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: SAW Filter 2332.5 MHz SMD 3.0×3.0 mm (BW=25 MHz)

TST Part No.: TA2110A (AEC-Q200 compliant)

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____Michael Yang_____

Approved by:_____Andy Yu_____

Date:_____12/13/2017_____

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.

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

SAW Filter 2332.5 MHz

MODEL NO.: TA2110A REV. NO.:2.0

A1. MAXIMUM RATING:

1. Input Power Level: 18 dBm
2. DC Voltage : 6V
3. Operating Temperature: -40°C to +105°C
4. Storage Temperature: -40°C to +125°C
5. ESD Machine Mode : 50V (10 pulse)
6. ESD Human Body Mode : 200V (1 pulse)
7. Moisture Sensitive Level (MSL): Level 1

RoHS Compliant
Lead free
Lead-free soldering

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

B1. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : Zs = 50 Ω

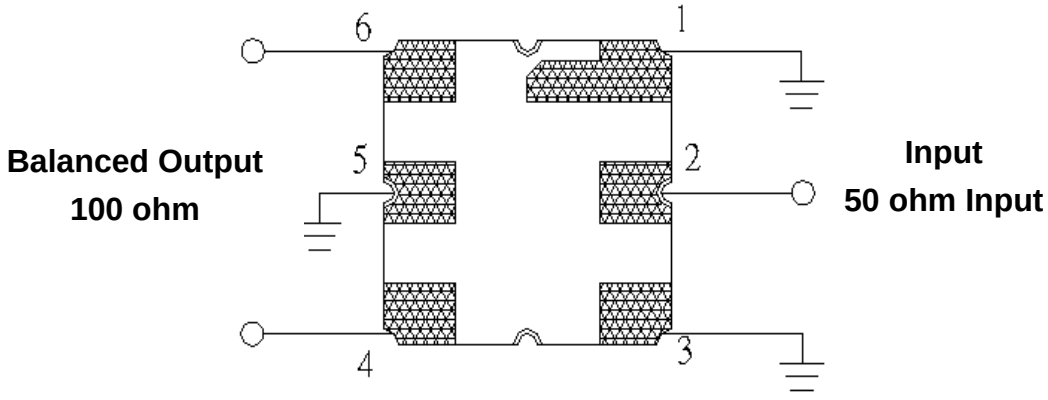
Terminating load impedance : Z_L = balanced 100 Ω

Item	Unit	Min.	Typ.	Max.
Center Frequency **Fc**	MHz	-	2332.5	-
Max. Insertion Loss (2320~2345 MHz) **IL**	dB	-	2.4	3.5[1)]
Max. Insertion Loss (2320~2345 MHz) **IL**	dB	-	2.4	4.8
Amplitude Ripple (2320~2345 MHz)	dB_{p-p}	-	0.4	2.6[1)]
Amplitude Ripple (2320~2345 MHz)	dB_{p-p}	-	0.4	2.9
Group Delay Variation (2320~2345 MHz) **GDV**	ns	-	2	10
Min. Input Return Loss (2320~2345 MHz)	dB	10	14	-
Min. Output Return Loss (2320~2345 MHz)	dB	8	9	-
Output Amplitude Balance (2320~2345 MHz)	dB	-3[1)]	-2	2.5[1)]
Output Amplitude Balance (2320~2345 MHz)	dB	-5	-2	3.5
Output Phase Balance (2320~2345 MHz)	deg	-15[1)]	-7	10[1)]
Output Phase Balance (2320~2345 MHz)	deg	-20	-7	15
Attenuation (refer to min. IL)				
88 ~ 880 MHz	dB	50	54	-
880 ~ 1710 MHz	dB	40	45	-
1710 ~ 1910 MHz	dB	44	48	-
1910 ~ 2090 MHz	dB	45	50	-
2090 ~ 2190 MHz	dB	40	45	-

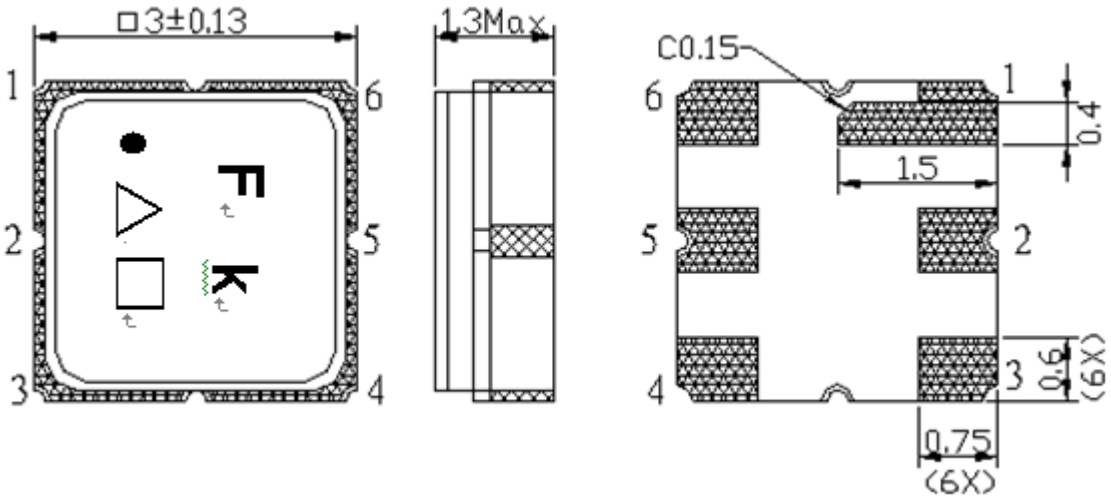
2190 ~ 2250 MHz	dB	23	28	-
2250 ~ 2275 MHz	dB	15	19	-
2300 MHz	dB		4.1	-
2305 MHz	dB		1.2	-
2310 MHz	dB		0.5	-
2315 MHz	dB		0.2	-
2350 MHz	dB		0.2	-
2355 MHz	dB		0.5	-
2360 MHz	dB		1.0	-
2365 MHz	dB		1.2	-
2390 MHz	dB		18	-
2400 ~ 2425 MHz	dB	10	20	-
2425 ~ 2500 MHz	dB	27	32	-
2500 ~ 2600 MHz	dB	30	36	-
2600 ~ 2800 MHz	dB	40	45	-
2800 ~ 3000 MHz	dB	45	48	-
3000 ~ 4000 MHz	dB	33	37	-
4000 ~ 4800 MHz	dB	31	37	-
4800 ~ 6000 MHz	dB	23	30	-
Group Delay Variation (2320~2345 MHz) **GDV**	ns	-	3	15[1)]
Group Delay Variation (2320~2345 MHz) **GDV**	ns	-	3	20
Package size	mm	SMD 3.0x3.0		

1) Valid for temperature -20℃ ~ +85℃

C. MEASUREMENT CIRCUIT:



D. OUTLINE DRAWING:



2: Unbalanced Input

4, 6: Balanced Output

1, 3, 5: Ground

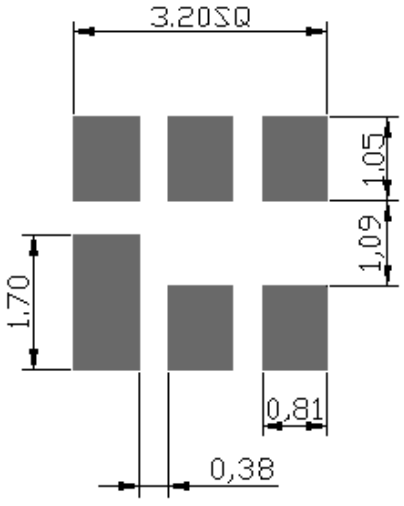
Unit: mm

△：Year Code (2011->1, 2012->2, …, 2019->9, 2020->0)

□：Date Code

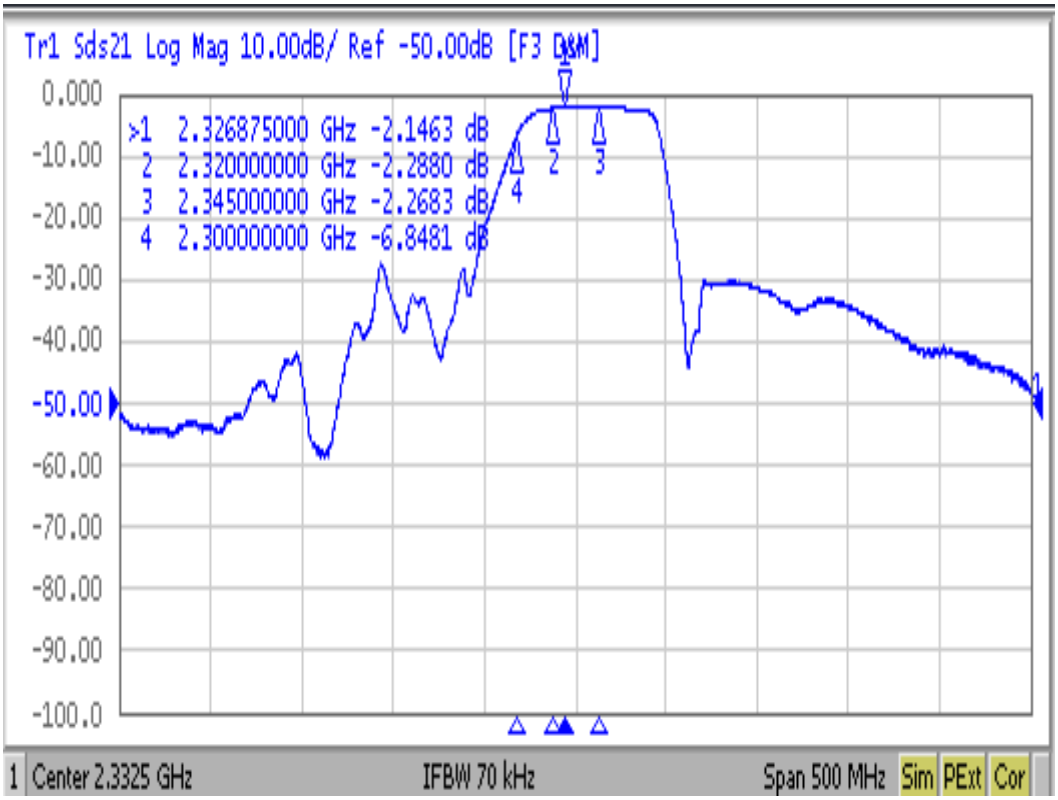
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

E. PCB Footprint:

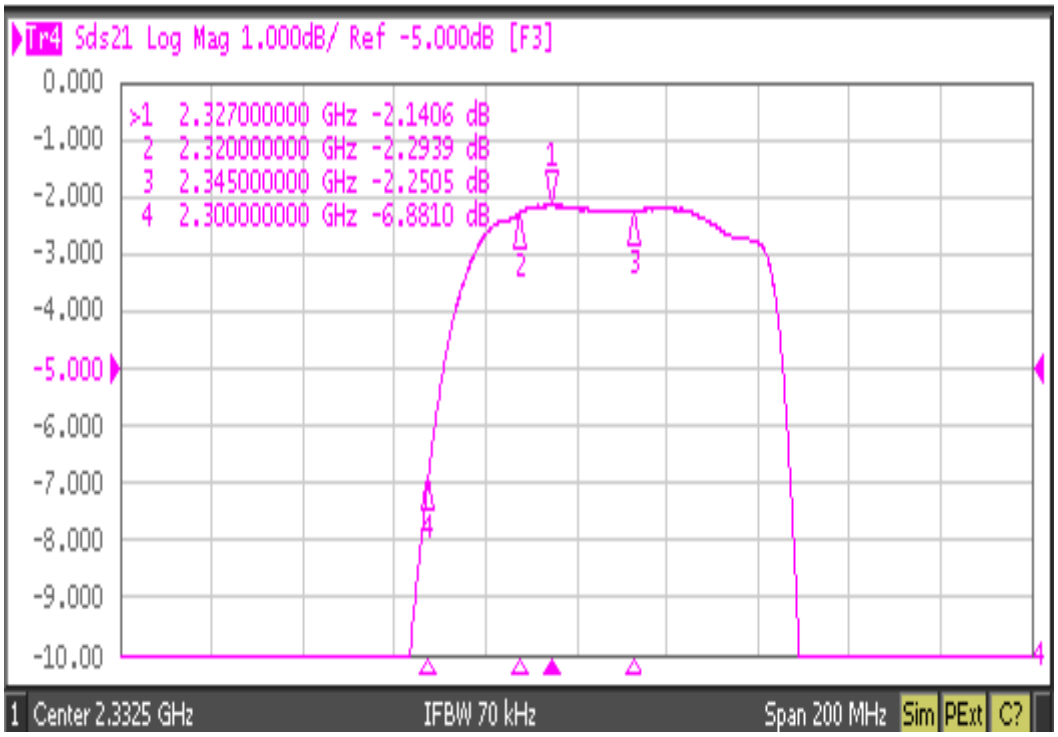


F. Frequency Characteristics:

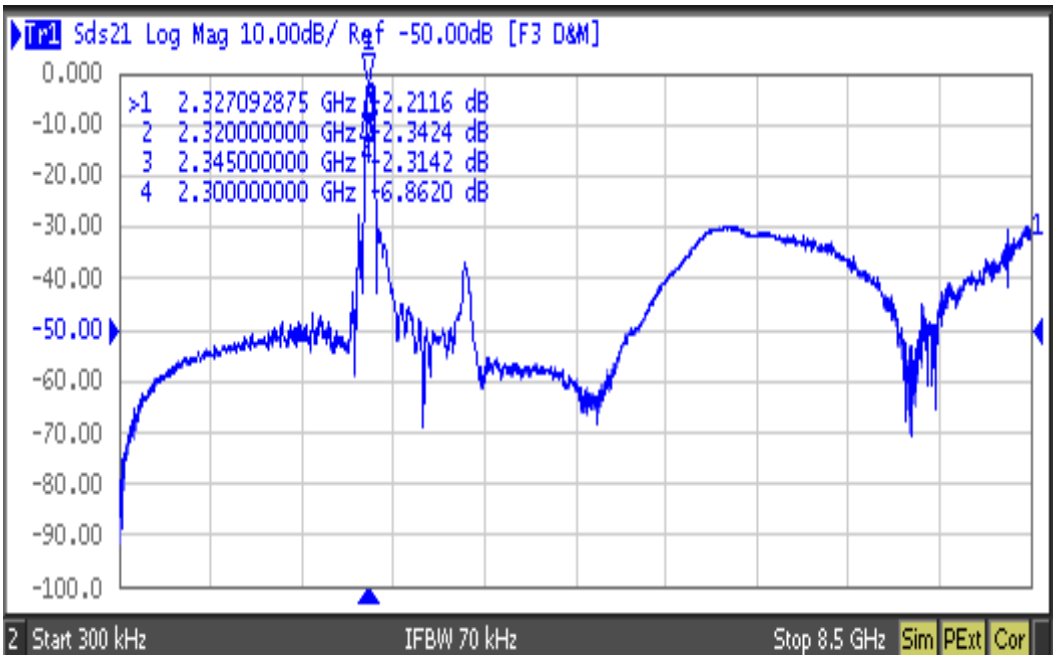
S21 response: (span 500MHz)



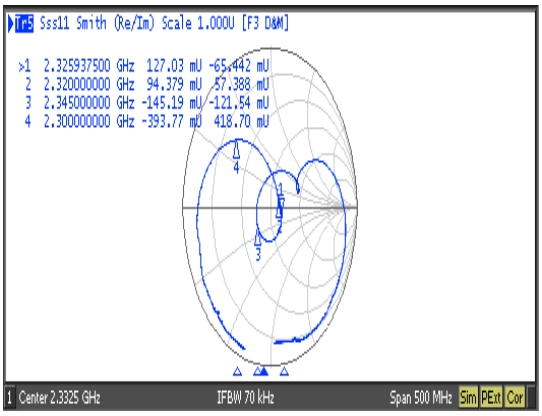
S21 response: (span 200MHz)

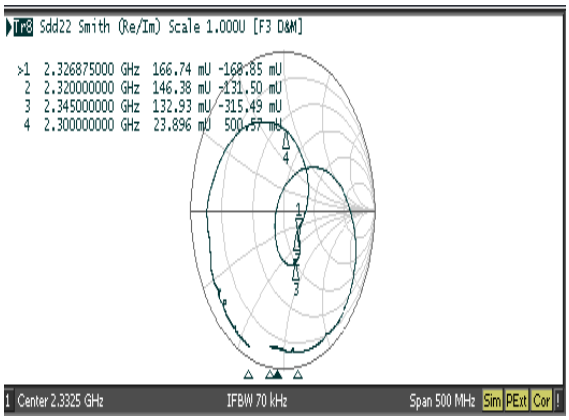


S21 response: (span 8500MHz)



S11/S22 (span: 500 MHz)

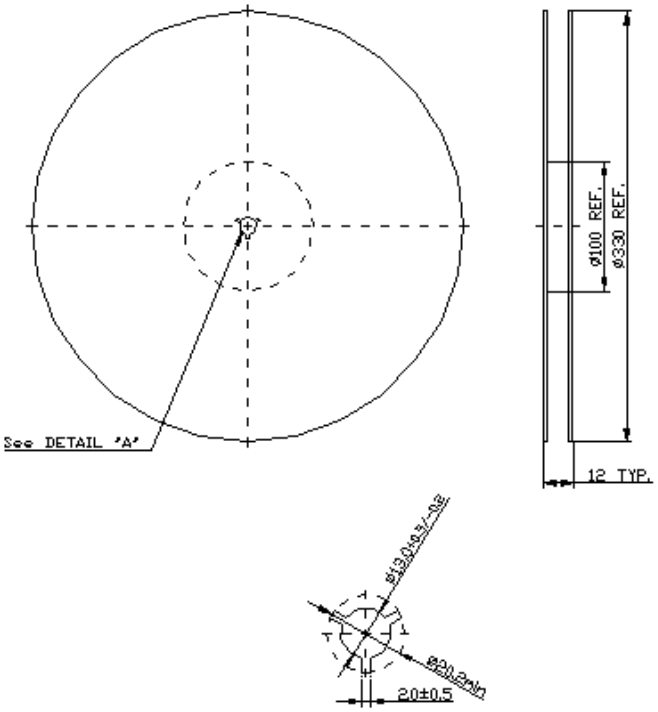




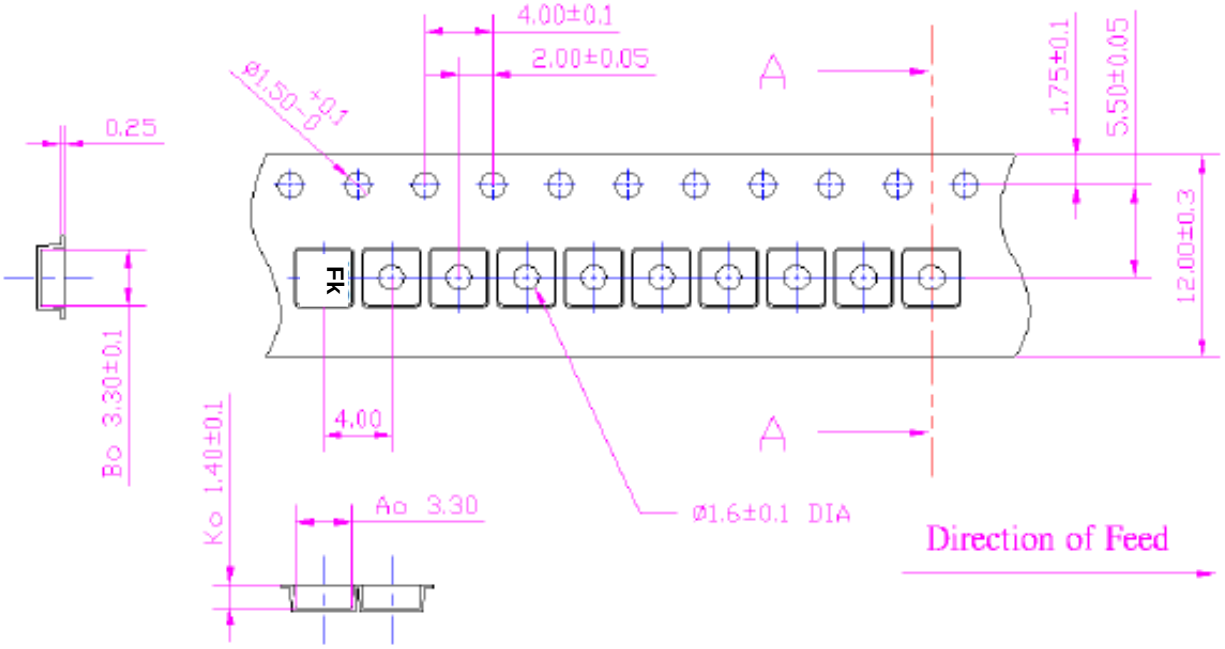
G. PACKING:

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.