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: 70 MHz 0.18MHz BW SMD 13.3 x 6.5 mm SAW IF Filter

TST Parts No.: TB1116A

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Kazuma Lee

Approval by: Bob Chau

Date: 04 / 09 / 2013

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 70MHz (SMD 13.3×6.5 mm)
MODEL NO.: TB1116A Rev No.1

A. MAXIMUM RATING:

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

RoHS Compliant
Lead free
Lead-free soldering

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

B. Characteristics :

Item	Unit	Min.	Typ.	Max.
Center frequency, **Fc**	MHz	-	70	-
Insertion Loss, **IL**	dB	-	6.6	8.5
2dB bandwidth	MHz	0.18	0.36	-
3dB bandwidth	MHz	0.22	0.40	
5dB bandwidth	MHz		0.43	0.48
15dB bandwidth	MHz		0.53	0.64
30dB bandwidth	MHz		0.78	0.82
40dB bandwidth	MHz		1.3	5.0
Amplitude Ripple Fc+/-80kHz	P-P dB	-	0.5	1.0
Group delay ripple Fc+/-80kHz	nsec	-	500	1500
Relative Attenuation				
10MHz ~ 67.5MHz	dB	40	45	-
72.5MHz ~ 130MHz	dB	40	45	-
Fc-10MHz	dB	50	60	-
Fc+10MHz	dB	50	60	-
Fc-20MHz	dB	60	65	-
Fc+20MHz	dB	60	65	-
Temperature Coefficient	ppm/°C^2	-0.036		
Source Impedance	Ohm	50		
Load Impedance	Ohm	50		

C. Frequency Characteristics :

1. S21 Narrowband Response

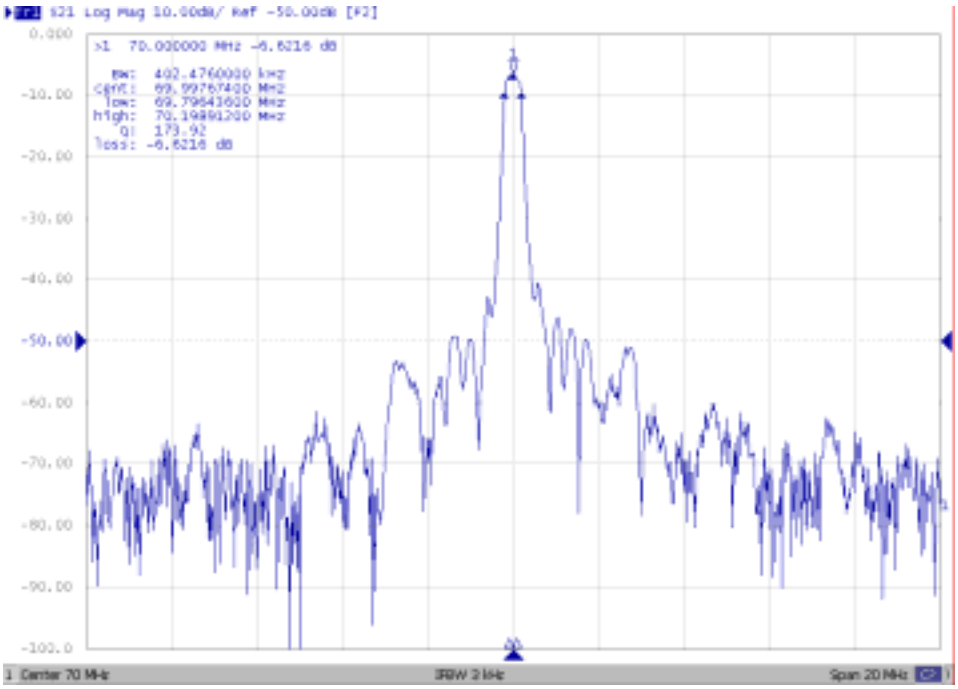


Fig1. Horizontal: 2MHz/Div Vertical: 20dB/Div

2. S21 Passband Response and Group Delay

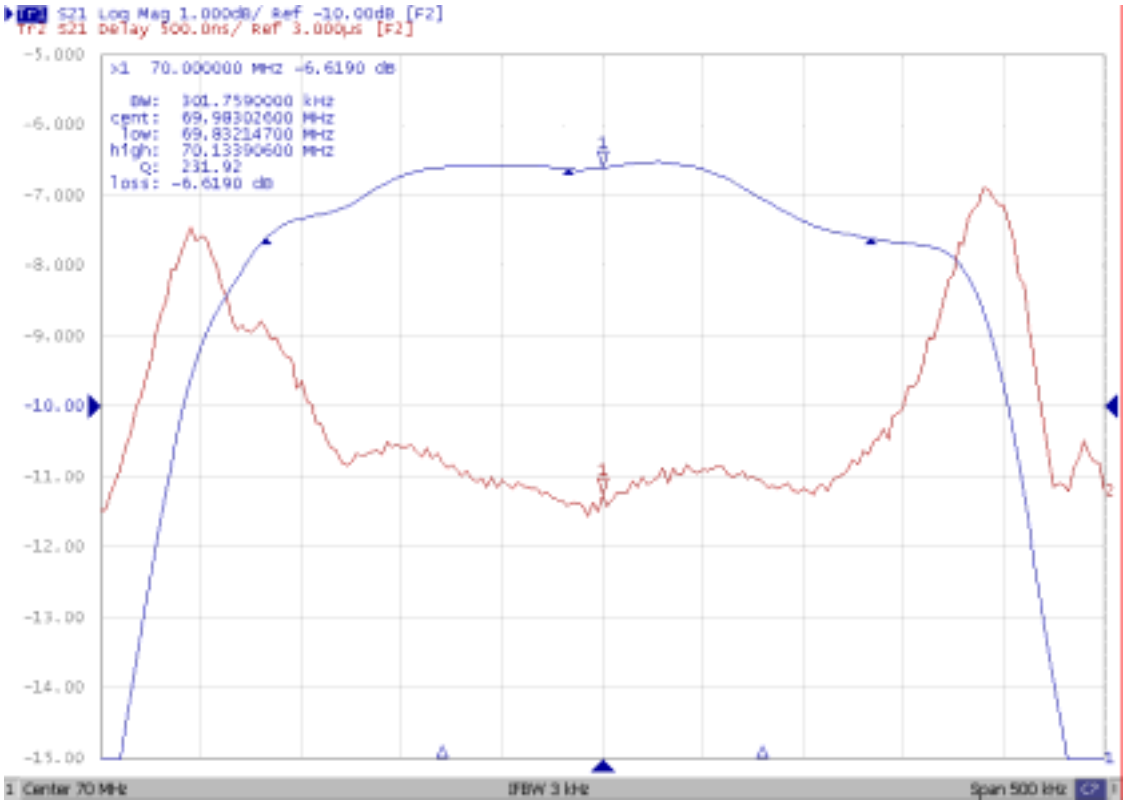
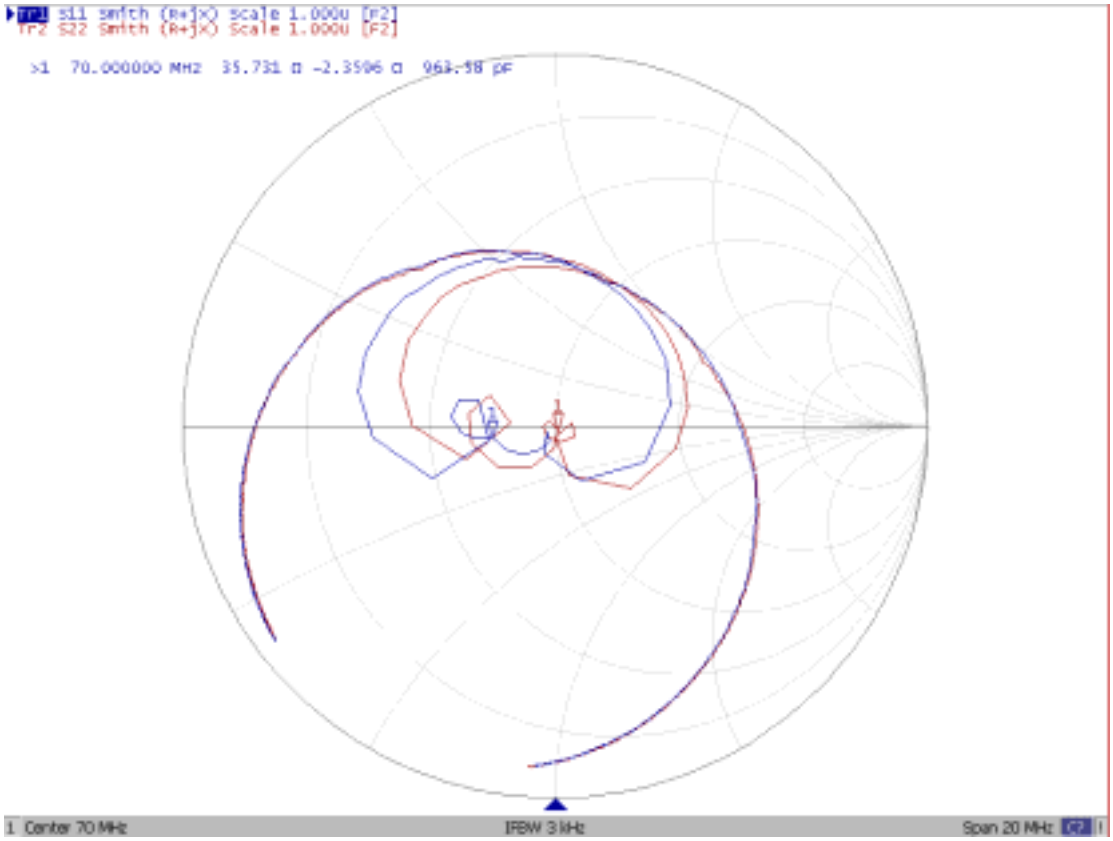


Fig2. Horizontal: 0.05MHz/Div Vertical: 1dB/Div
Vertical: 500ns/Div

3. Smith Chart



4. S21 Wideband Response

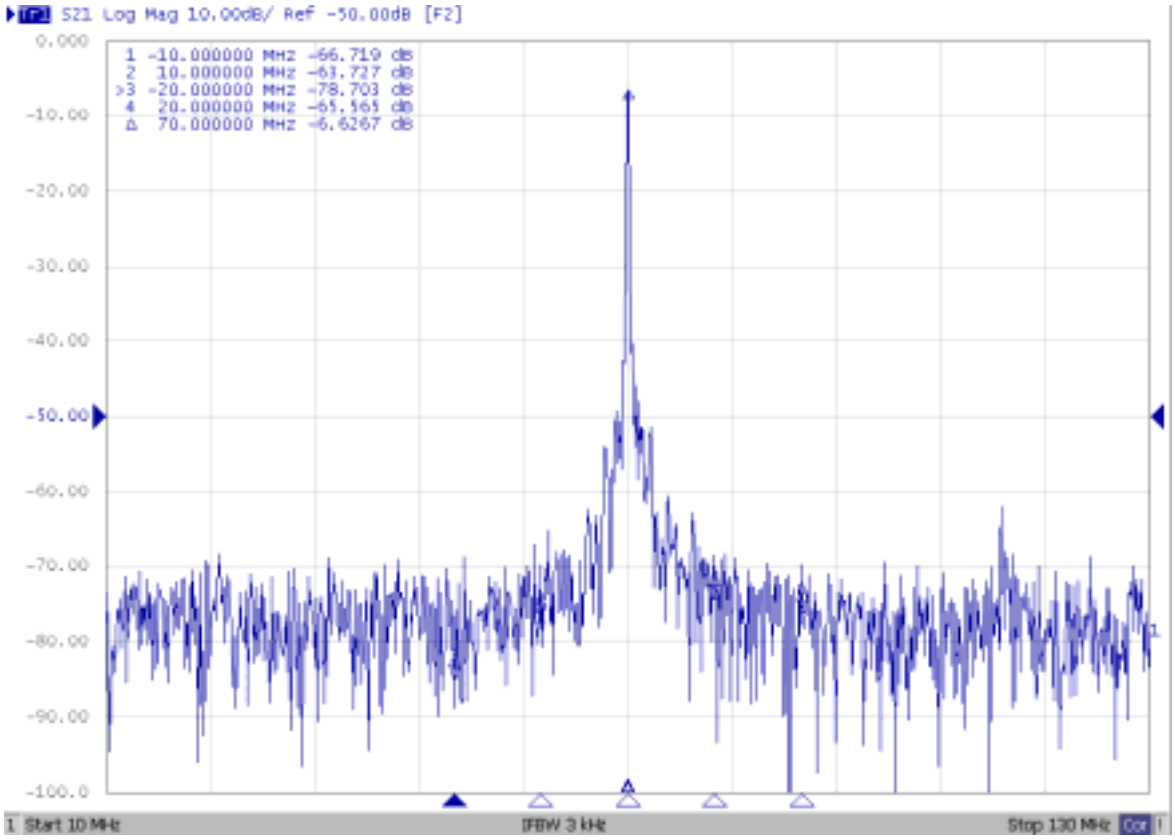
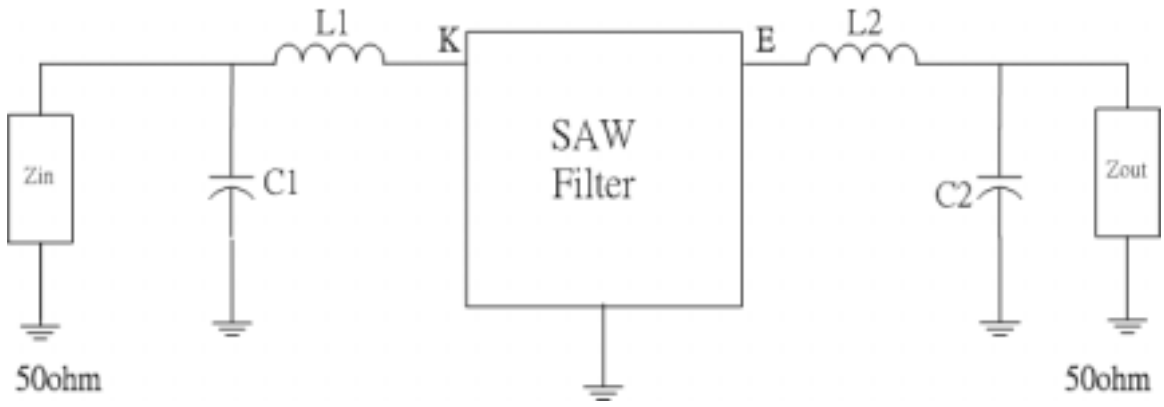


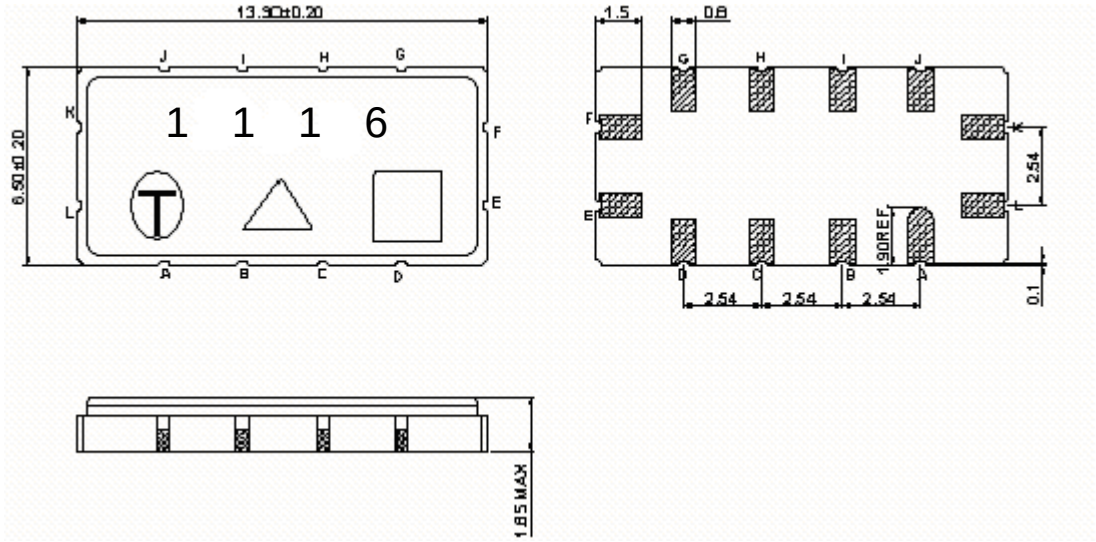
Fig4. Horizontal: 12MHz/Div Vertical: 10dB/Div

D. Measurement Circuit:



L1=390nH+27nH C1=68pF L2=390nH+36nH C2=68pF

E. Outline Drawing:



#K : Input

#L : Input Ground

#E : Output

#F : Output Ground

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

: Week Code

Unit: mm

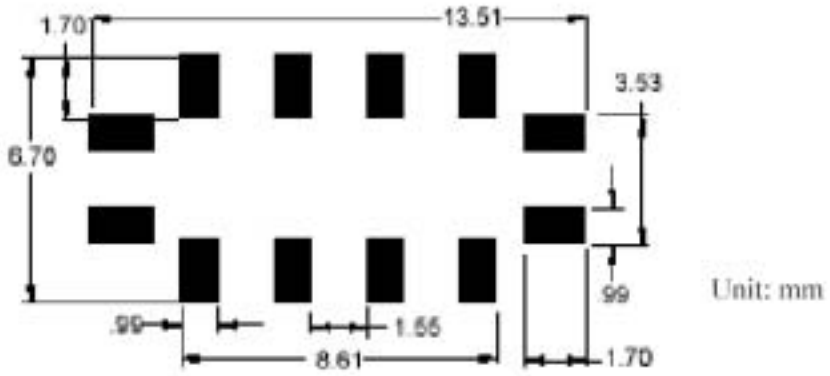
△ : Product / Year Code

Year	2013 2017	2014 2018	2015 2019	2016 2020
Product Code	B	b	B	b

Week Code Table

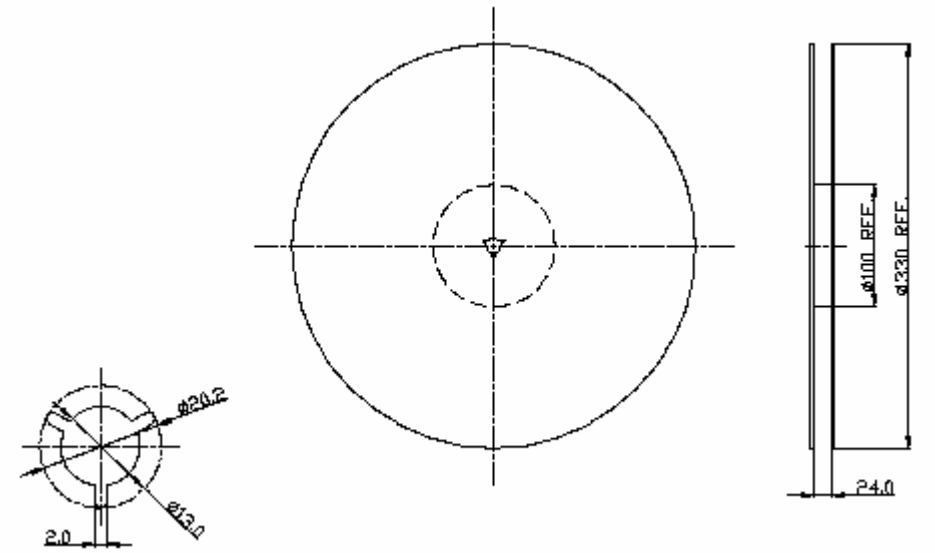
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

F. PCB Footprint:

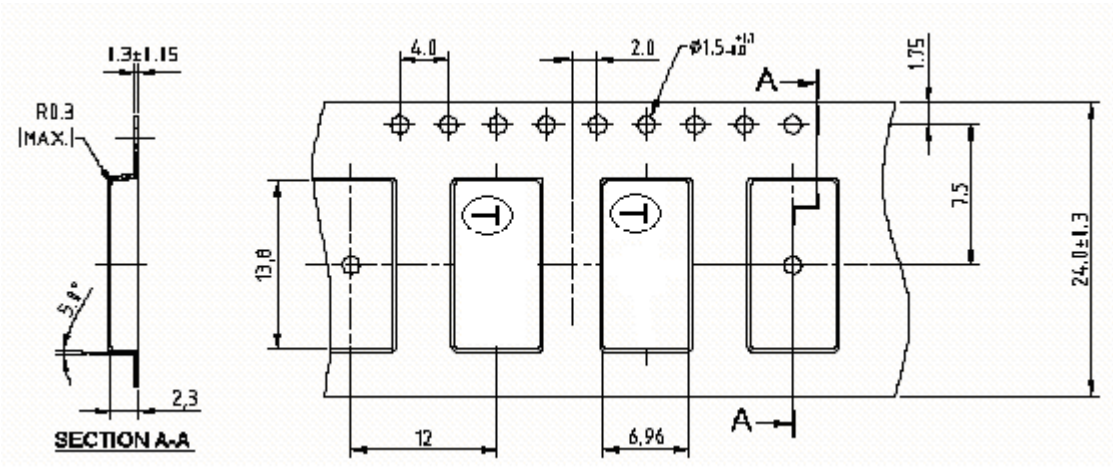


G. PACKING:

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE: