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: 70 MHz 13.84MHzBW SMD 13.3mm x 6.5 mm SAW IF Filter

TST Parts No.: TB1190A

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Kazuma Lee _____

Approval by:_____ Bob Chau _____

Date:_____ 08 / 05 / 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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SAW Filter 70MHz 13.84MHz BW (SMD 13.3×6.5 mm)
MODEL NO.: TB1190A REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -10°C to 40°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 **S**ensitive **D**evice

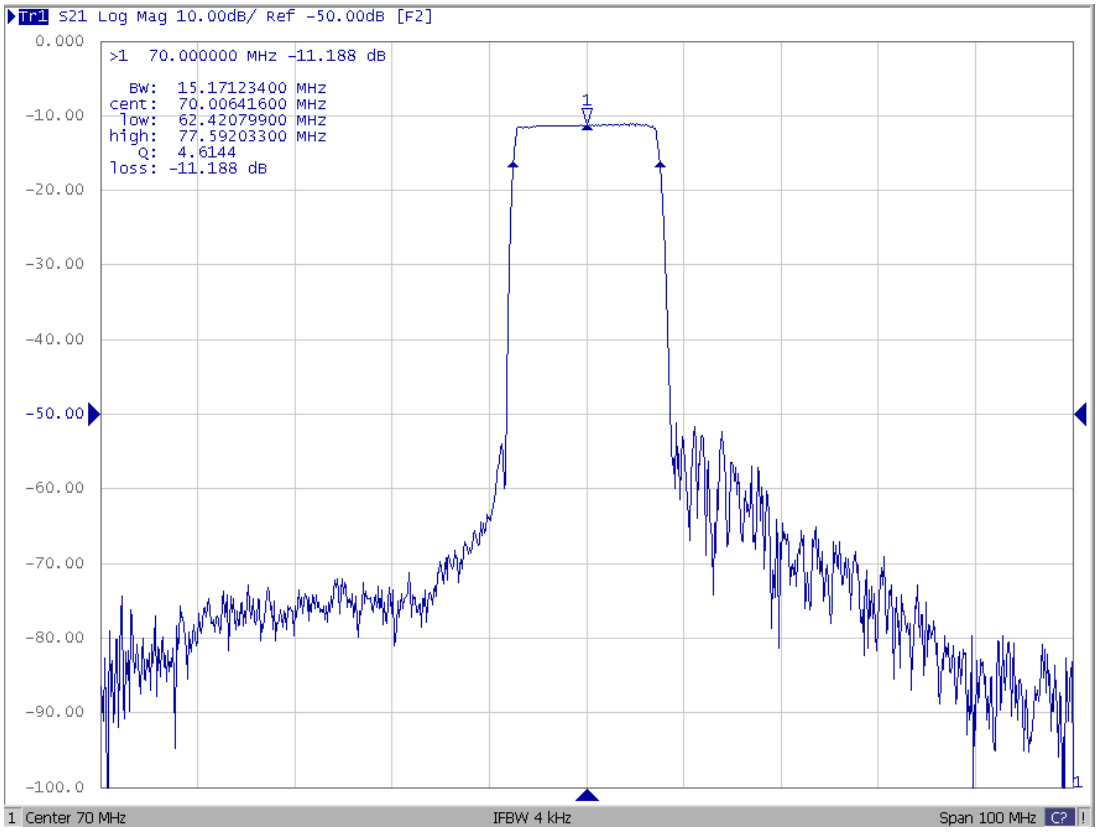
B. ELECTRICAL CHARACTERISTICS:

Ambient Temperature: 25°C

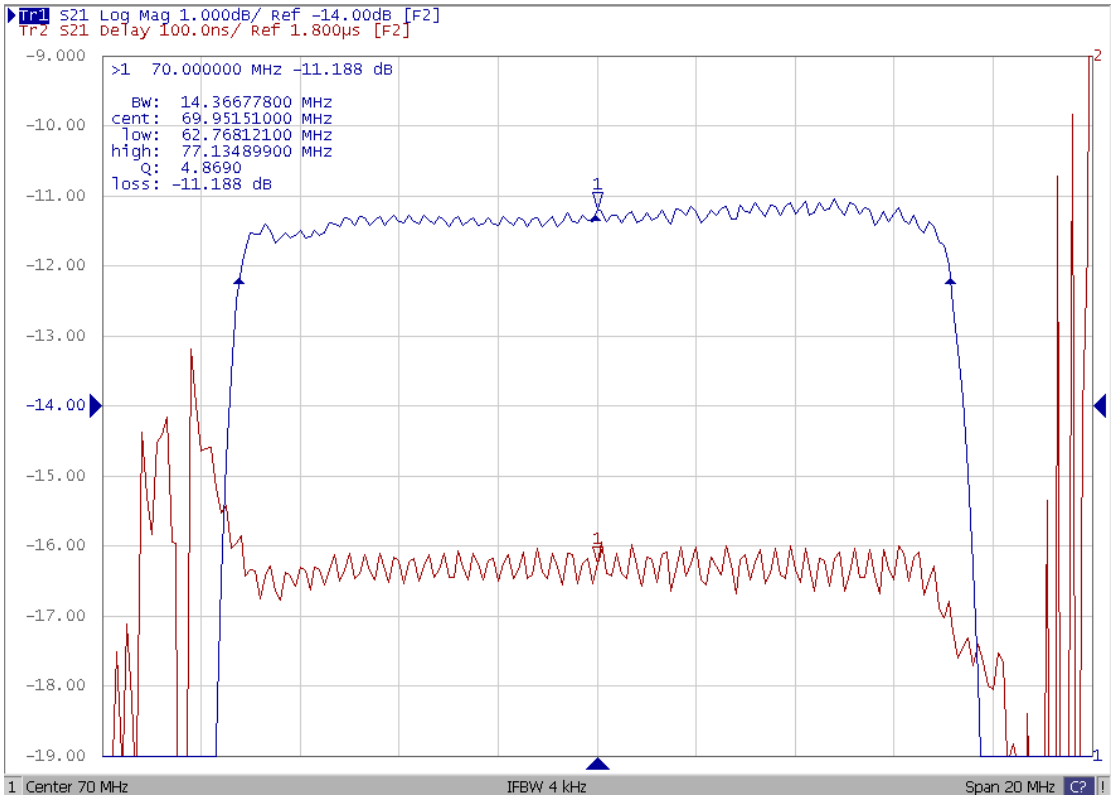
Item	Unit	Min.	Type.	Max.
Center frequency, **Fc**	MHz	-	70	-
Insertion Loss, **IL**	dB	-	11.2	14
-1dB bandwidth	MHz	14.2	14.38	-
-3dB bandwidth	MHz	-	14.87	-
-5dB bandwidth	MHz	-	15.17	15.3
-40dB bandwidth	MHz	-	16.90	-
Passband Ripple Fc+/- 6.92MHz	dB	-	0.7	1.5
Group Delay variation Fc+/- 6.92MHz	ns		100	100
Absolute Group Delay	us	-	1.58	-
Attenuation:(Reference level from Min IL)				
Ultimate Attenuation	dB	40	45	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

C. FREQUENCY CHARACTERISTICS:

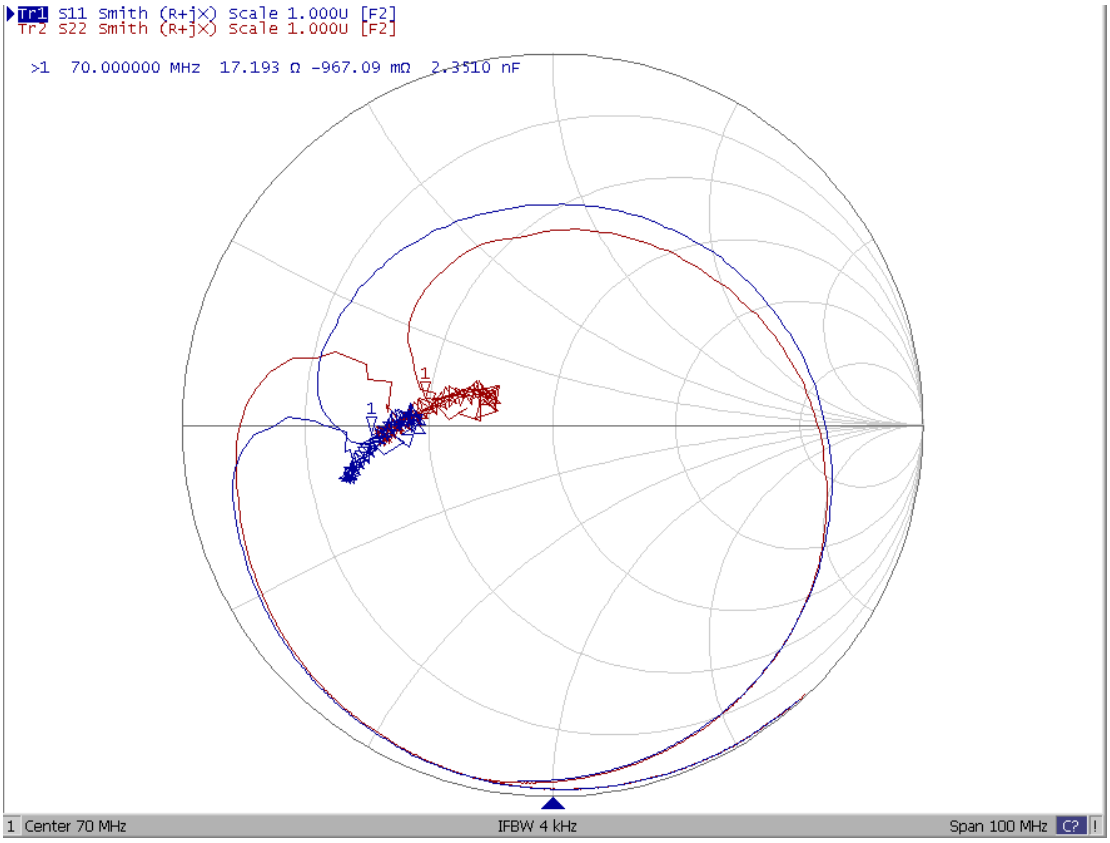
(1) Wide band Response:



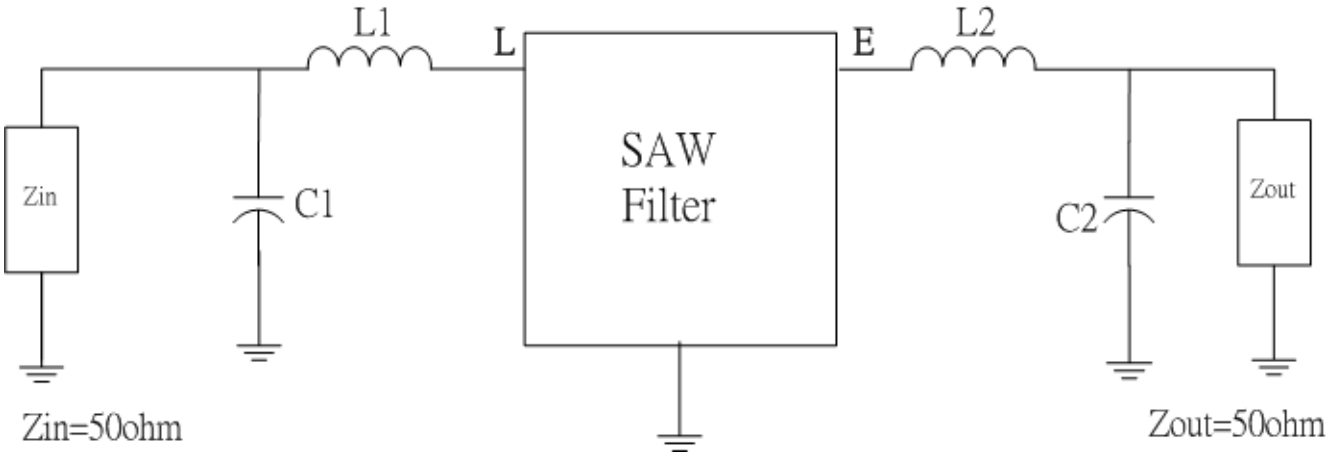
(2) Pass Band Response and Group Delay Response:



(3) Smith Chart:

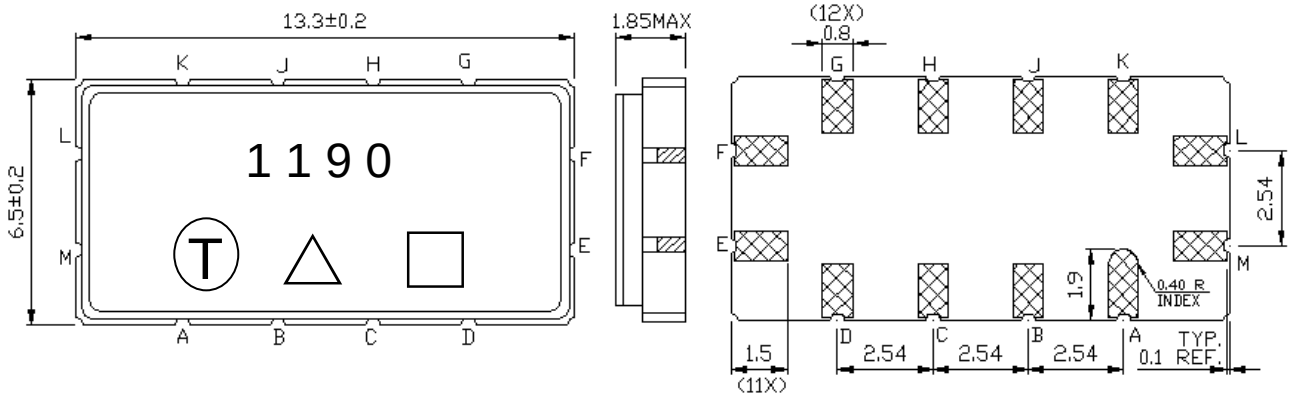


D. MATCHING CIRCUIT:



L=180nH L2=220nH C1=39pF C2=39pF

E. 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

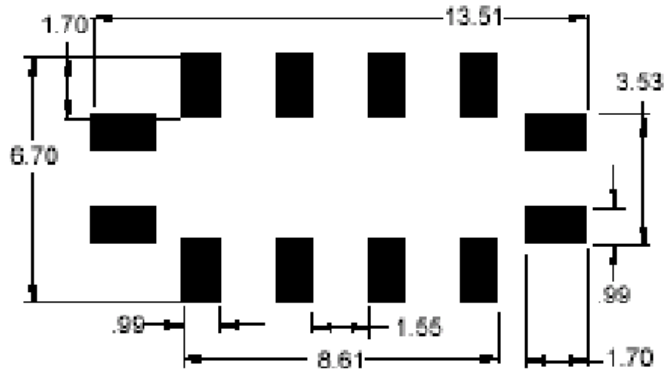
△ : Product / Year Code

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

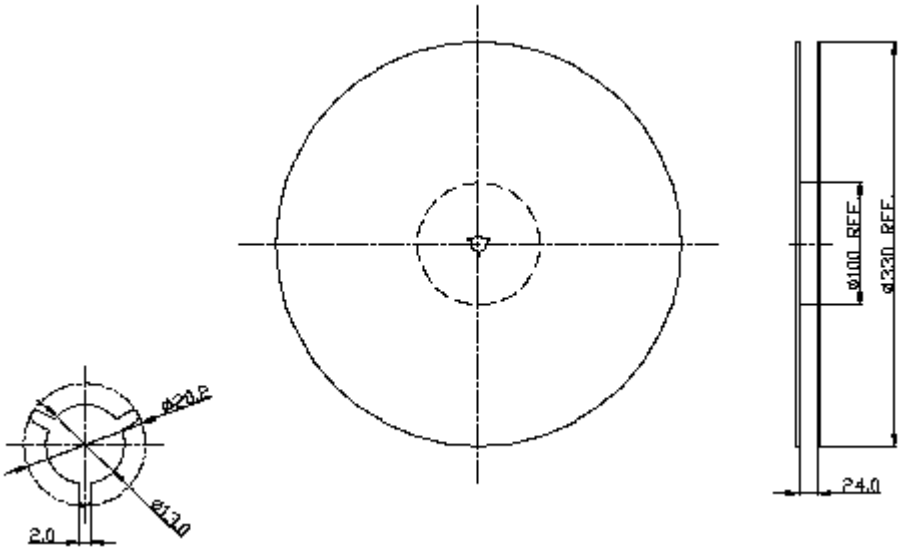
F. PCB FOOTPRINT:



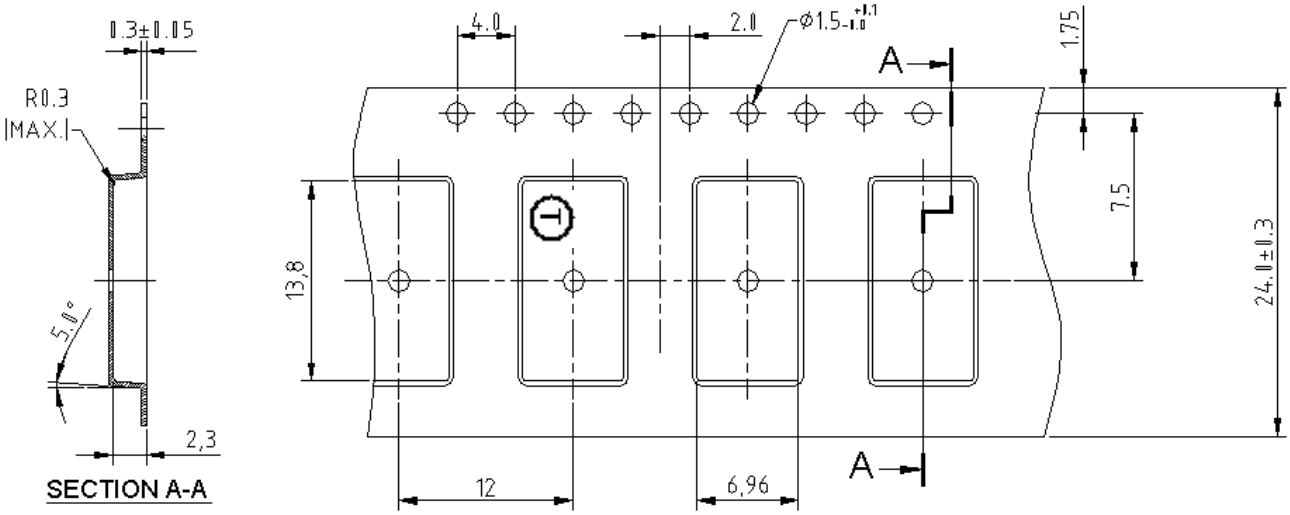
G. PACKING:

1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

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