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 s

Product Name: SAW Filter 314.45 MHz (BW 1.06MHz) SMD 3.0X3.0 mm

TST Parts No.: TA1778B

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Sam Lin

Approval by: Bob Chau

Date: 2016/03/16

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 314.45MHz

MODEL NO.:TA1778B REV. NO.:1.0

A. MAXIMUM RATING:

1. Input Power Level: 20 dBm(50000hours CW)
2. Input Power Level: 28 dBm(5000hours CW)
3. DC Voltage : 0 V
4. Operating Temperature: -40°C to +105°C
5. Storage Temperature: -40°C to +105°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic **S**ensitive **D**evice (**ESD**)

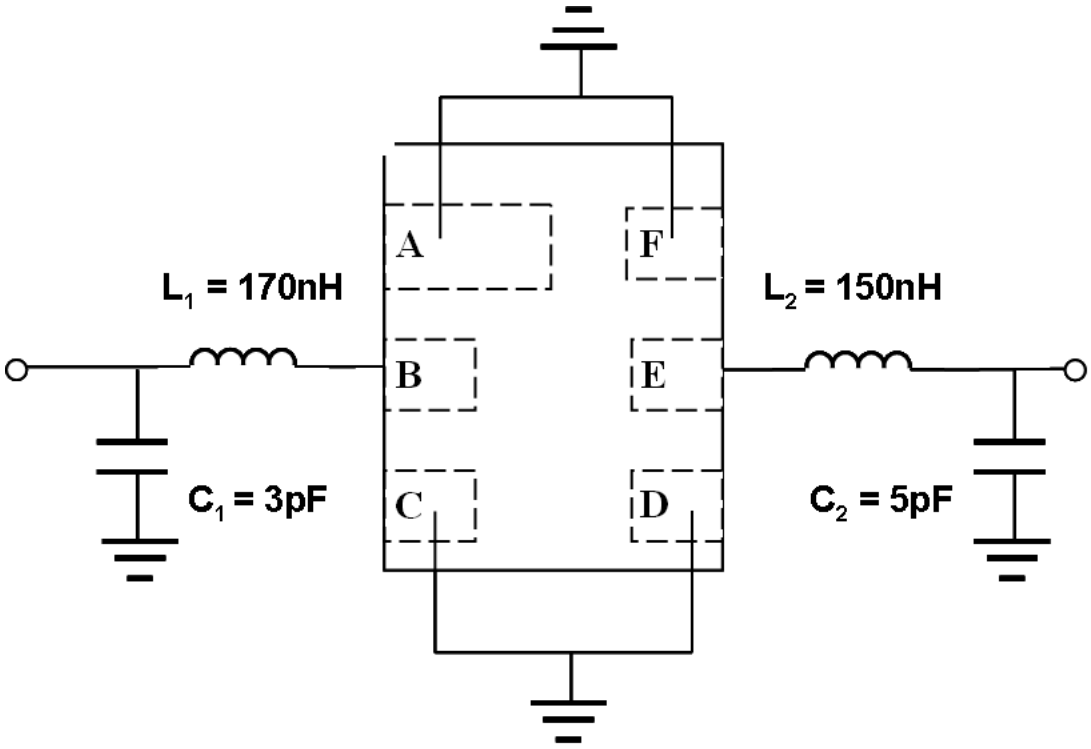
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single) : Zs = 50 Ω

Terminating load impedance(single) : Z_L = 50 Ω

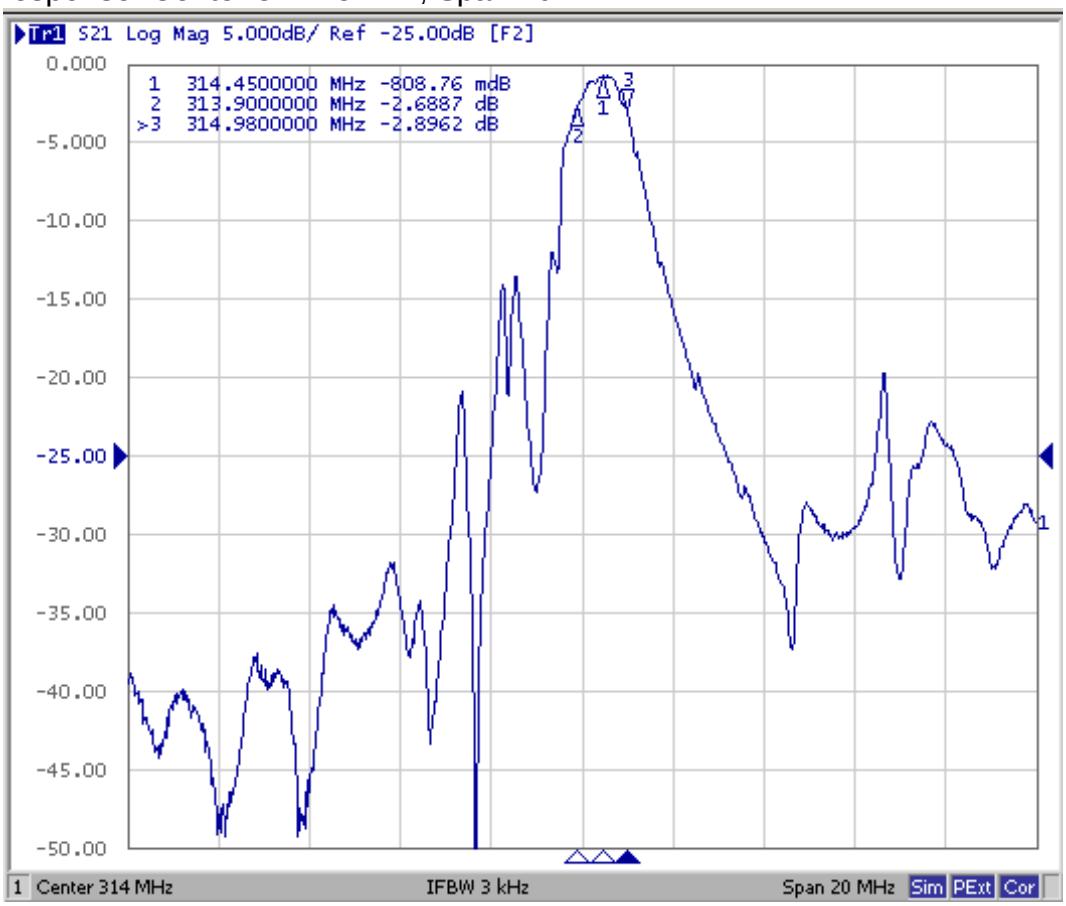
Item	Unit	Min	Typ.	Max
Center Frequency Fc	MHz	-	314.45	-
Minimum Insertion Loss (313.92 ~ 314.98 MHz) α_{min}				
Incl. loss in matching elements	dB	-	1.9	2.7
Excl. loss in matching elements	dB	-	1.0	1.6
Pass Band (Relative to α_{min})				
313.92 ~ 314.98 MHz	dB	-	2.5	3.0
313.90 ~ 315.00 MHz	dB	-	3.0	3.5
Relative Attenuation (Relative to α_{min}) α_{rel}				
10 ~ 180 MHz	dB	61	66	-
180 ~ 200 MHz	dB	57	62	-
300 ~ 310 MHz	dB	26	31	-
310 ~ 313 MHz	dB	11	16	-
315.9 ~ 318.8 MHz	dB	11	16	-
318.8 ~ 326 MHz	dB	18	25	-
326 ~ 328 MHz	dB	31	36	-
328 ~ 340 MHz	dB	36	41	-
340 ~ 389 MHz	dB	41	46	-
389 ~ 568 MHz	dB	54	59	-
568 ~ 1164 MHz	dB	61	66	-
1164 ~ 2250 MHz	dB	51	57	-
2250 ~ 2500 MHz	dB	55	61	-

C.. TEST CIRCUIT:

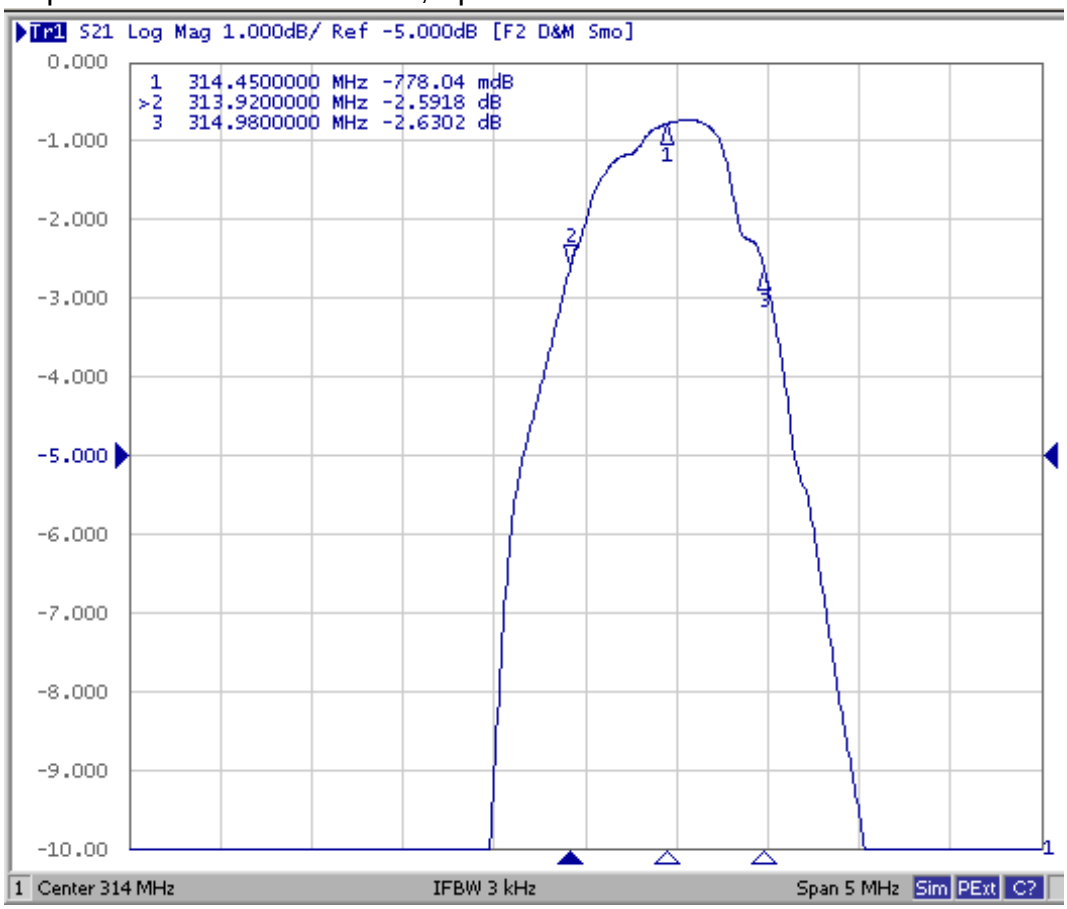


D. Frequency Characteristics:

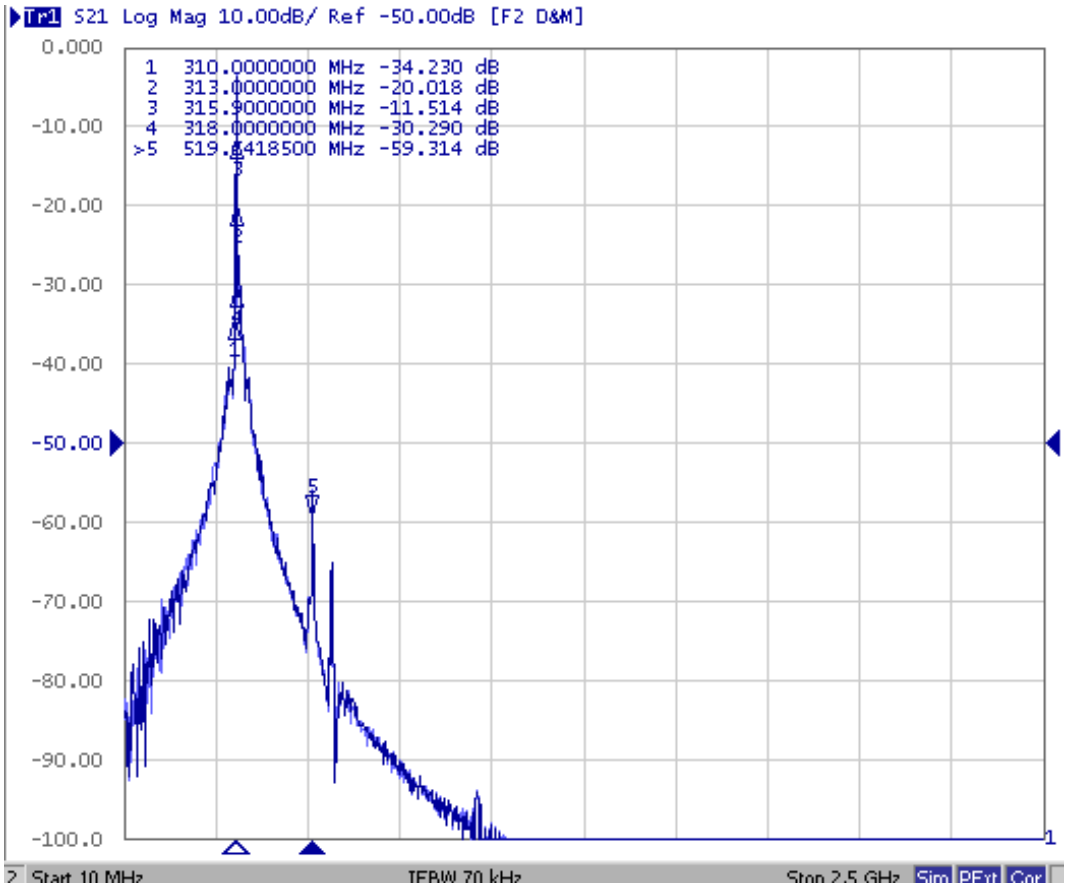
S21 response: Center 314.45MHz, Span 20 MHz



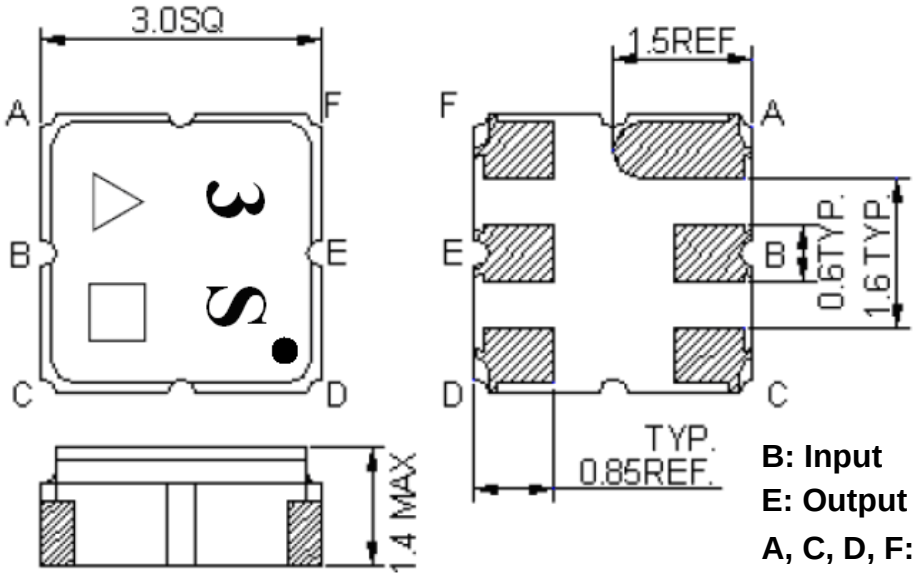
S21 response: Center 314.45MHz, Span 5 MHz



S21 response: Start 10 MHz, Stop 2500 MHz



E.OUTLINE DRAWING:



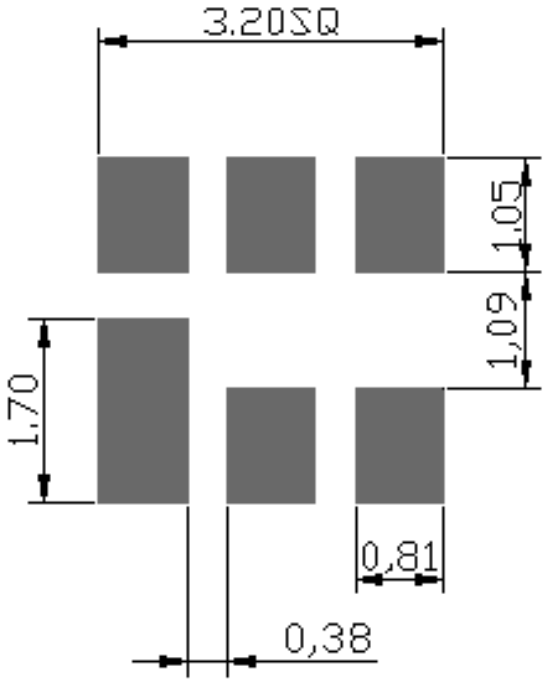
B: Input
E: Output
A, C, D, F: Ground
Unit: mm

△ : Year Code (2009->9, 2010->0,…, 2018->8)

□ : Date Code (Follow the table from planner each year)

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

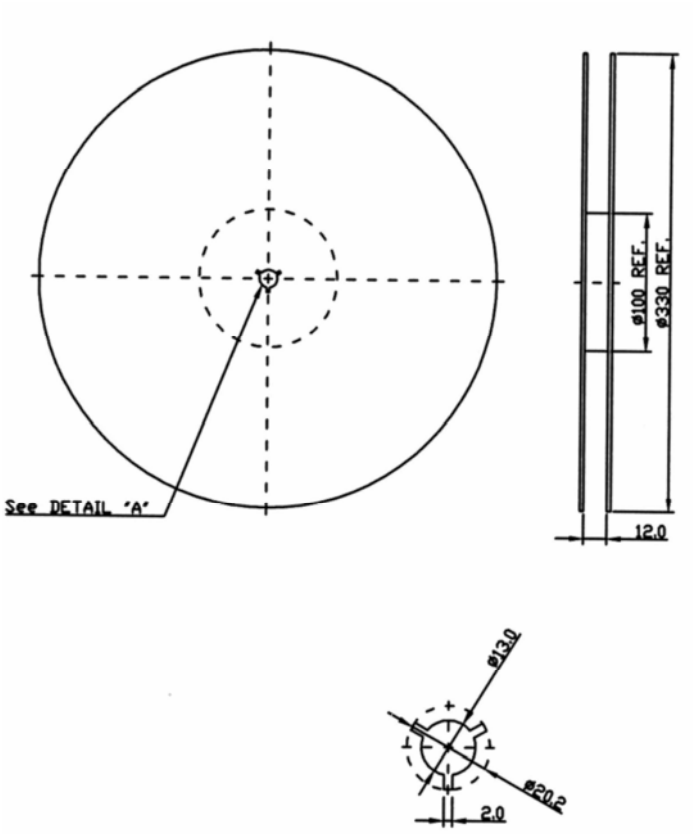
F. PCB FOOTPRINT:



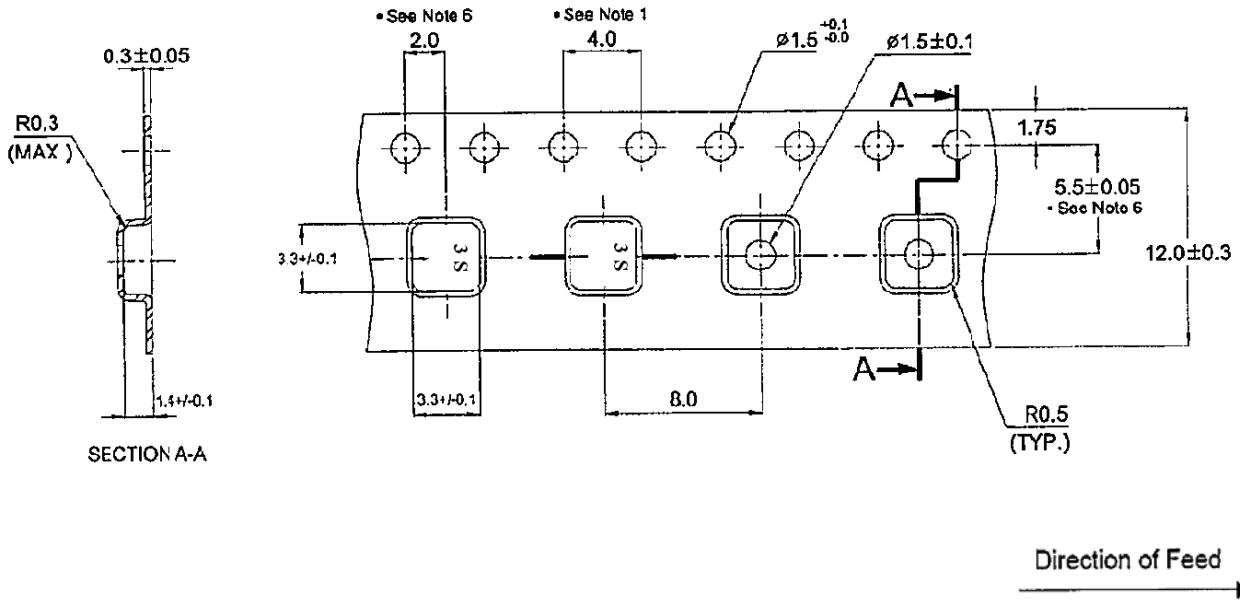
G. PACKING:

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.