



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Description: 738 MHz 18.4 MHz BW SMD 13.3 x 6.5 mm SAW IF Filter

TST Parts No.: TB1183A

Customer Parts No.: _____

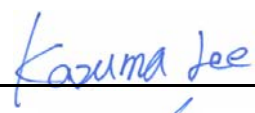
Customer signature required

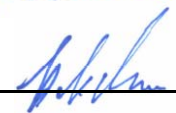
Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee 

Approval by: _____ Bob Chau 

Date: _____ 05 / 07 / 2015

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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IF SAW Filter 738MHz SMD 13.3X6.5mm

MODEL NO.: TB1183A

REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -10°C to 60°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.
Center frequency	MHz	737.8	738	738.2
Maximum Insertion loss I.L.	dB	-	24.5	28.5
1dB Band Width	MHz	18.4	18.9	-
3dB Band Width	MHz	-	19.4	-
5dB Band Width	MHz	-	19.8	20.2
40dB Band Width	MHz	-	22.8	-
Passband Ripple $F_C \pm 9.0075$ MHz	dB	-	1.5	1.8
Absolute group Delay	usec	-	1.0	-
Group Delay Variation $F_C \pm 9.0075$ MHz		-	60	200
Attenuation:(Reference level from Min IL)				
Ultimate Rejection	dB	37	40	-
Single Input Impedance	Ohm	-	50	-
Single Output Impedance	Ohm	-	50	-
Temperature Coefficient	ppm/°C ²	-	-0.036	-

C. FREQUENCY CHARACTERISTICS:

1. Wide band Response

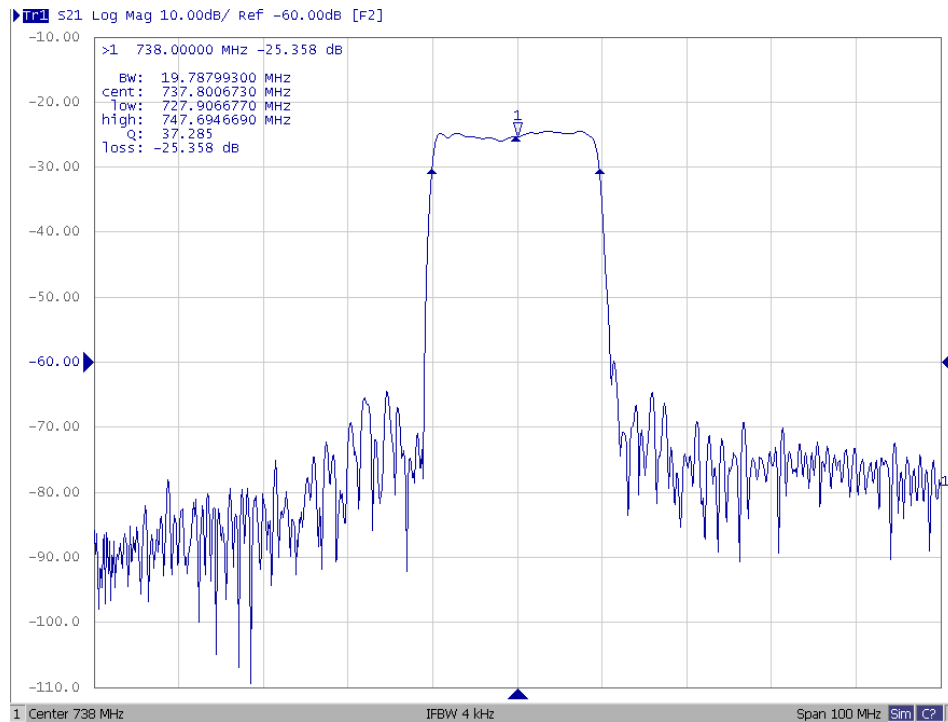


Fig1. Horizontal: 10MHz/Div Vertical: 10dB/Div

2. Pass band & Group Delay Response

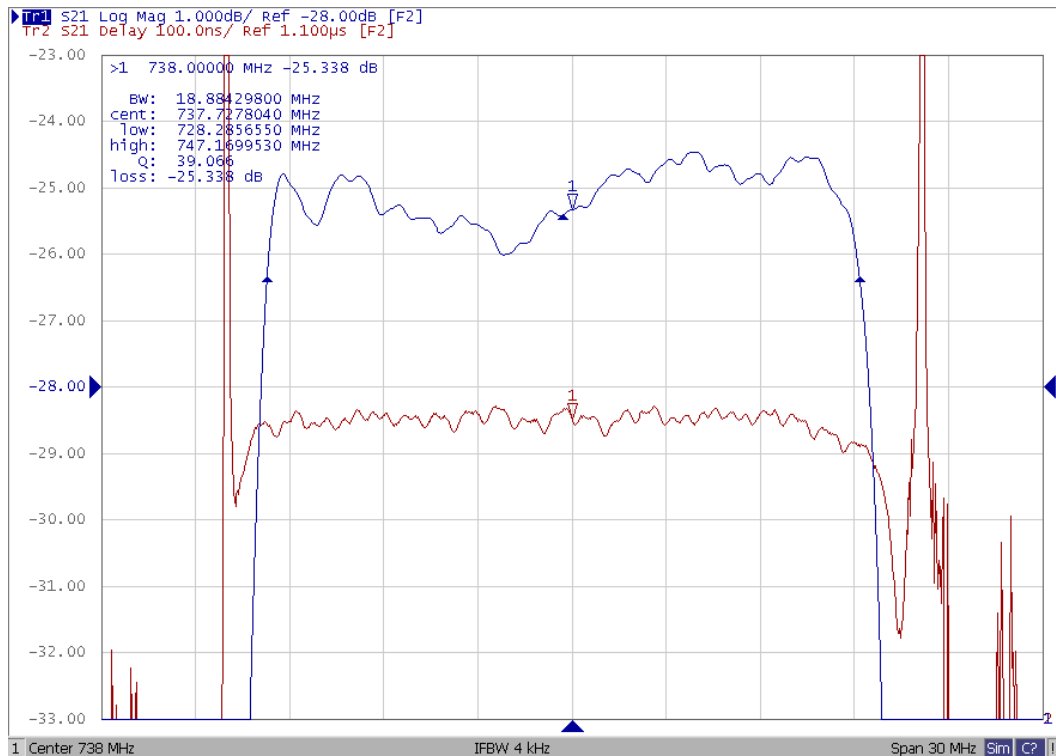
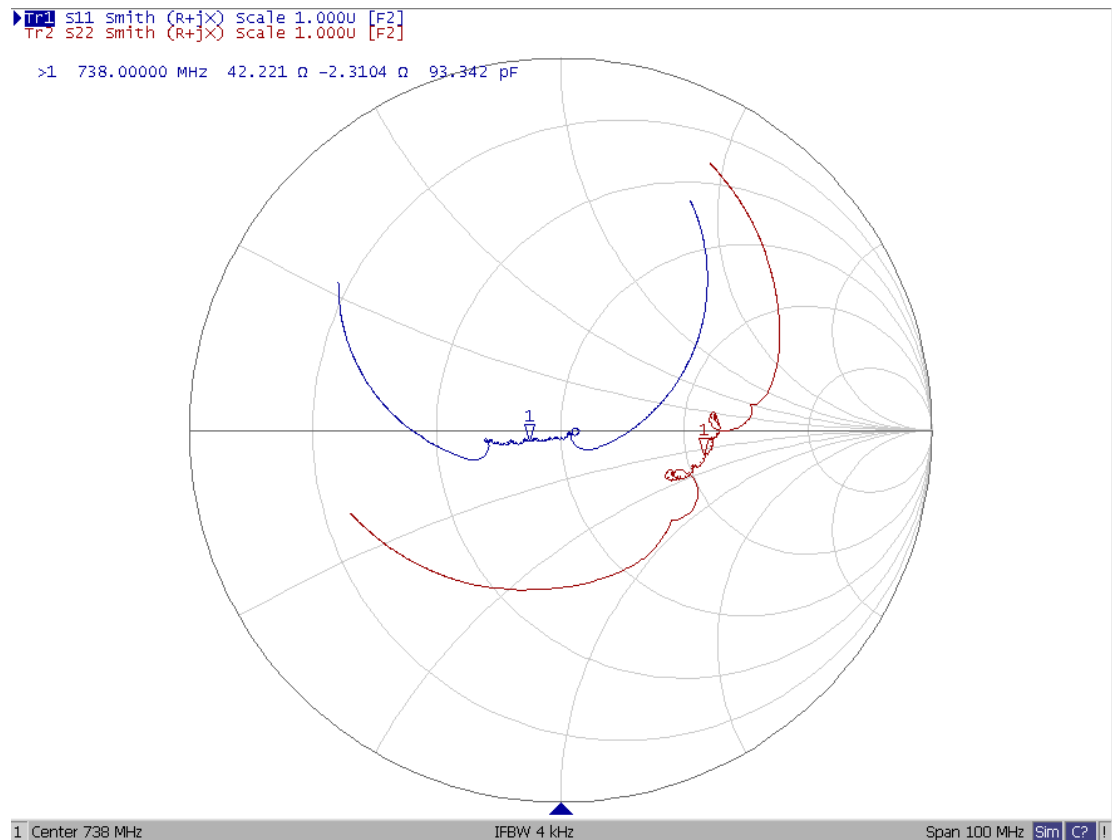
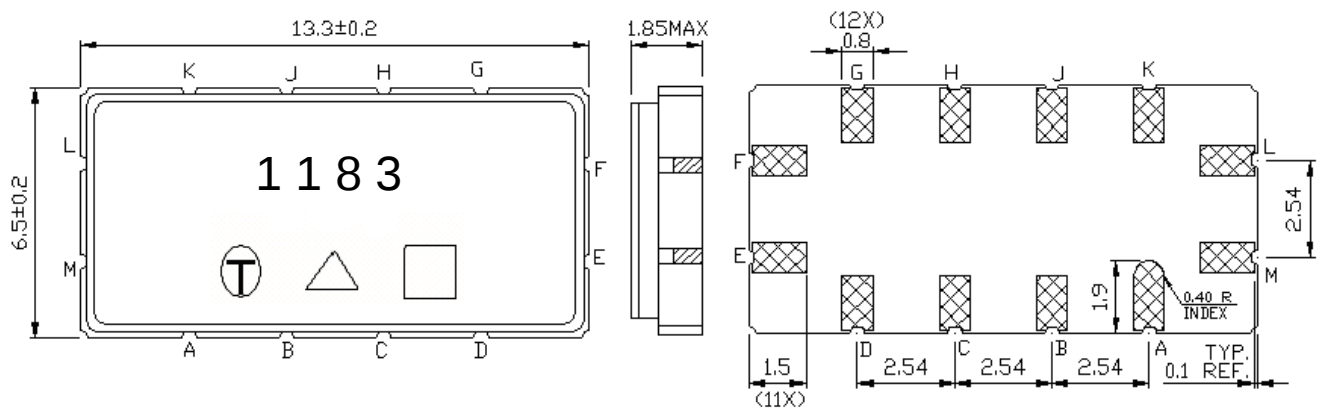


Fig2. Horizontal: 3MHz/Div Vertical: 1dB/Div
Vertical: 100ns/Div

3. Smith Chart



D. OUTLINE DRAWING:



#L : Input

#M : Input Ground

#E : Output

#F : Output Ground

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

□: Week Code

Unit: mm

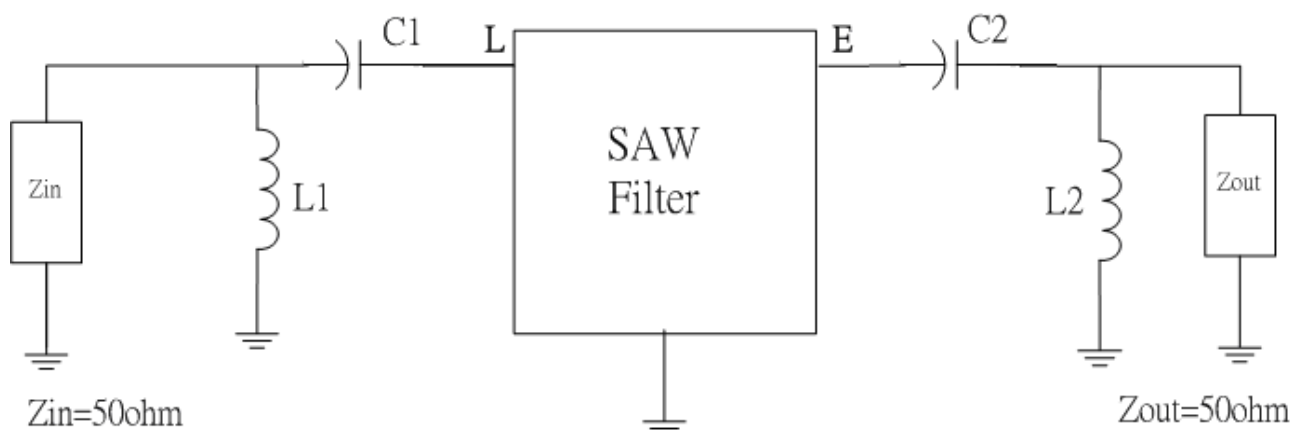
△ : Product / Year Code

Year	2013 2017	2014 2018	2015 2019	2016 2020
Product Code	B	b	<u>B</u>	<u>b</u>

Week Code Table

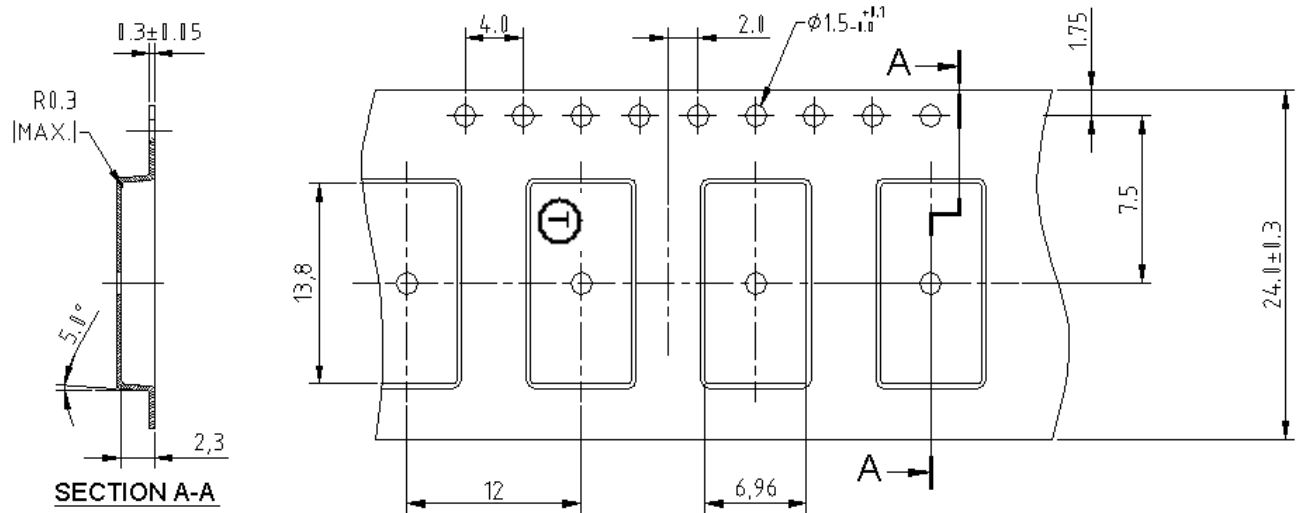
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

E. MATCHING CIRCUIT:



$$L1=3\text{nH} \quad L2=3\text{nH} \quad C1=12\text{pF} \quad C2=39\text{pF}$$

2. TAPE DIMENSION



H. 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 245~260°C peak (min. 10sec).
4. Time : 2 times.

