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: IF SAW Filter 140 MHz SMD13.3x6.5 mm (BW=11 MHz)

TST Parts No.: TB1364A

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Hayley Chou

Approval by: Andy Yu

Date: 2020/10/15

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 140 MHz

MODEL NO.: TB1364A REV. NO.:1.0

A. MAXIMUM RATING:

RoHS Compliant
Lead-free soldering

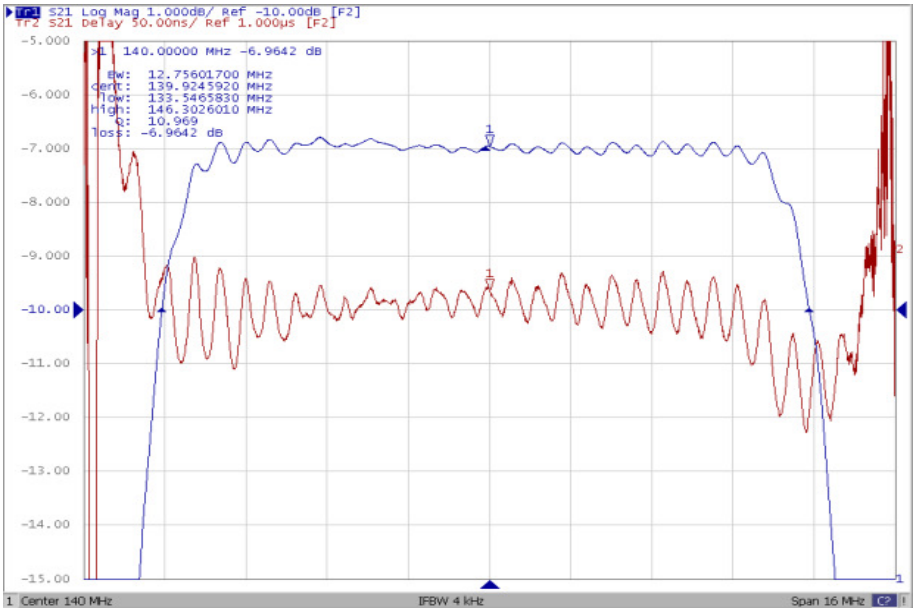
1. Input Power Level: 10 dBm
2. DC Voltage: 3 V
3. Operating Temperature: -30 °C to +80 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1 (MSL 1)

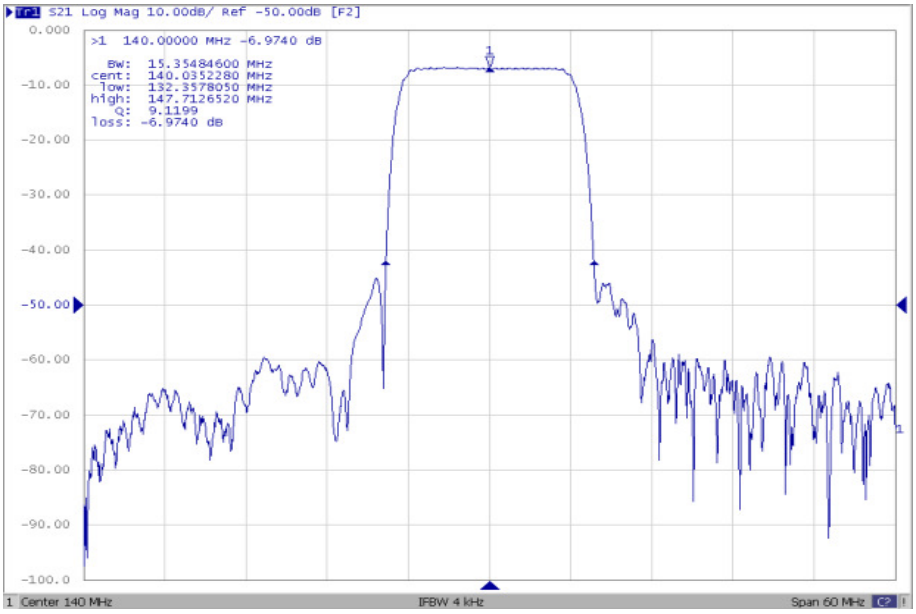
Electrostatic Sensitive Device (**ESD**)

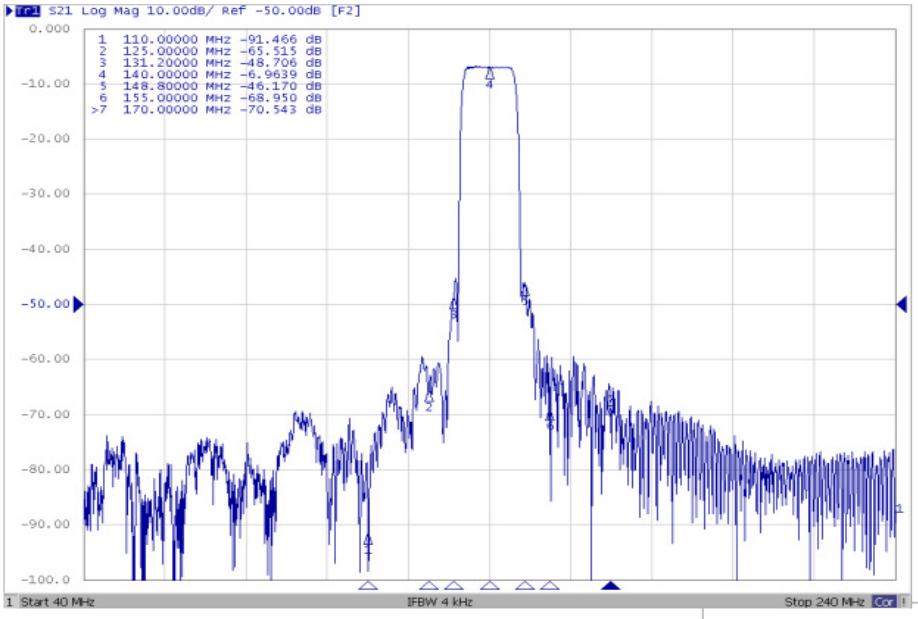
B. ELECTRICAL CHARACTERISTICS:

Item		Unit	Min.	Typ.	Max.
Center Frequency	**Fc**	MHz	-	140	-
Minimum Insertion Loss	**IL_{min}**	dB	-	6.8	10.5
0.5 dB Bandwidth		MHz	-	11	-
1 dB Bandwidth		MHz	9	11.7	-
3 dB Bandwidth		MHz	10	12.7	-
35 dB Bandwidth		MHz	-	15.3	16.7
Amplitude Ripple (Fc±4.5 MHz)		dB	-	0.4	1.0
Absolute Group Delay		μsec	-	1.02	-
Group Delay Variation (Fc±4.5 MHz)		nsec	-	65	130
Attenuation (Reference level from minimum insertion loss)					
40 ~ 110 MHz		dB	55	62	
110 ~125 MHz		dB	42	52	
125 ~131.2 MHz		dB	25	41	
148.8 ~155 MHz		dB	25	39	
155 ~170 MHz		dB	42	52	
170 ~240 MHz		dB	52	58	
Temperature Coefficient of Frequency		ppm/℃	-94		

C. FREQUENCY CHARACTERISTICS:

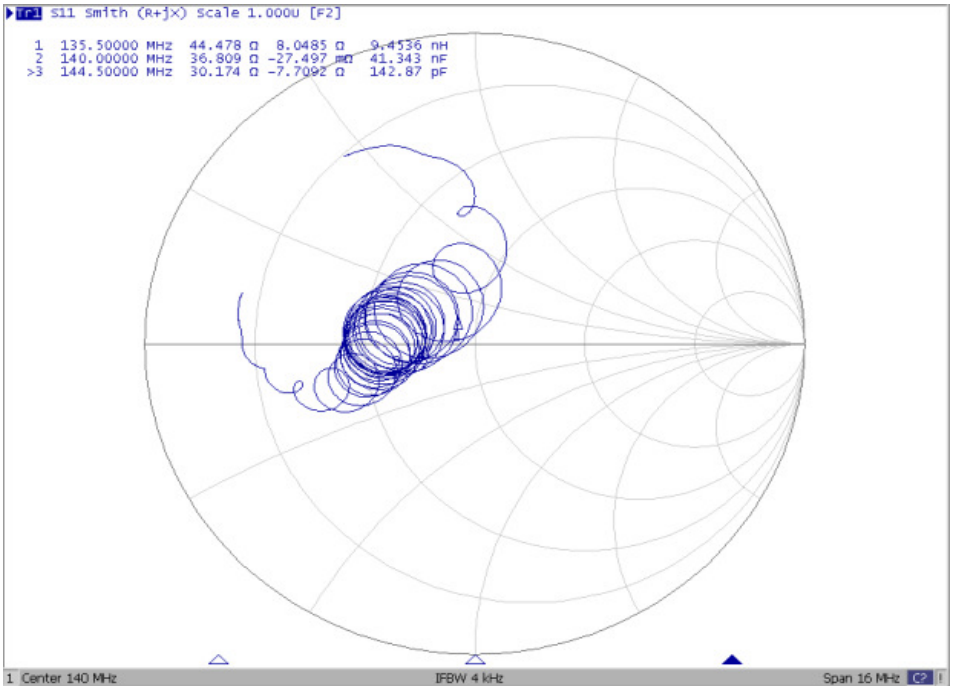




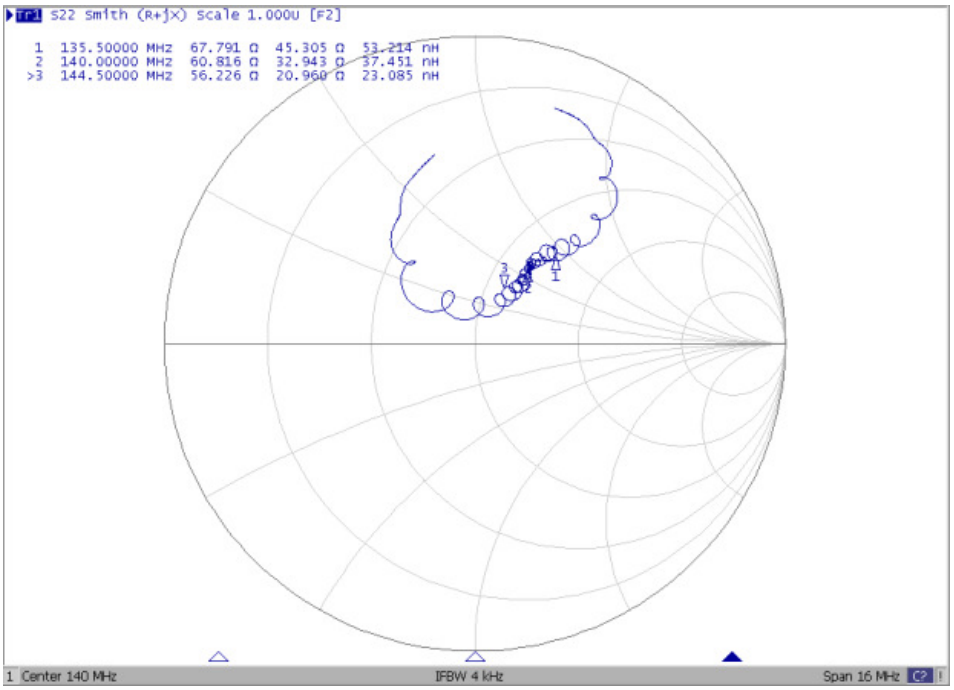


Reflection Functions:

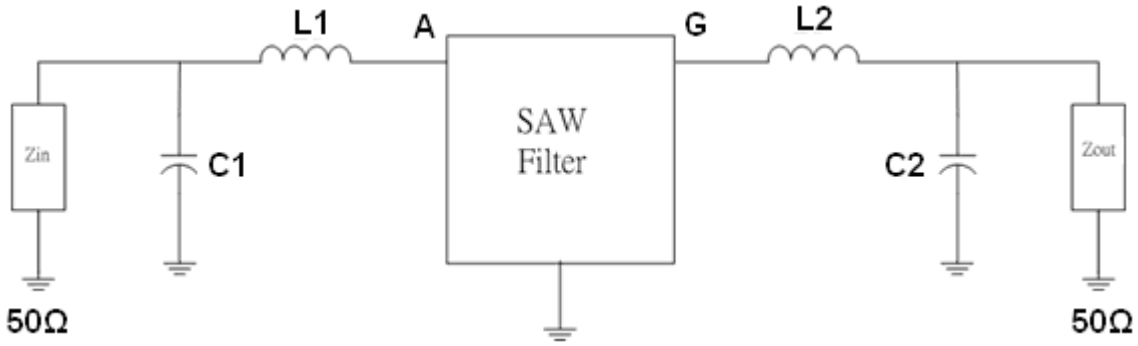
S11



S22

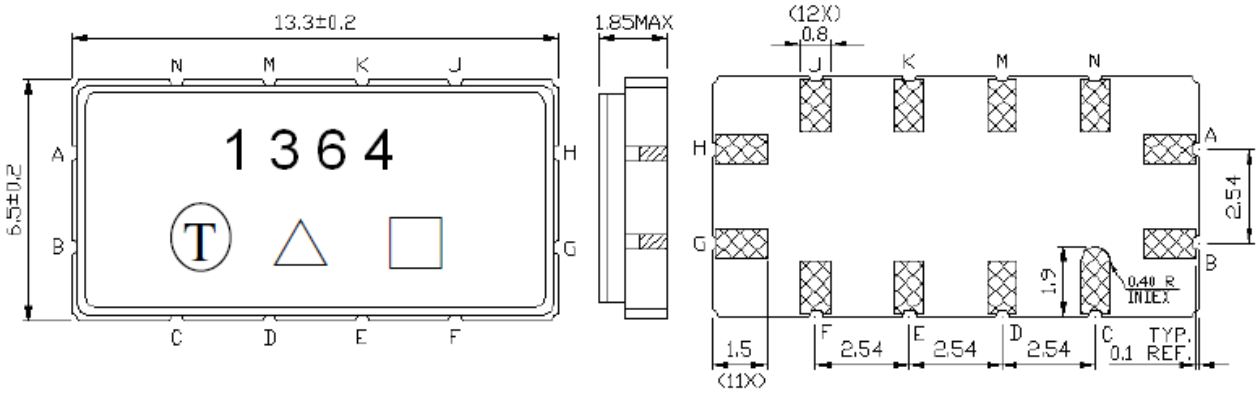


D. MEASUREMENT CIRCUIT:



L1=68nH, L2=100nH, C1=30pF, C2=15pF

E. OUTLINE DRAWING:



Pin A: Input
Pin G: Output
Others: Ground
Unit: mm
All tolerances are +/-0.2 mm unless otherwise specified.
△: Product / Year Code
□: Date Code (Follow the table from planner each year)

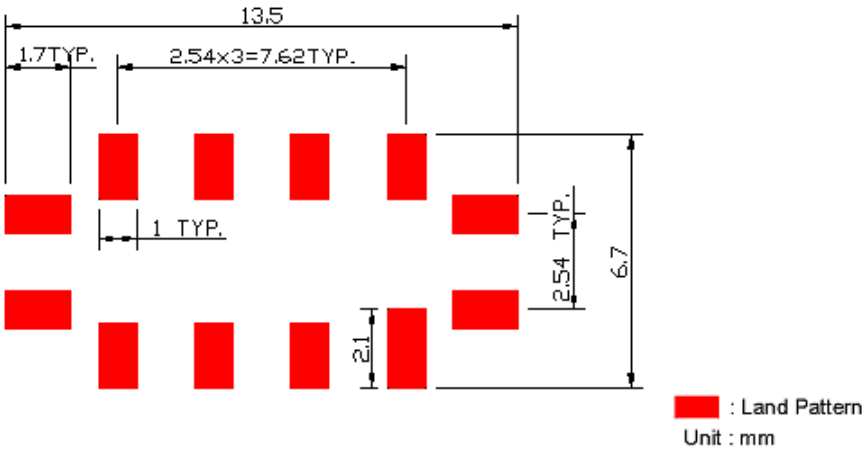
Product / Year Code

Year	2017 2021	2018 2022	2019 2023	2020 2024
Product Code	B	b	B	b

Date 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

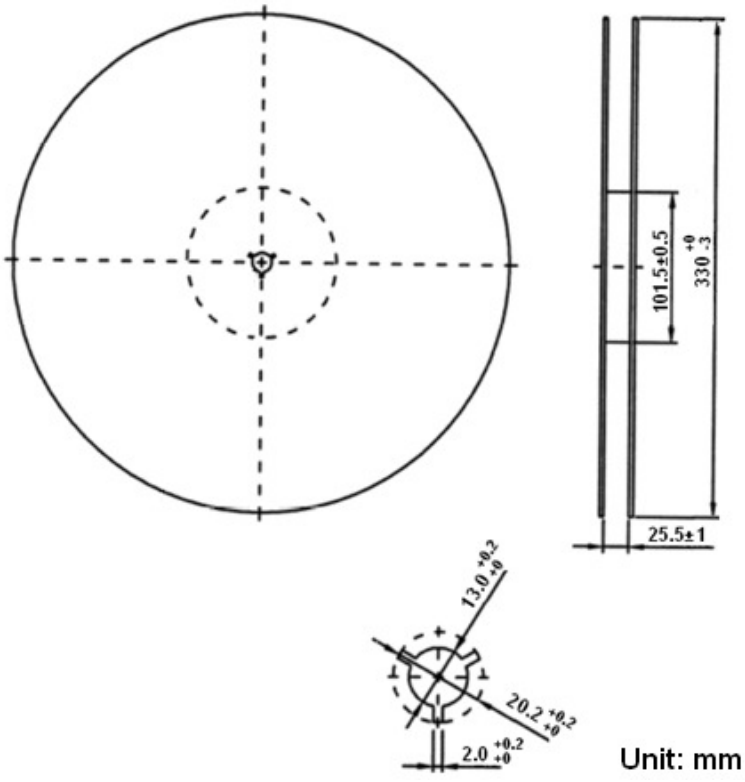
F. PCB FOOTPRINT:



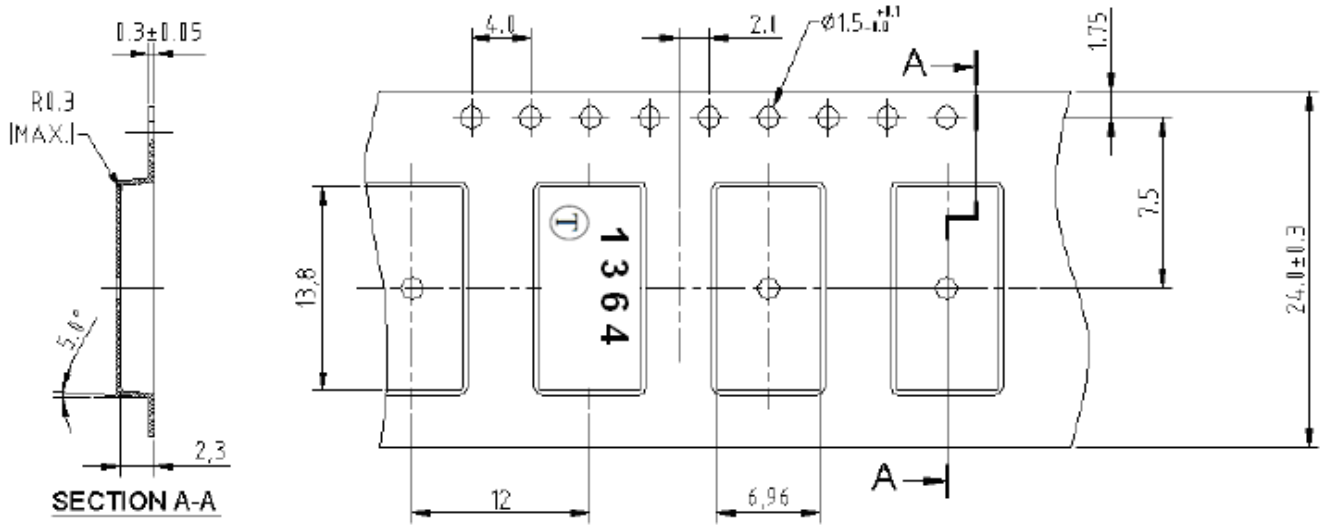
G. PACKING: (Ref. WI-75M03)

1. REEL DIMENSION

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



2. TAPE DIMENSION



Unit: mm

H. <u>RECOMMENDED REFLOW PROFILE</u>:

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.