



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Name: SAW Filter 315 MHz (BW 1.06MHz) SMD 3.8X3.8 mm

TST Parts No.: TA1602A (This part is is compliant with AEC-Q200)

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Michael Yang *Michael*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2019/07/25

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 315MHz

MODEL NO.:TA1602A

REV. NO.:1.0

A. MAXIMUM RATING:

1. Input Power Level: 13 dBm
2. DC Voltage : 0V
3. Operating Temperature: -40℃ to +105℃
4. Storage Temperature: -40℃ to +105℃
5. Moisture Sensitive Level (MSL): Level 1

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

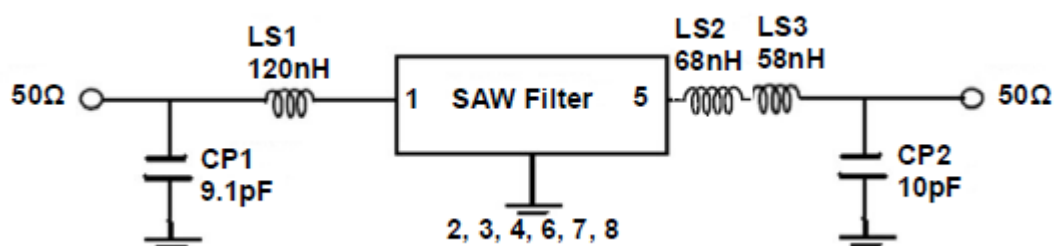
Terminating source impedance (single) : $Z_s = 50 \Omega$

Terminating load impedance(single) : $Z_L = 50 \Omega$

Item	Unit	Min	Type.	Max	Note
Center Frequency F_c	MHz	-	315	-	
Minimum Insertion Loss @315 MHz I.L _{min}	MHz		2.0	3.0	
3dB BW pass band (relative to 315 MHz) 3dB Low	MHz		314.3	314.47	2
3dB BW pass band (relative to 315 MHz) 3dB High	MHz	315.53	315.7		2
Relative Attenuation (Relative to I.L _{min})					
10 ~ 140 MHz	dB	65	71		
140 ~ 235 MHz	dB	57	62		
235 ~ 300 MHz	dB	41	43		
300 ~ 310 MHz	dB	23	34		
310 ~ 313 MHz	dB	9	14		
317 ~ 320 MHz	dB	9	14		
320 ~ 325 MHz	dB	11	13		
325 ~ 332 MHz	dB	23	26		
332 ~ 352 MHz	dB	36	41		
352 ~ 390 MHz	dB	47	52		
390 ~ 1600 MHz	dB	55	60		
1600 ~ 2500 MHz	dB	50	55		
Package size	mm	SMD 3.8x3.8			

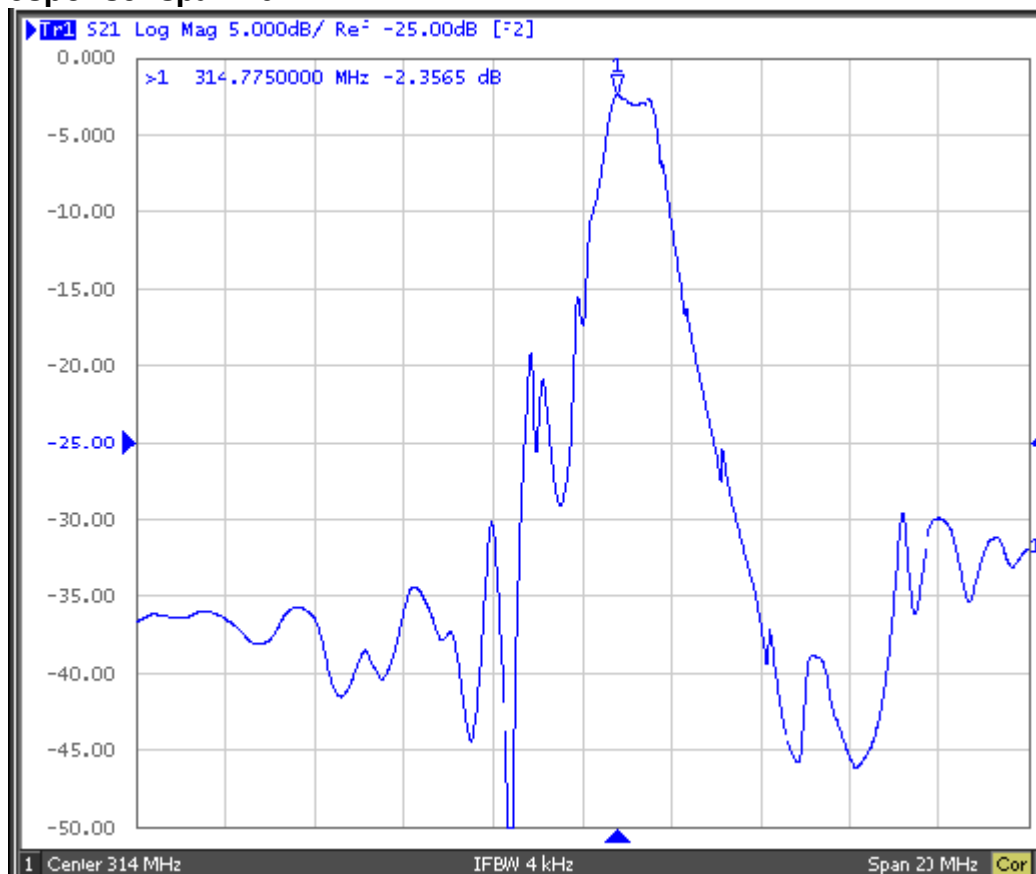
1. These passband frequencies are only applicable in the -40 to +105°C temperature range.
2. These passband frequencies are only applicable in the -40 to +125°C temperature range.

C. TEST CIRCUIT:

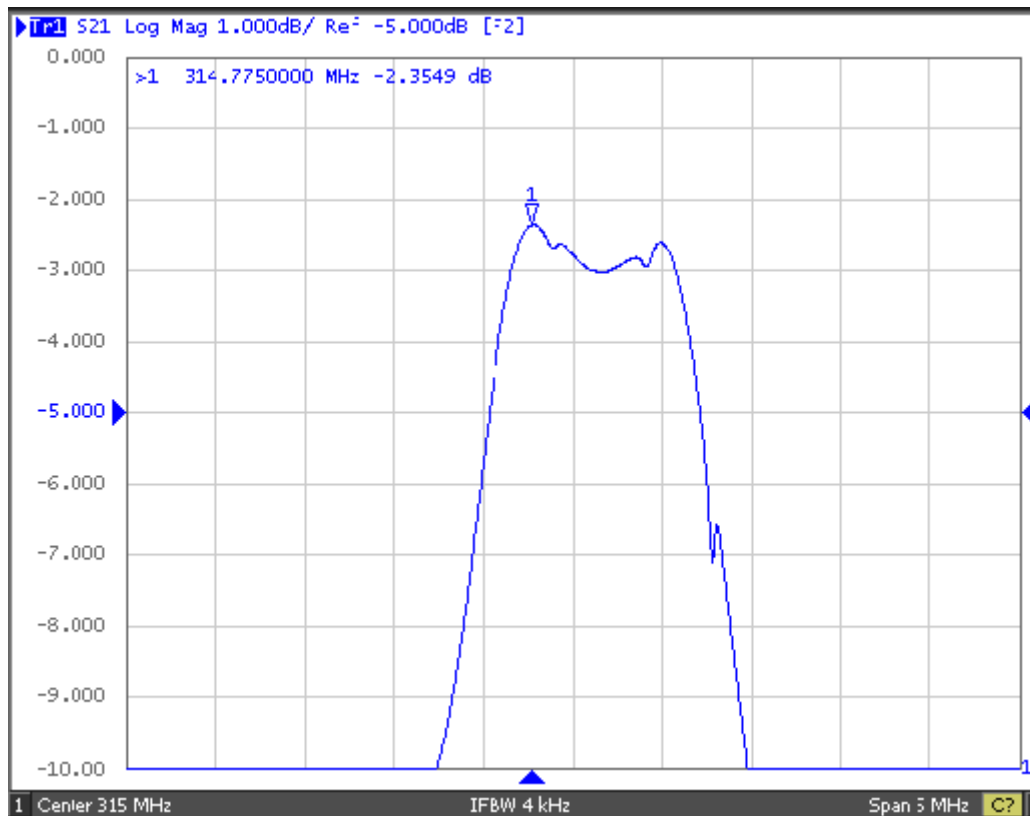


D. Frequency Characteristics:

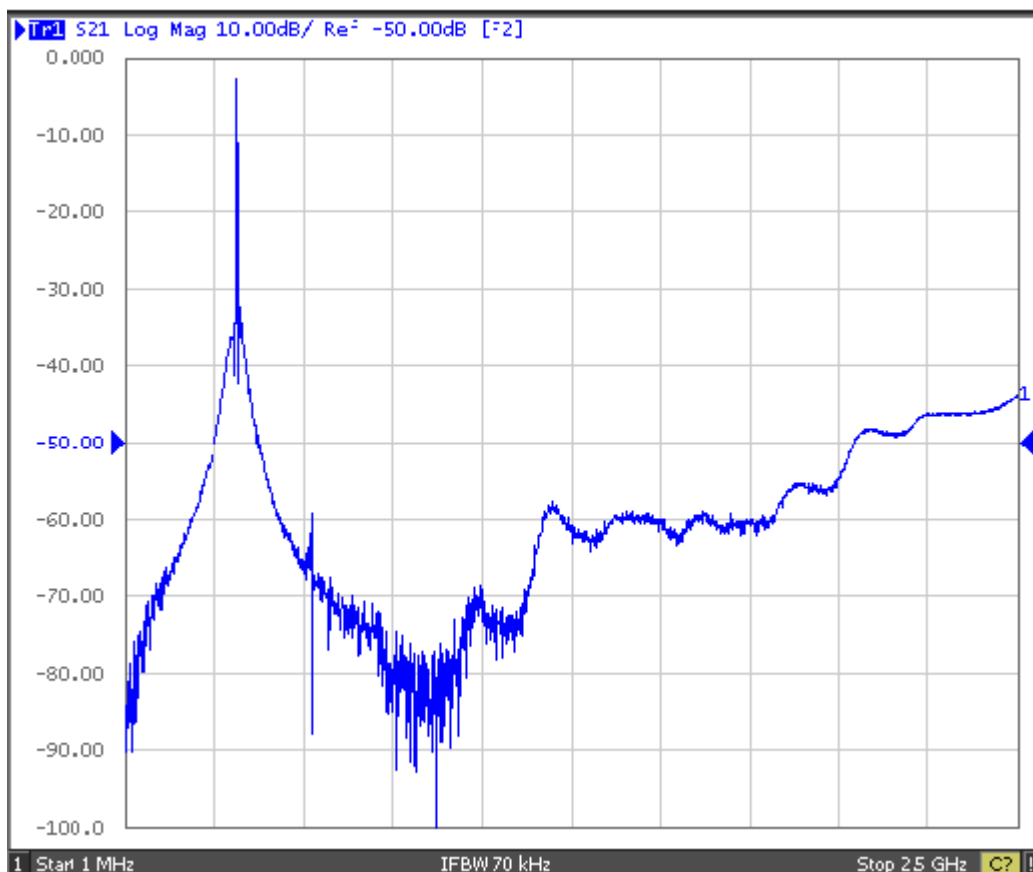
S21 response: span 20MHz



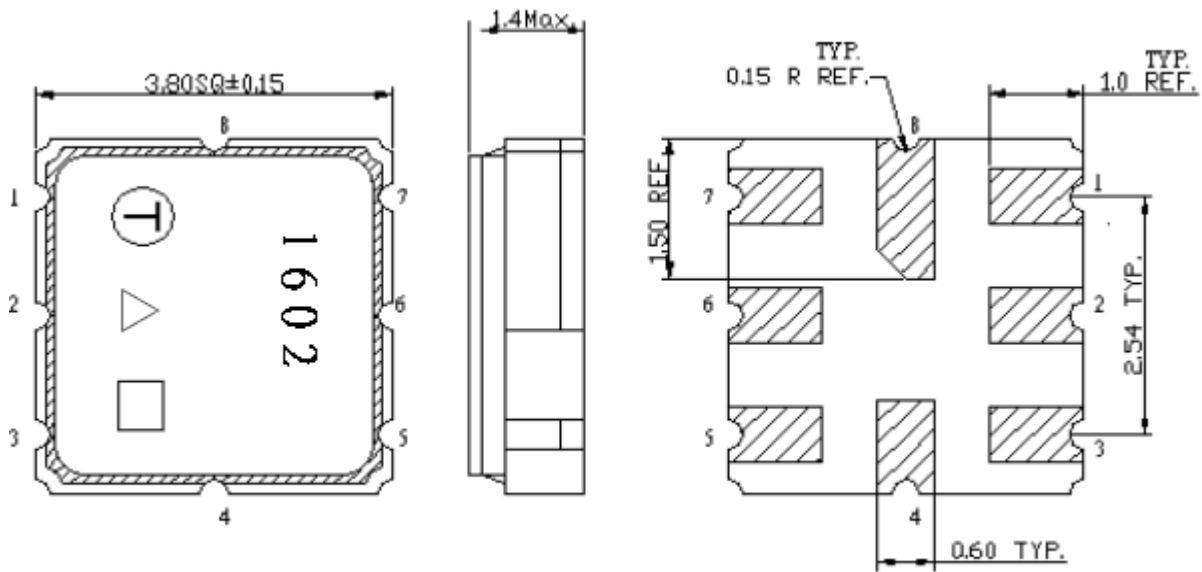
S21 response: span 5MHz



S21 response: span 1 MHz ~2.5 GHz



E.OUTLINE DRAWING:



- #1 : Input or Input ground
- #2 : Input ground or Input
- #5 : Output or Output ground
- #6 : Output ground or Output
- #3,4,7,8 : Ground
- △ : Year code
- : Data code
- Unit : mm

Year	2011	2012
	:	:
	:	:
	2019	2020
Year Code	A	a

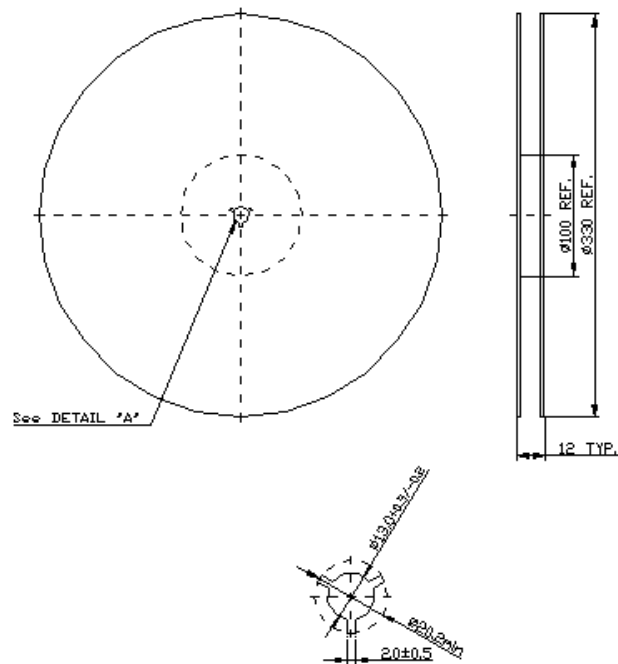
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

*3) The recommended pin configuration offers better suppression of electrical crosstalk.

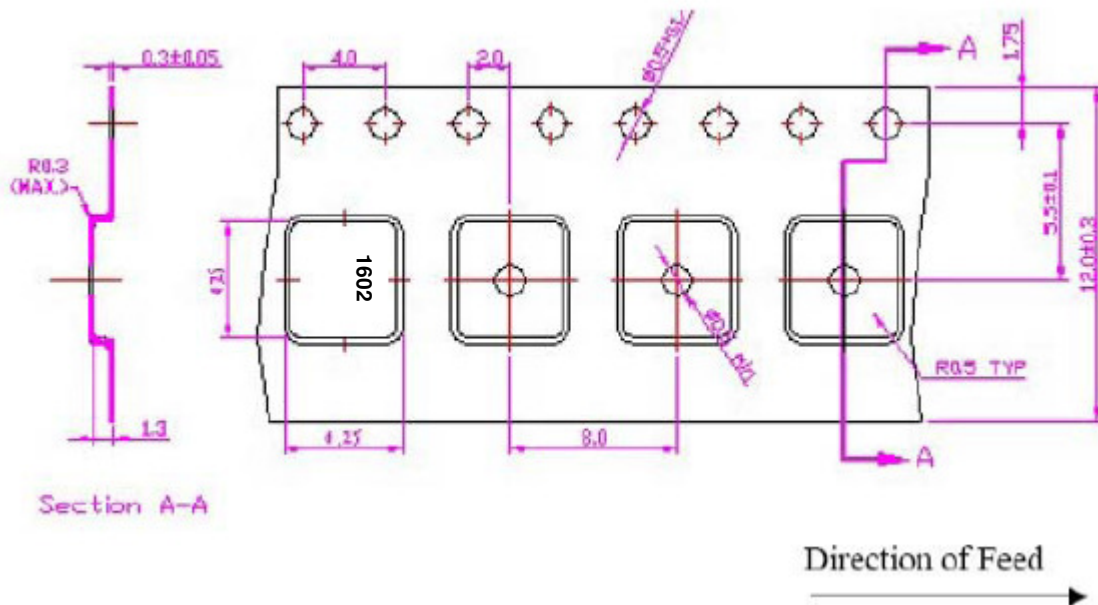
F. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



G. 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.

