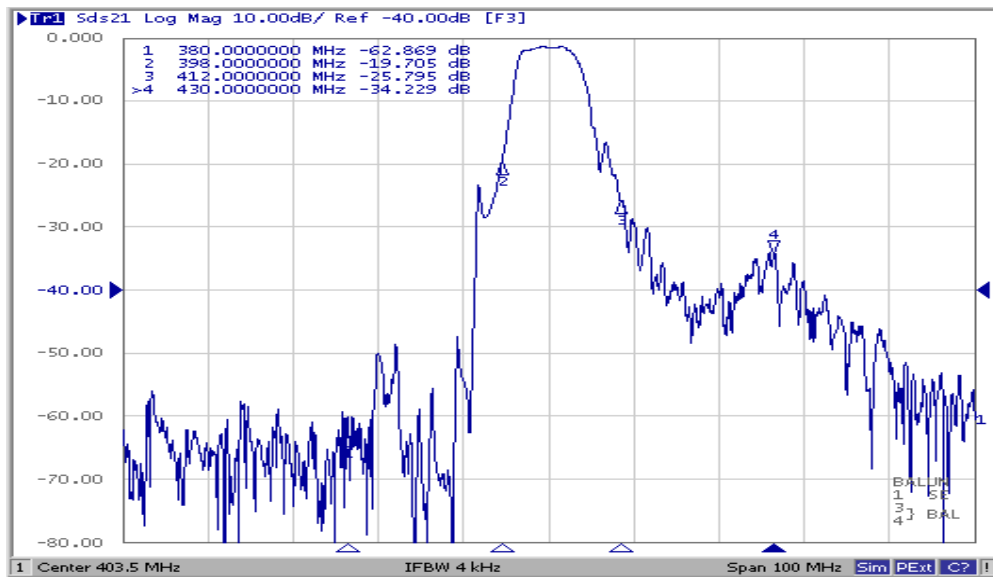
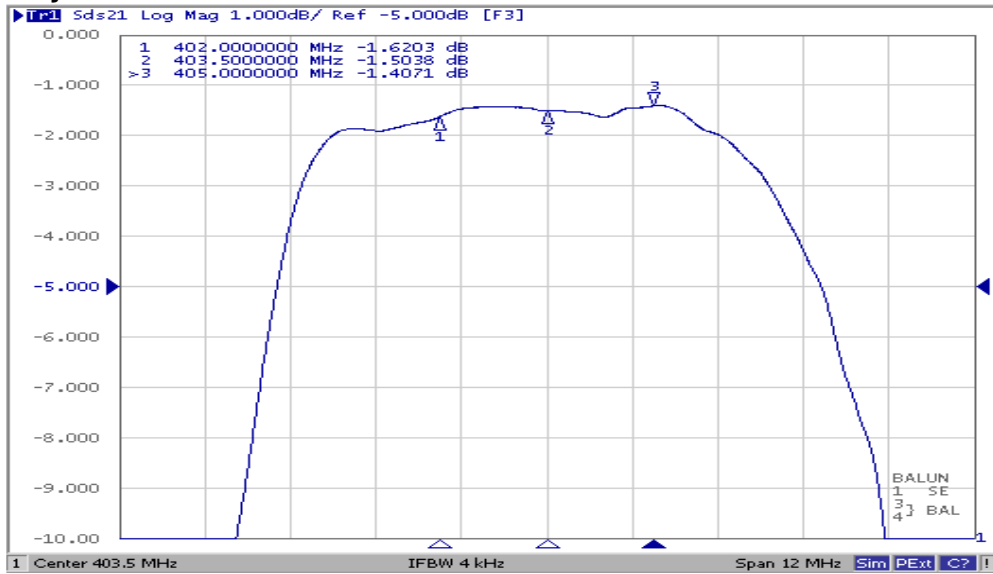
Date code Option

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2009	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2010	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2011	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>i</u>	<u>k</u>	<u>l</u>	<u>m</u>
2012	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>
2013	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2014	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2015	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>j</u>	<u>k</u>	<u>l</u>	<u>m</u>
2016	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

E. PCB Footprint:

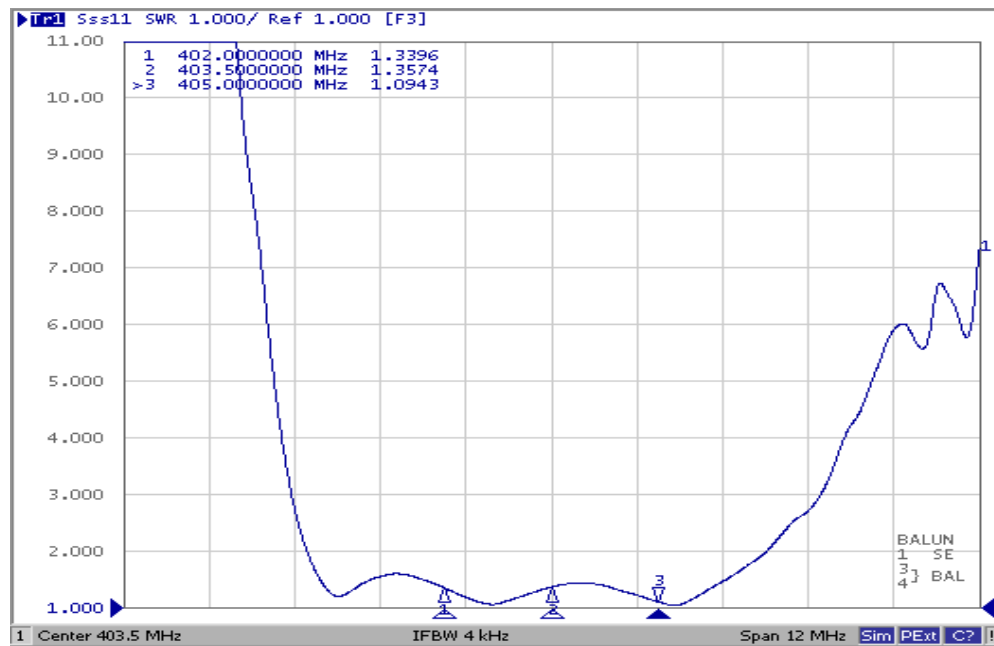


F. Frequency Characteristics:

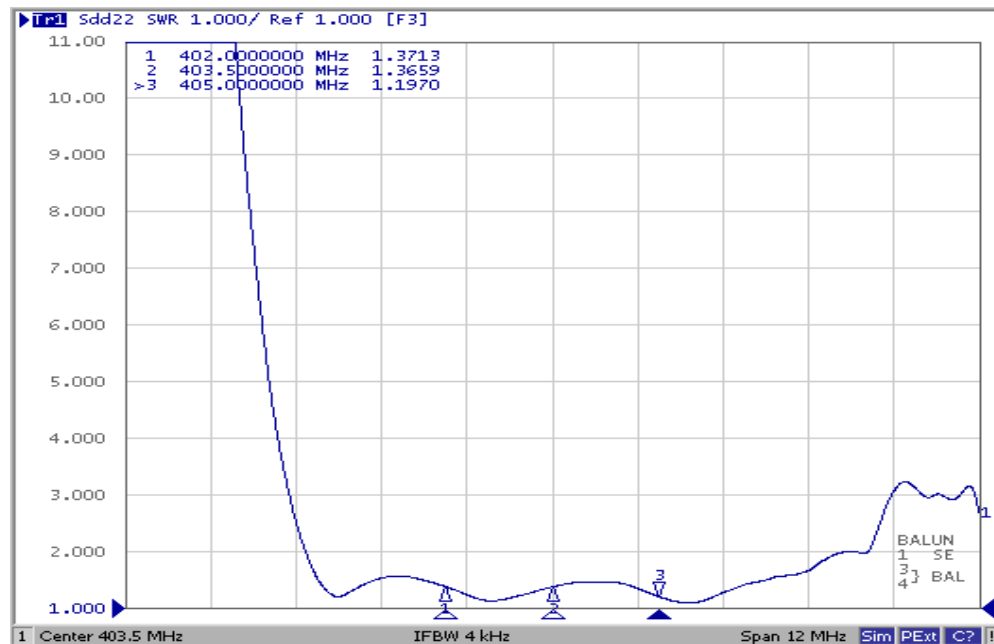


Reflection Functions:

S11



S22



G. Recommended Reflow Profile:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C+0/-5°C peak (20~40sec).
4. Time: 2 times.

