



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: 403.5 MHz 3MHz BW SMD 3.8 x 3.8 mm SAW IF Filter

TST Parts No.: TB0261B

Customer Parts No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee

Approval by: _____ Francis Chen

Date: _____ 08 / 18 / 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 403.5MHz (SMD 3.8×3.8 mm)

MODEL NO.: TB0261B

REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -40°C to 55°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

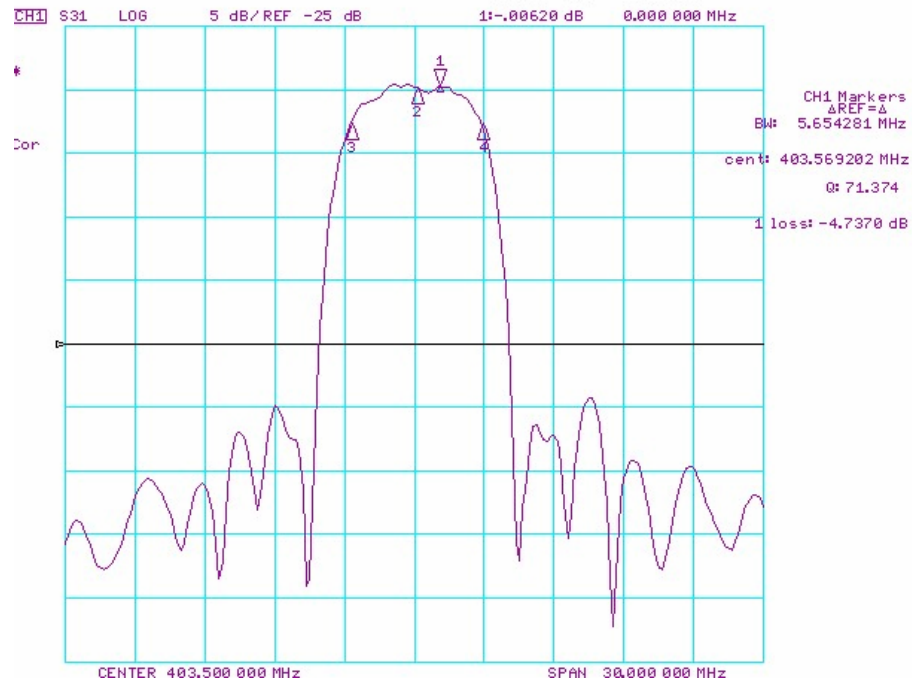
B. Characteristics :

1. Ambient Temperature: 25 °C

Characteristics		Value			
		Min.	Typ.	Max.	Note
Center frequency	F _C MHz	-	403.5	-	-
1dB Bandwidth	MHz	3	3.9	-	-
Minimum insertion loss.	dB	-	4.7	5.5	-
Ripple (402MHz.....405MHz)	dB	-	0.8	1.5	-
Phase linearity (402 MHz.....405 MHz) (rms)°		-	1.6	-	-
Return Loss (Input and Output)	dB	-	9	-	-
Attenuation:(Reference level from Minimum insertion loss)					
(1) 303.5MHz~384MHz		25	35	-	-
(2) 384MHz~399MHz		20	26	-	-
(3) 408MHz~423MHz		20	25	-	-
(4) 423MHz~503.5MHz		25	31	-	-

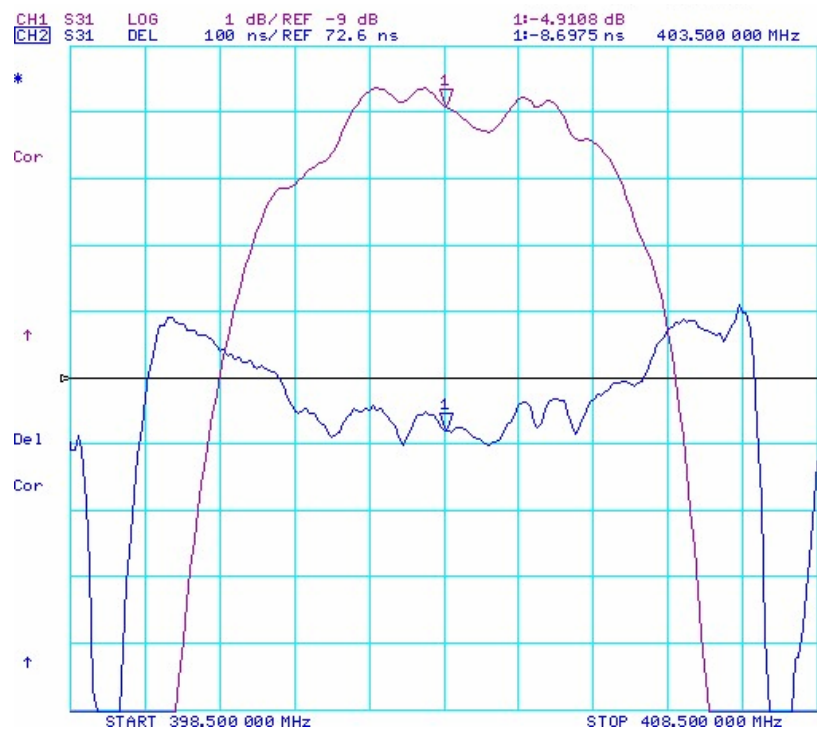
C. Frequency Characteristics :

1. Response of S21:



Horizontal: 3MHz/Div Vertical: 5dB/Div Reference: -25dB

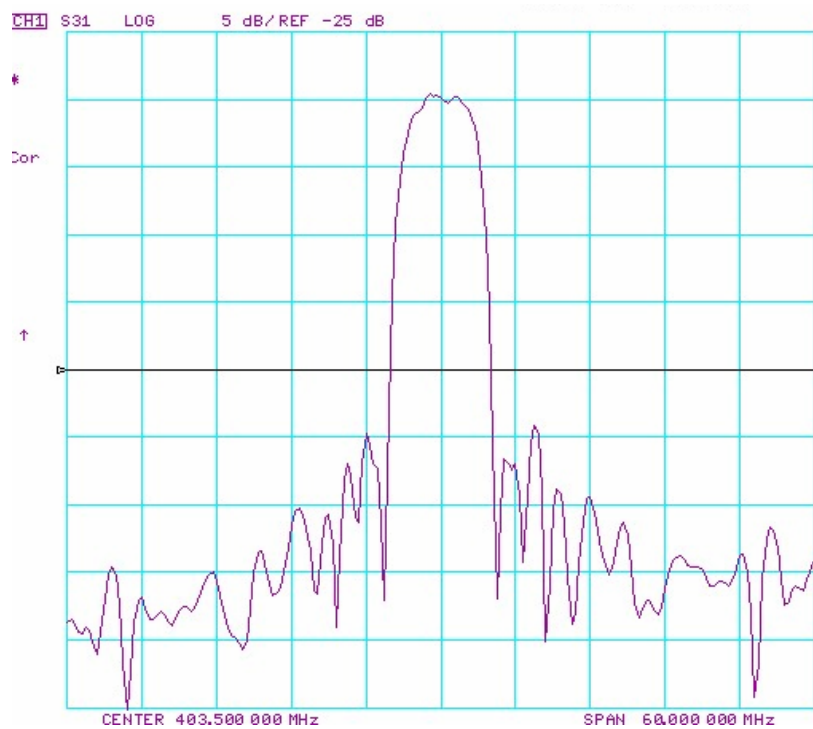
(2) Passband of Response:



Group Delay and Ripple, Horizontal:1 MHz/Div

Vertical 1: 1 dB/Div Vertical 2: 100 nS/Div

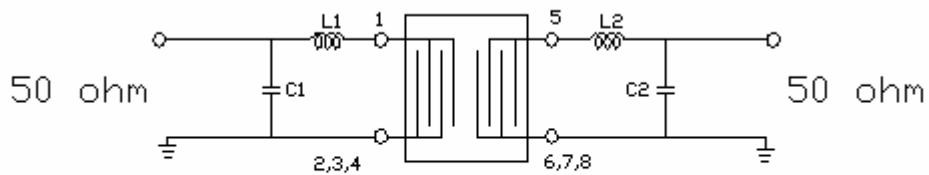
(3) Wide band of Response:



Horizontal: 6MHz/Div Vertical: 5dB/Div Reference: -25dB

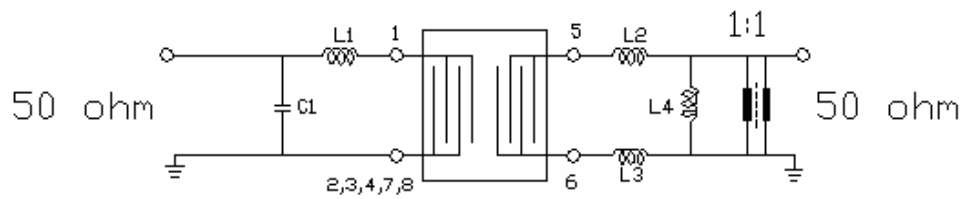
D. Matching Circuit:

1. Single Input to Single Output



$L1=12\text{nH}$ $C1=15\text{pF}$ $L2=47\text{nH}$ $C2=9\text{pF}$

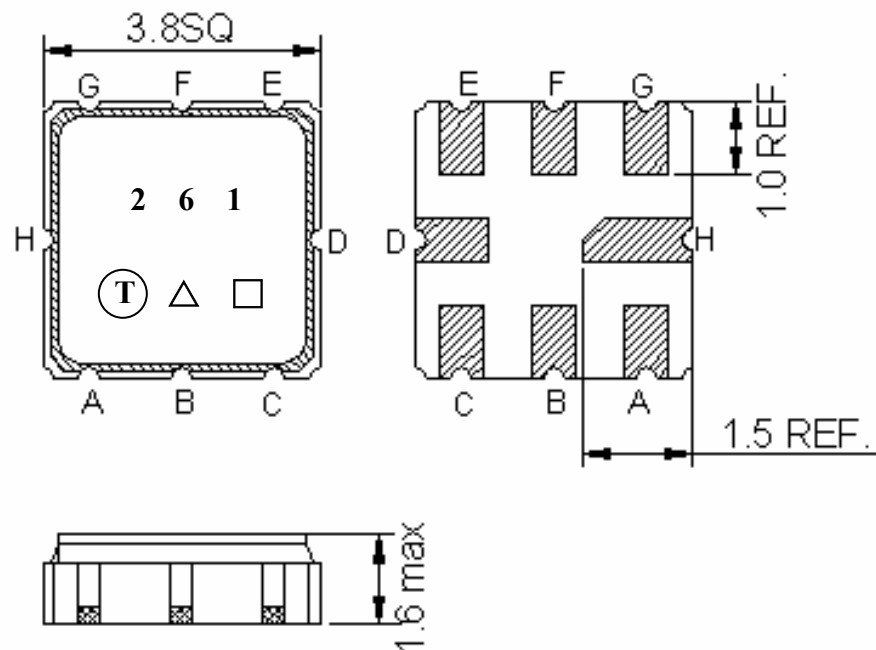
2. Single Input to Balanced Output



$L1=12\text{nH}$ $C1=15\text{pF}$ $L2=L3=12\text{nH}$ $L4=33\text{nH}$

Note: The device balun will offer about 0.6dB loss additionally.

E. Outline Drawing:



Pin A – RF input

Pin E – RF output

Pin B, C, D, F, G, H – To Be 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:

H. RECOMMENDED REFLOW PROFILE_:

