



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.

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Product Specifications Approval Sheet

Product Description: 234.5MHz 160kHz BW SMD 7.0 x 5.0 mm SAW IF Filter

TST Parts No.: TB1312A

Customer Parts No.: _____

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Kazuma Lee *Kazuma Lee*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 01 / 17 / 2019

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 234.5MHz SMD 7.0X5.0mm

MODEL NO.: TB1312A

REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -10°C to 70°C
2. Storage temperature range: -55°C to 125°C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V
5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

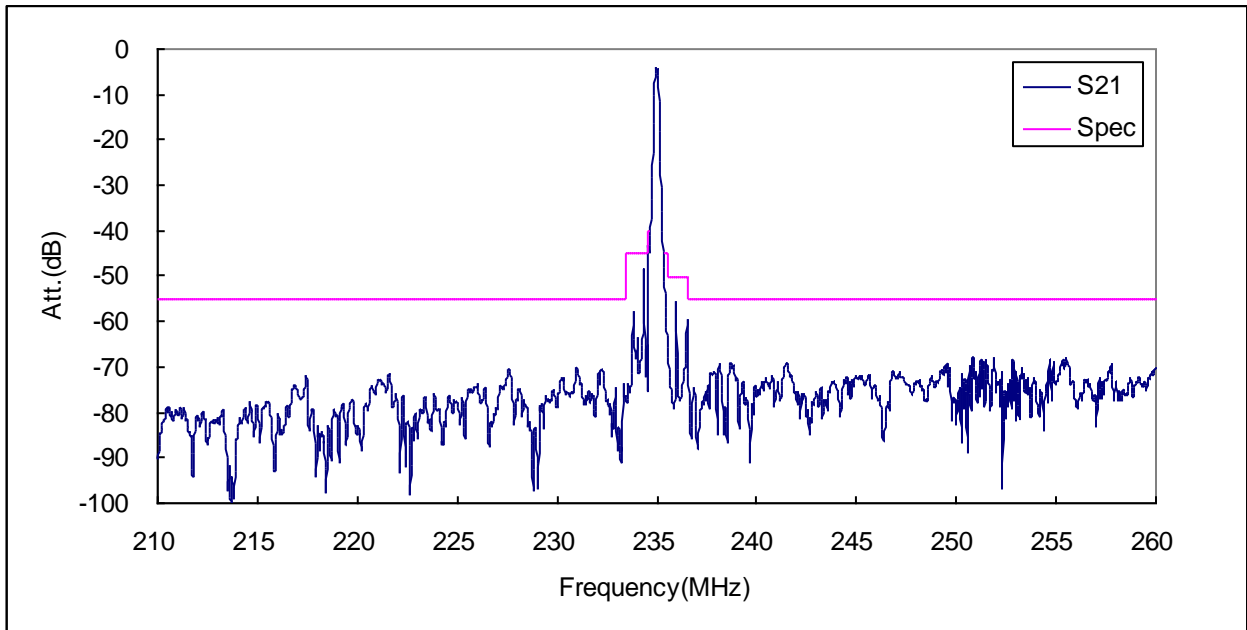
B. ELECTRONIC CHARACTERISTICS:

Ambient Temperature: 25°C

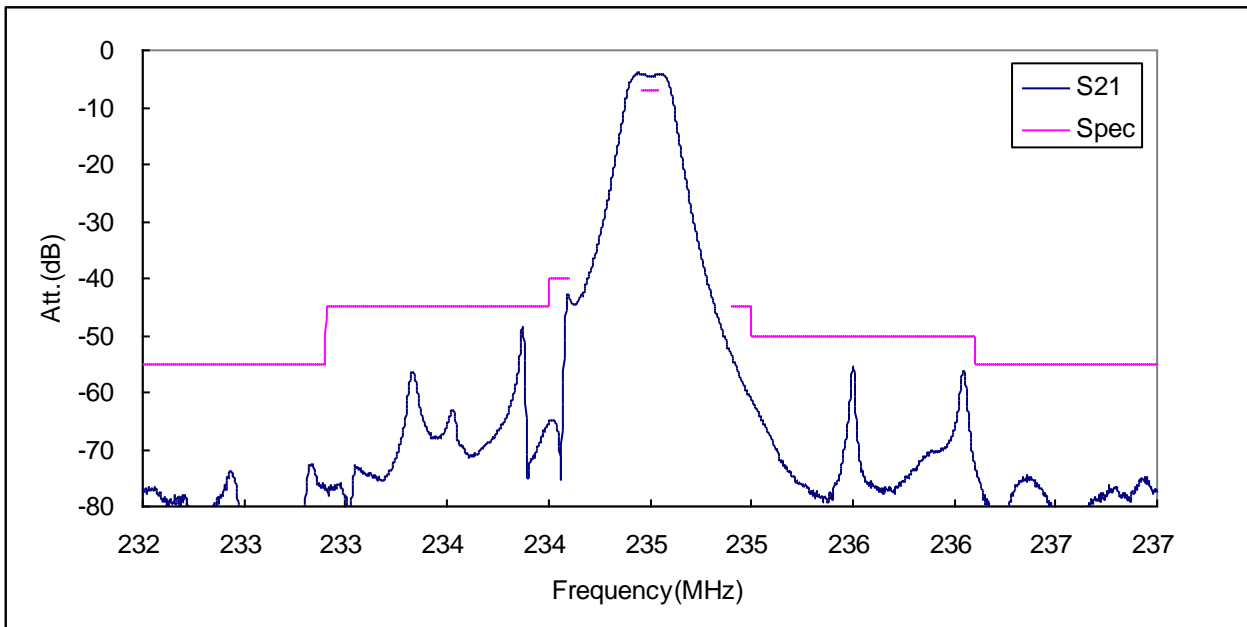
Item	Unit	Min.	Type.	Max.
Center frequency, F_c	MHz	-	234.5	-
Insertion Loss, IL	dB	-	4.0	6.0
Passband Ripple F _c +/- 80kHz	dB	-	0.9	3
3dB BW	MHz	0.16	0.2	-
Group Delay Variation F _c +/- 80kHz	us	-	1.7	3.0
Attenuation:(Reference level from Min IL)				
F _c +/-0.4MHz	dB	35	40	-
F _c -25MHz ~ F _c -1.6MHz	dB	50	45	
F _c -1.6MHz ~ F _c -0.5MHz	dB	40	45	
F _c -0.5MHz ~ F _c -0.4MHz	dB	35	40	
F _c +0.4MHz ~ F _c +0.5MHz	dB	40	45	
F _c +0.5MHz ~ F _c +1.6MHz	dB	45	50	
F _c +1.6MHz ~ F _c +25MHz	dB	50	55	
Temperature Coefficient	ppm/°C ²	-	-0.036	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

C. FREQUENCY CHARACTERISTICS:

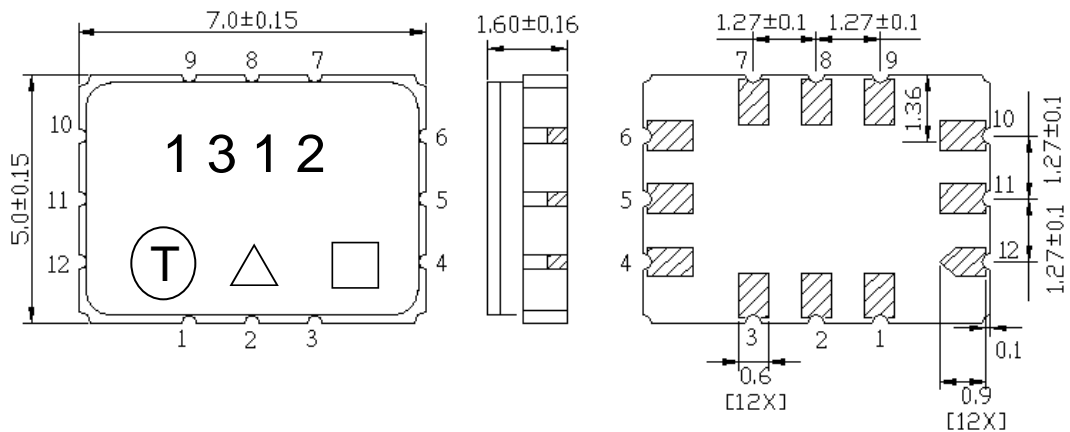
1. Wide Band Response



2. Narrow Band Response



D. OUTLINE DRAWING:



#1: Input

#2: Input

#7: Output

Others: Ground

□ : Week Code

Unit: mm

△ : Product / Year Code

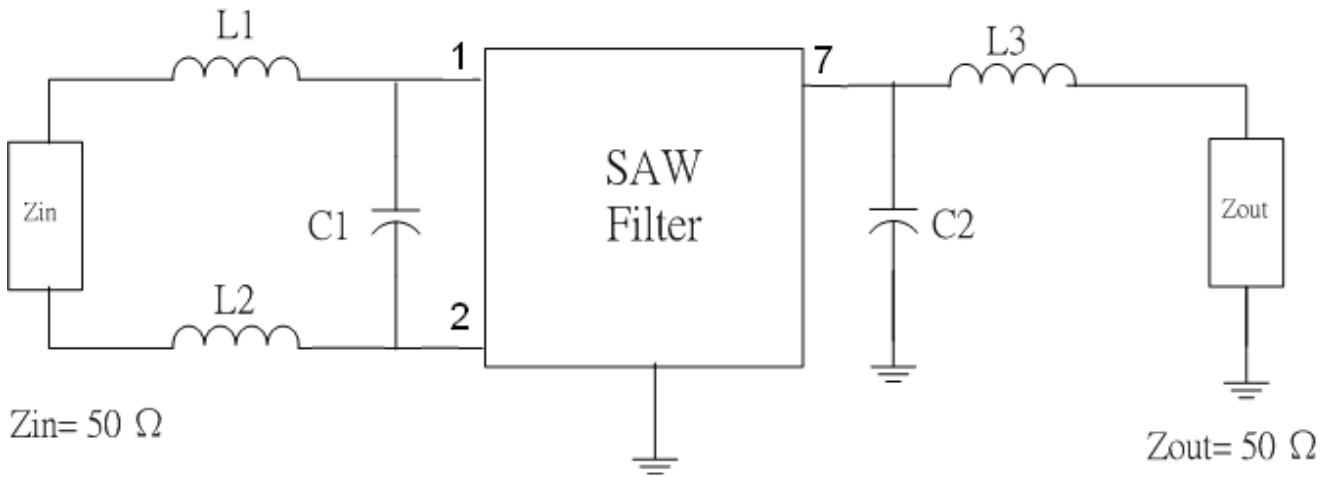
Product / Year Code: Four-Year Cycle

Year	2017 2021	2018 2022	2019 2023	2020 2024
Product Code	B	b	<u>B</u>	<u>b</u>

Week Code Table

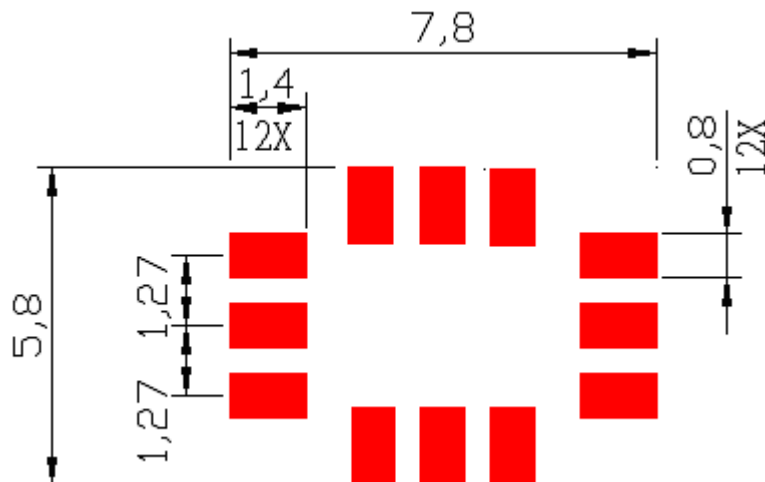
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

E. MATCHING CIRCUIT:



$L1=L2=56\text{nH}$ $L3=100\text{nH}$ $C1=C2=1\text{pF}$

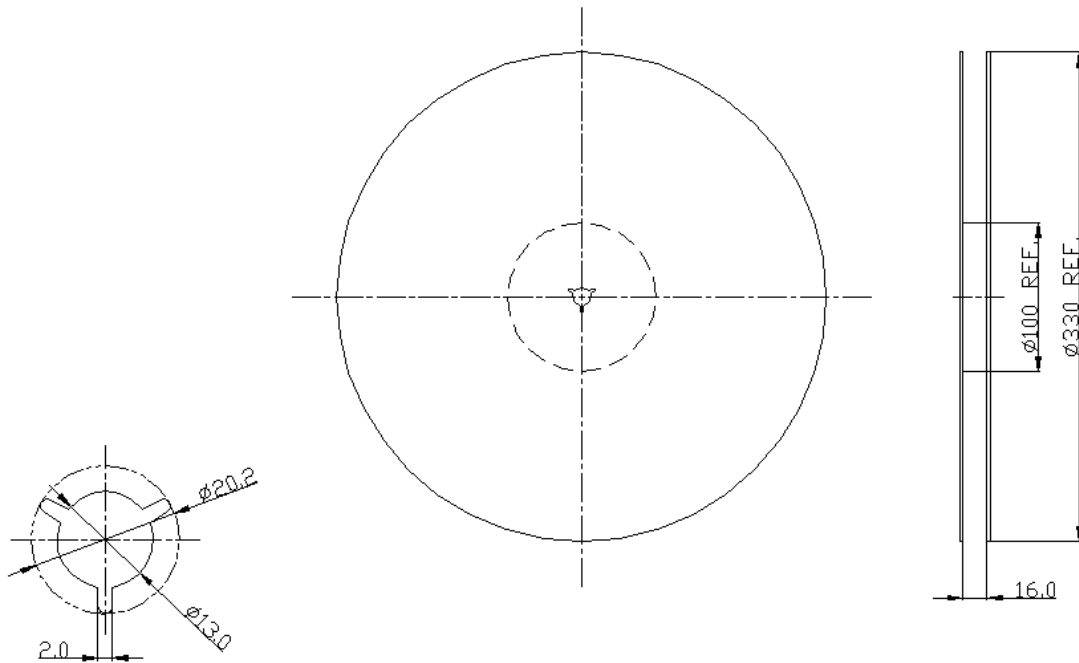
F. PCB FOOTPRINT:



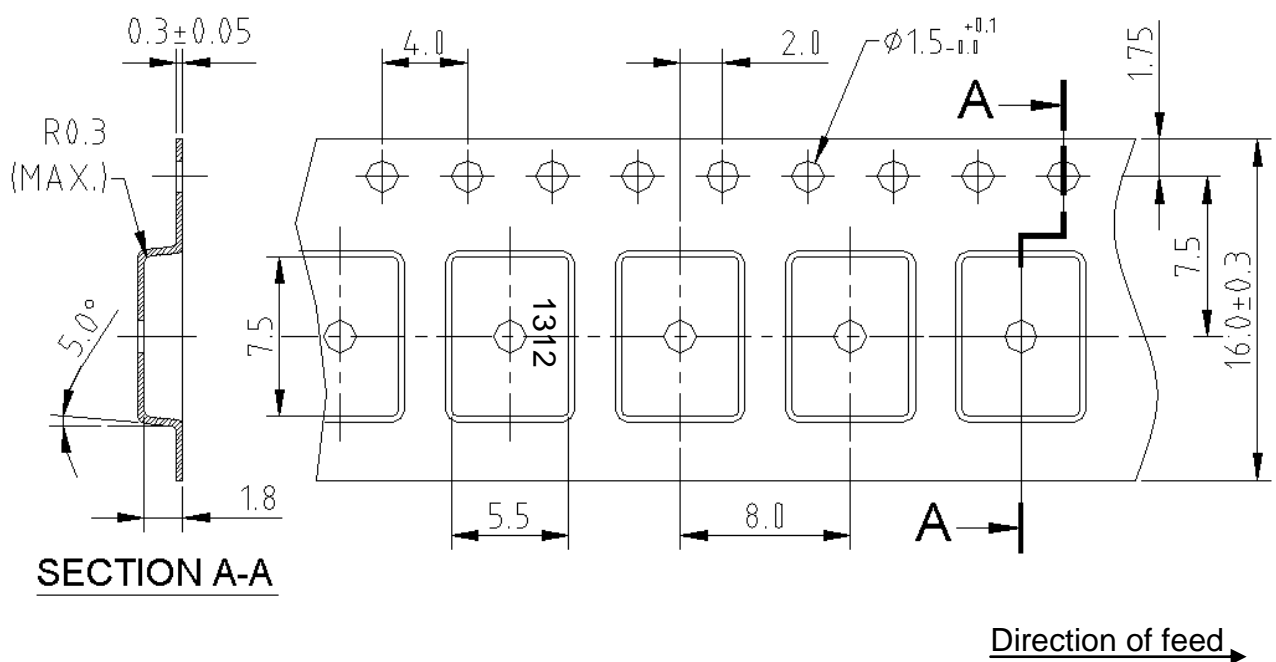
G. PACKING:

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°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 260°C+0/-5°C peak (20~40sec).
4. Time: 2 times.

