



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 description: 307.36 MHz 20MHz BW SMD 7.0 x 5.0 mm SAW IF Filter

TST Parts No.: TB1151A

Customer Parts No.: _____

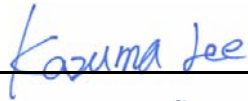
Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee 

Approval by: _____ Bob Chau 

Date: _____ 06 / 12 / 2014

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 307.36MHz 20MHz BW (SMD 7.0×5.0 mm)

MODEL NO.: TB1151A

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 : 18 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

B. Characteristics :

1. Ambient Temperature: 25 °

Item	Unit	Min.	Type.	Max.
Center frequency, F_c	MHz	-	307.36	-
Insertion Loss, IL	dB	-	9.2	12.5
1dB Band Width	MHz	20.0	22.5	-
40dB Band Width	MHz	-	36	40
Amplitude Ripple F _c ±9MHz	dB	-	0.65	1.00
Group Delay Ripple F _c ±9MHz	ns	-	34	80
Absolute Group Delay at F _c	us	-	0.38	0.65
Attenuation (Reference level from minimum Insertion loss)				
10MHz ~ 267.36MHz	dB	35	50	-
347.36MHz ~ 550MHz	dB	35	42	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	200	-
Load Impedance	Ohm	-	200	-

C. Frequency Characteristics :

(1) Wide band Response:

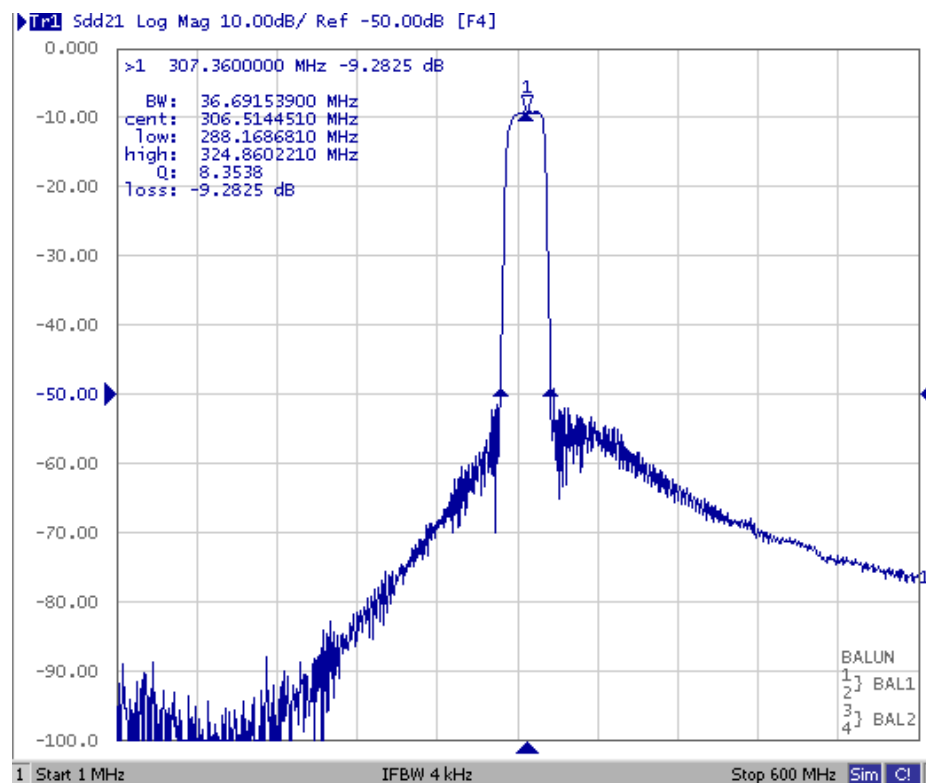


Fig1. Horizontal: 60MHz/Div Vertical: 10dB/Div

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

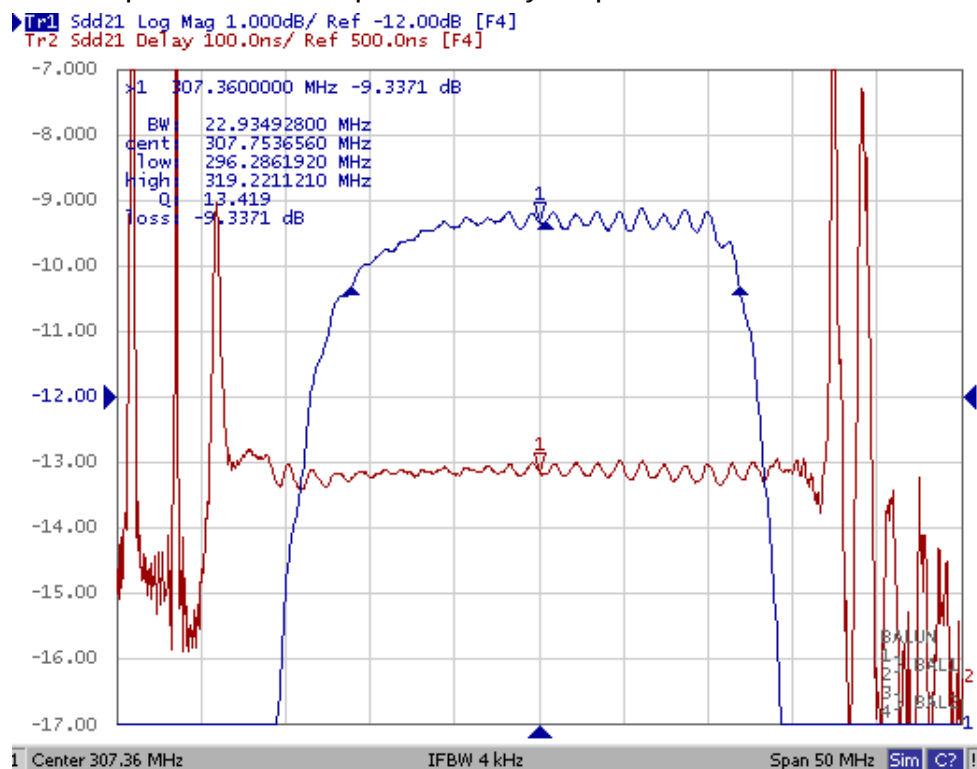
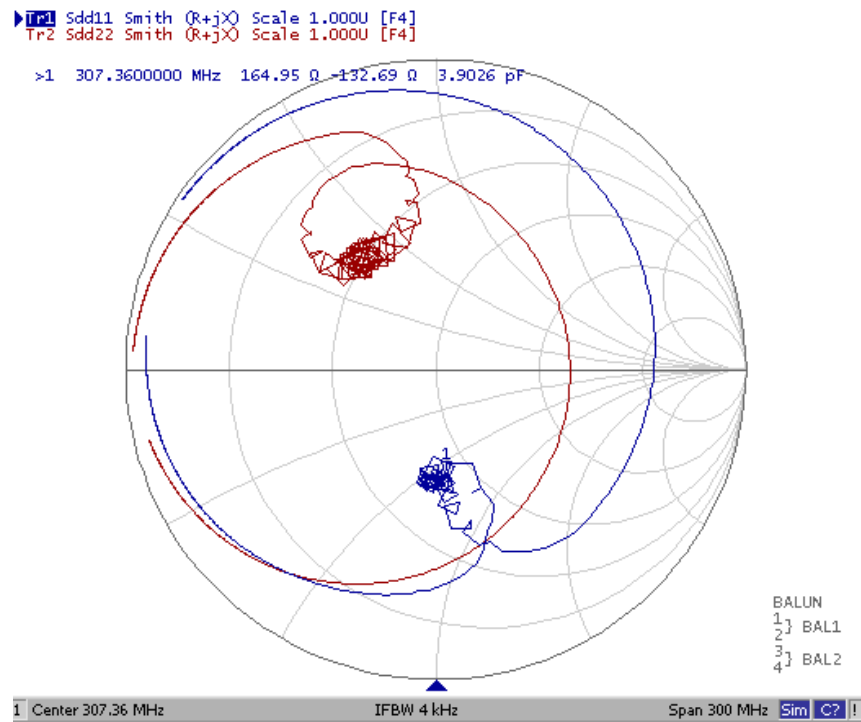
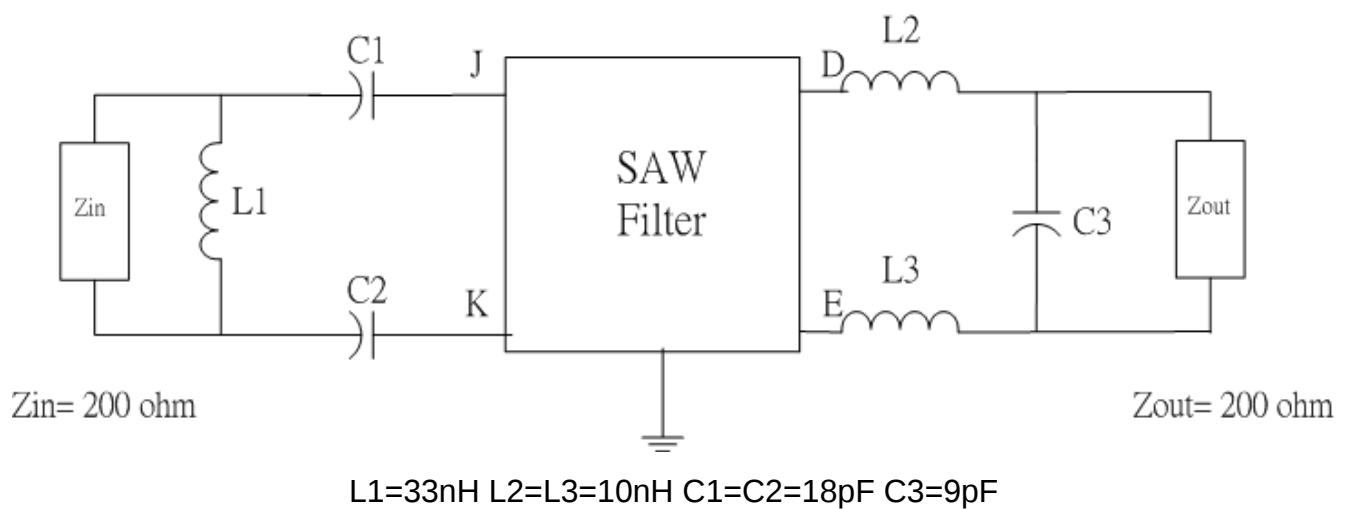


Fig2. Horizontal: 5MHz/Div Vertical: 1dB/Div
Vertical: 100ns/Div

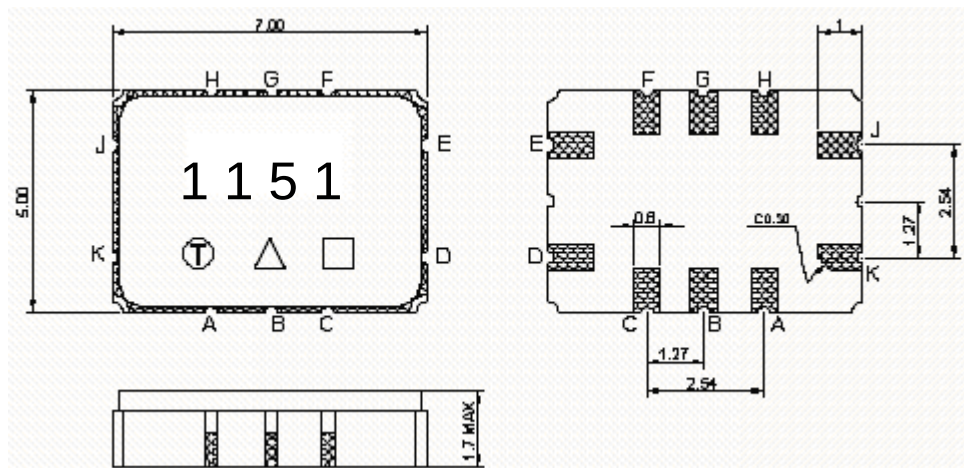
(3) Pass band Response and Group Time Delay response:



D. Matching Circuit:



E. Outline Drawing:



Pin J –RF input

Pin K –RF balance input or to be ground

Pin D –RF output

Pin E –RF balance output or to be ground

Pin A,B,C,F,G,H - Ground

□ : Week Code

Unit : mm

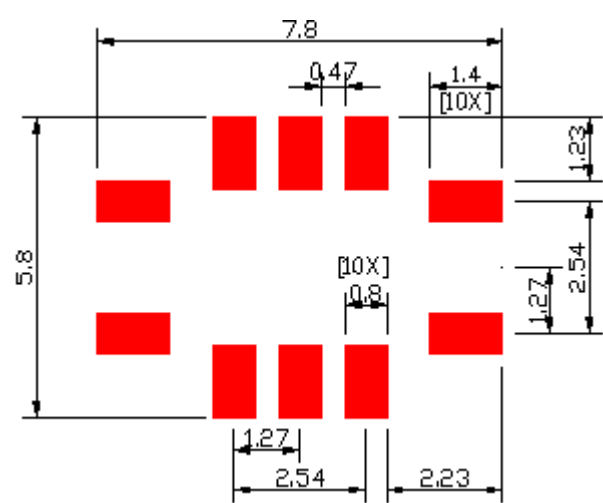
△ : Product / Year Code

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

Week Code Table

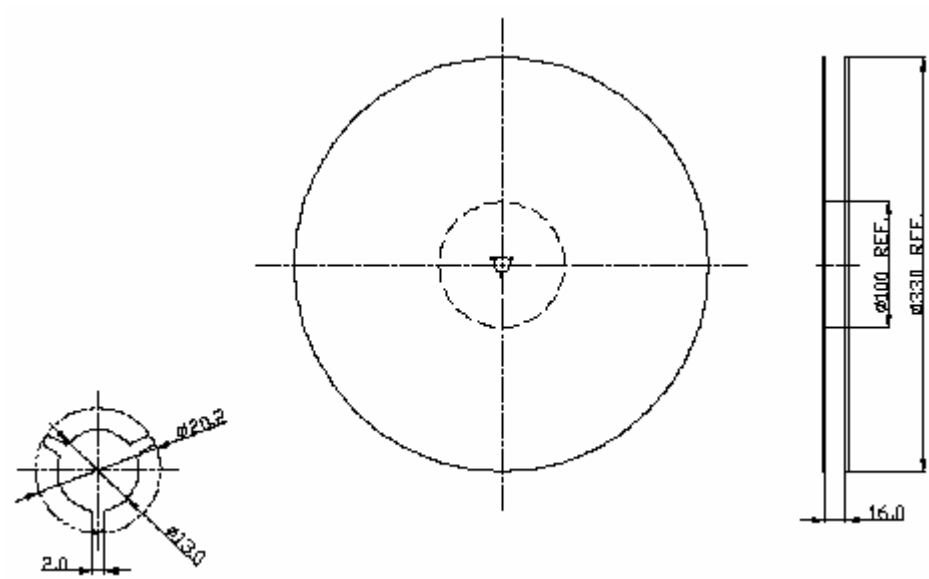
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

F. PCB Footprint:



G. PACKING:

1. REEL DIMENSION



Technical drawing of a mechanical part, likely a mold, showing dimensions and features. The part has a rectangular body with a central slot and a flange on the left. Dimensions include 0.3±0.05, 4.0, 2.0, 1.75, 7.5, 16.0±0.3, 1.8, 5.5, 8.0, and a 5.0° angle. A feature is labeled R0.3 MAX.1. A hole is labeled Ø1.5+0.1/-0.1. A feature is labeled 1151. A feature is labeled A. The drawing includes a "Direction of Feed" arrow.

The graph displays the temperature profile over a 360-second period. The temperature starts at 25°C, rises to a peak of 260°C at 220 seconds, and then decreases to 110°C at 360 seconds. The temperature remains relatively stable between 140°C and 160°C from 40 to 100 seconds.

Time (Sec)	Temp (Deg C)
0	25
20	28
40	145
60	150
80	155
100	160
120	175
140	180
160	200
180	220
200	255
220	260
240	250
260	175
280	145
300	148
320	135
340	120
360	110