



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: 868.30MHz 1.5MHz BW SMD3.0X3.0mm RF SAW Filter

TST Parts No.: TA1900A

Customer Parts No.: _____

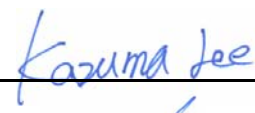
Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee 

Approval by: _____ Bob Chau 

Date: _____ 08 / 05 / 2015

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 868.30 MHz BW1.5MHz

MODEL NO.: TA1900A

REV. NO.: NO.1

A. MAXIMUM RATING:

1. Input Power Level: 18 dBm
2. DC voltage: 0 V
3. Operating Temperature: -45°C to +90°C
4. Storage Temperature: -45°C to +90°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

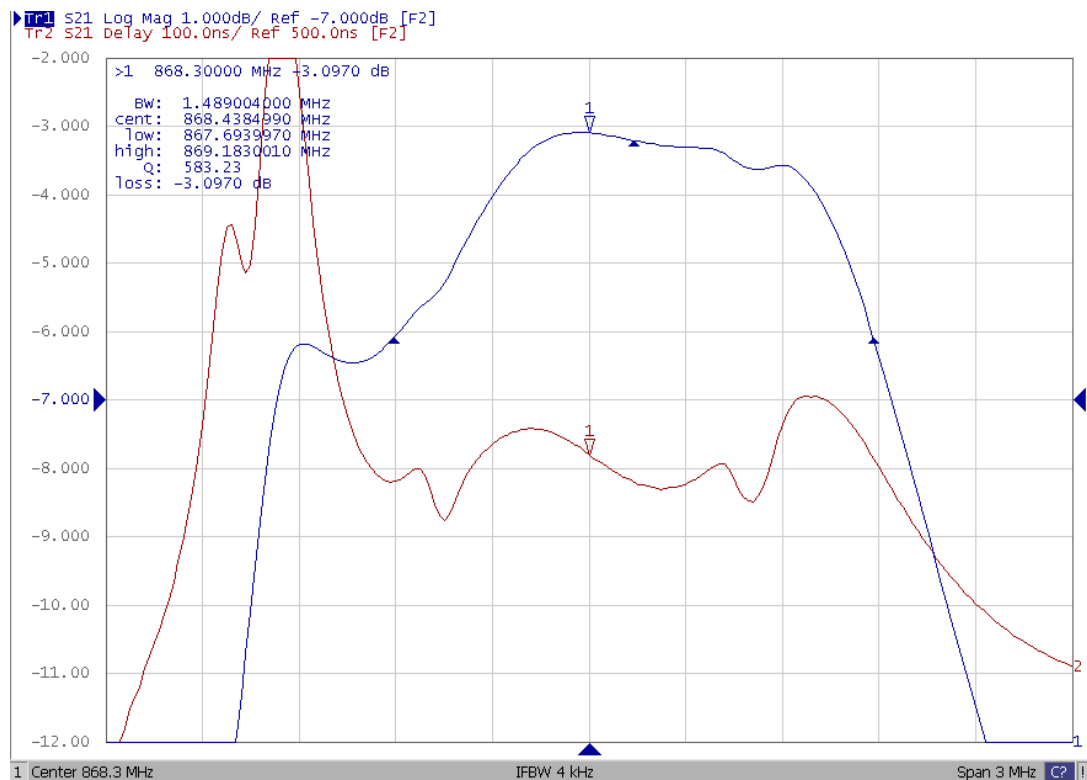
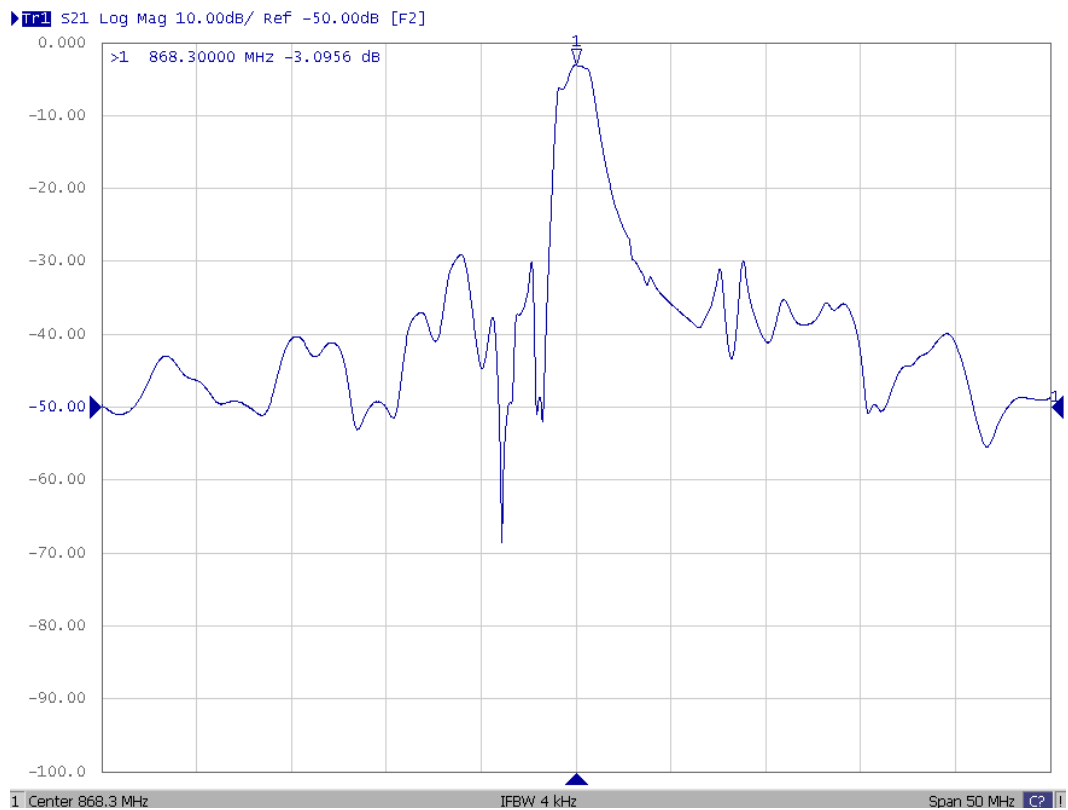
B. ELECTRICAL CHARACTERISTICS:

Reference temperature: 25°C

Item	Min.	Typ.	Max.
Center frequency F_c (MHz)	-	868.30	-
Minimum I.L. ILmin (dB)	-	3.0	4.2
Pass band (relative to ILmin)			
868~868.78 MHz (dB)	-	0.9	3.0
867.9~868.88 MHz (dB)	-	1.7	6.0
Pass bandwidth (relative to ILmin) BW3 (KHz)	-	1500	-
Attenuation:(relative to ILmin) (dB)			
10~700 MHz (dB)	50	53	-
700~830 MHz (dB)	40	45	-
830~850 MHz (dB)	35	40	-
850~865.02 MHz (dB)	25	27	-
871~874.5 MHz (dB)	15	23	-
874.5~883 MHz (dB)	19	27	-
883~900 MHz (dB)	30	35	-
900~1000 MHz (dB)	40	47	-
Impedance at F_c ; Input $Z_{IN}=R_{IN}/C_{IN}$ Output $Z_{OUT}=R_{OUT}/C_{OUT}$	145Ω // 2.6 pF 145Ω // 2.6 pF		

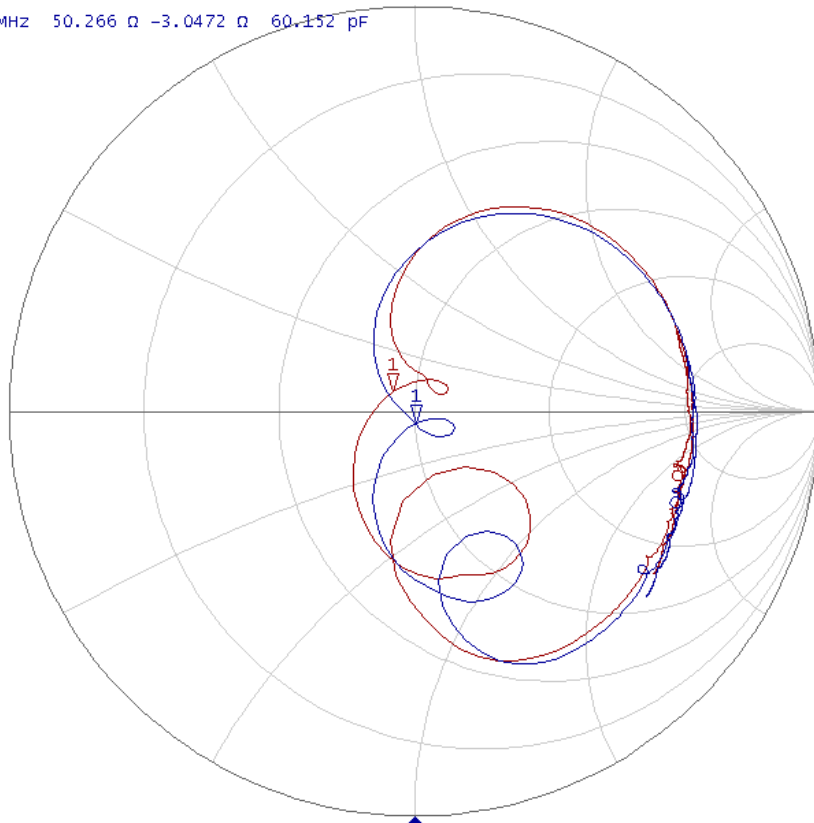
C. FREQUENCY CHARACTERISTICS:

The response included the loss of matching circuit.



► Tr1 S11 Smith (R+jX) Scale 1.000U [F2]
 Tr2 S22 Smith (R+jX) Scale 1.000U [F2]

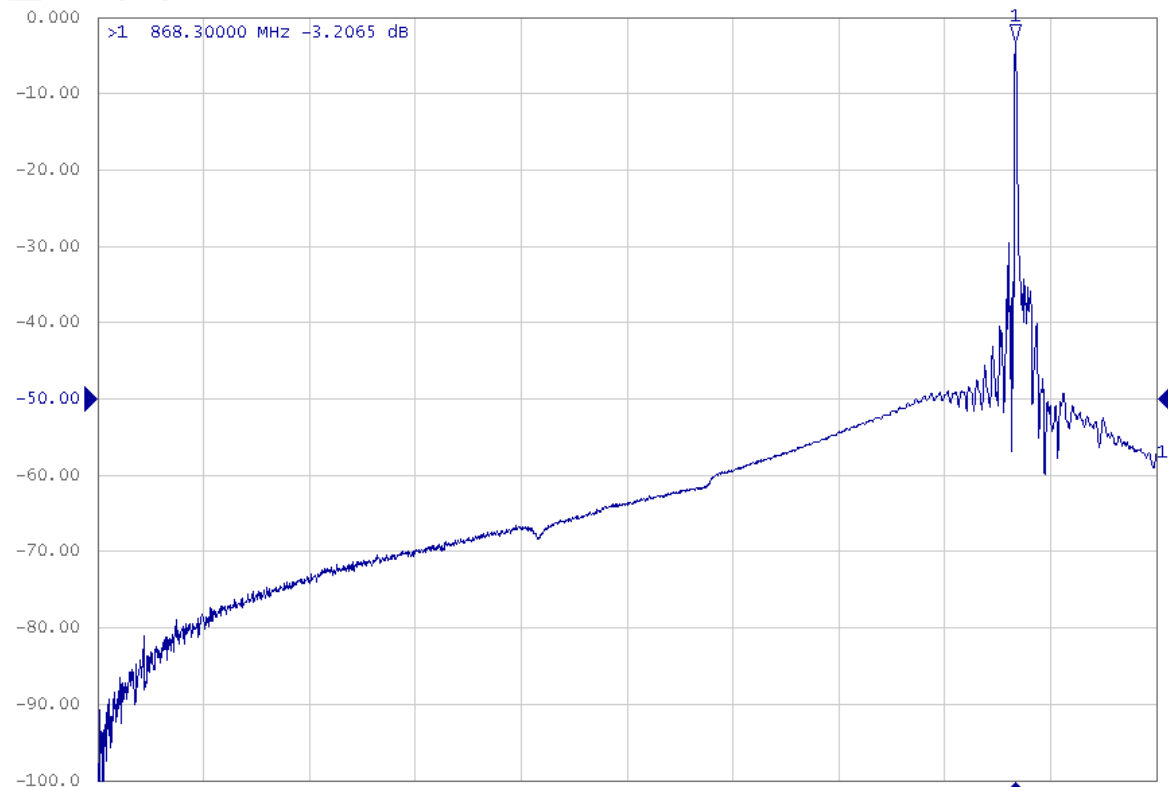
>1 868.30000 MHz 50.266 Ω -3.0472 Ω 60.152 pF



1 Center 868.3 MHz IFBW 4 kHz Span 50 MHz C? |

► Tr1 S21 Log Mag 10.00dB/ Ref -50.00dB [F2]

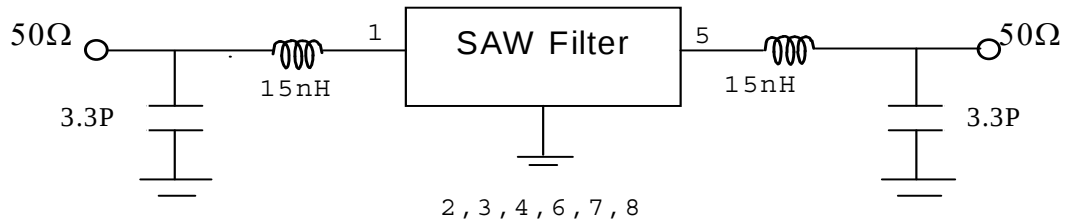
>1 868.30000 MHz -3.2065 dB



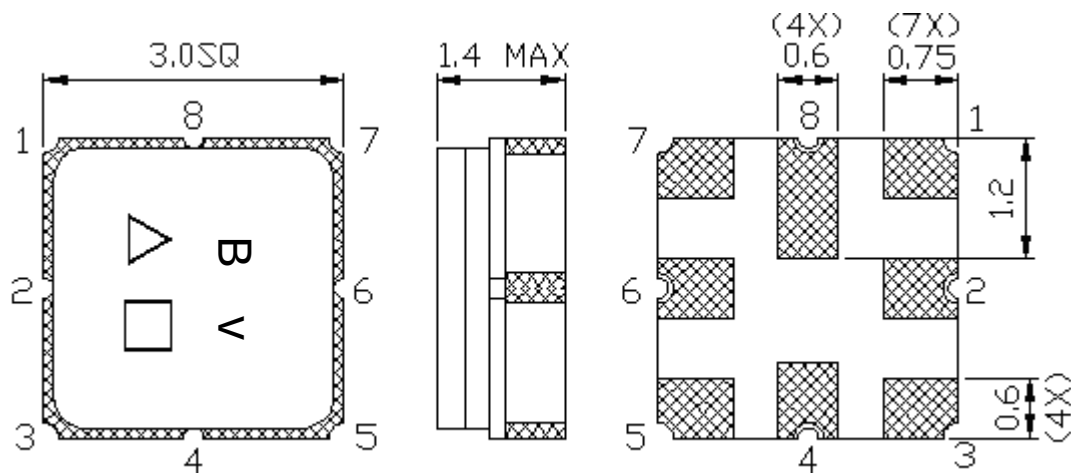
1 Start 10 MHz IFBW 4 kHz Stop 1 GHz C? |

D. MEASUREMENT CIRCUIT:

HP Network analyzer



E. OUTLINE DRAWING:

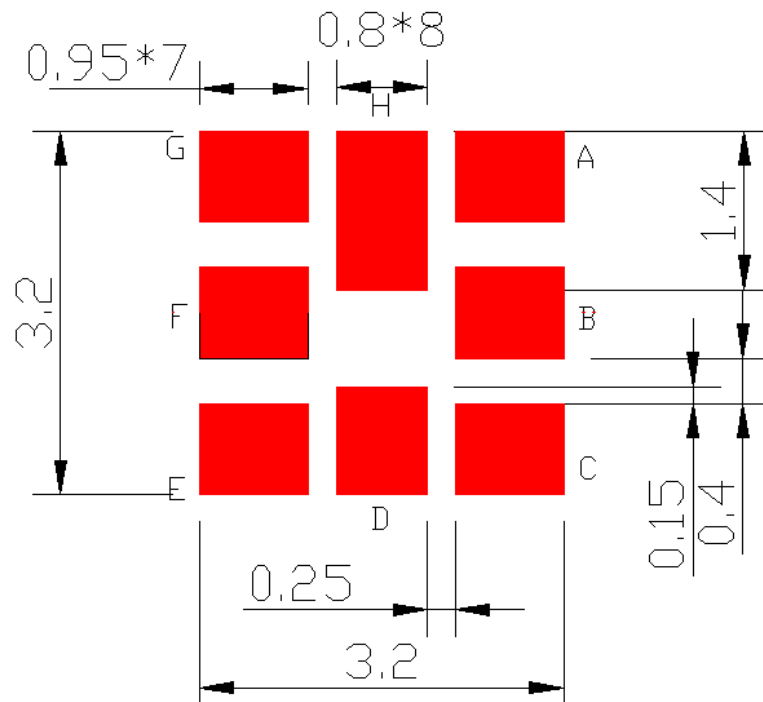


1: Input or Input ground
 2: Input ground or Input
 5: Output or Output ground
 6: Output ground or Output
 3,4,7,8: Ground
 △: Year code : 1 for 2011, 2 for 2012,...0 for 2020,...
 □: Date code :
 Unit: mm

□ : Data code : See the table

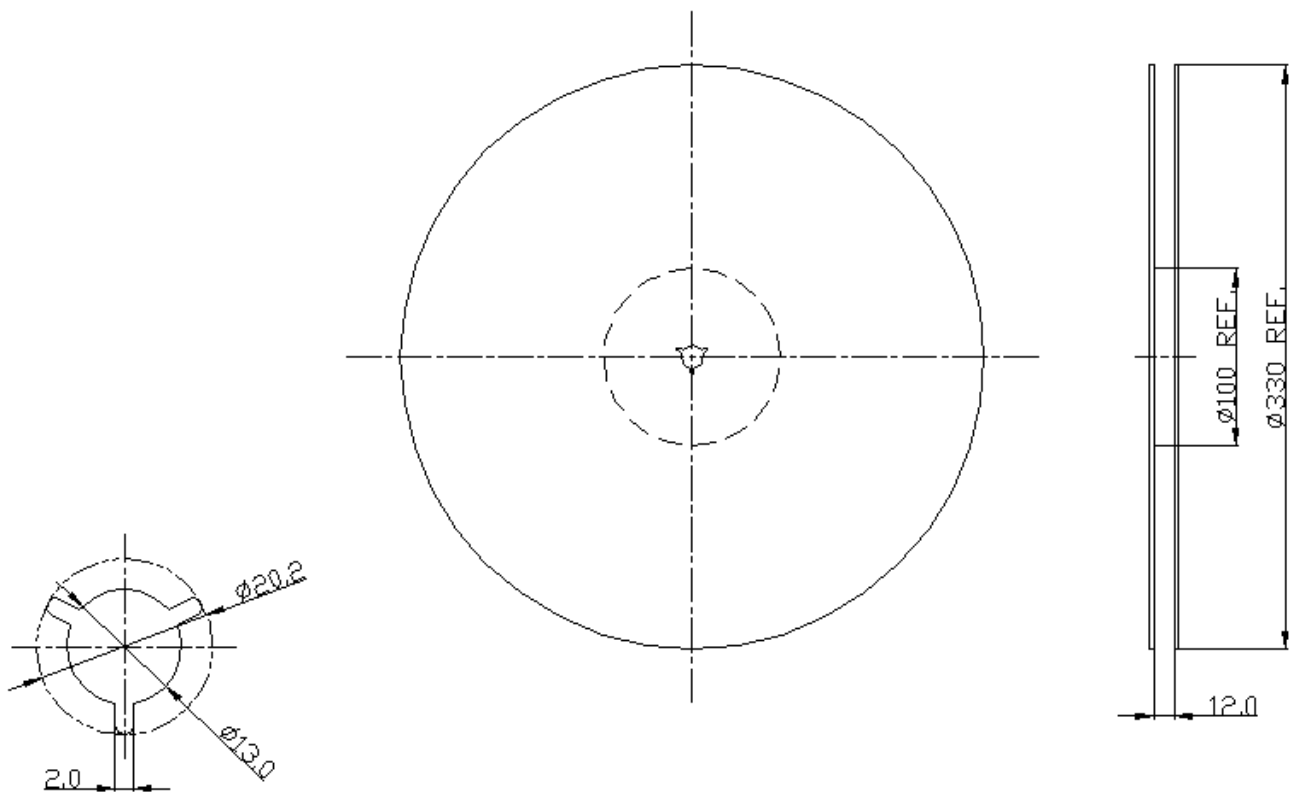
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



Technical drawing of a mechanical part, showing a side view and a cross-sectional view. The side view includes dimensions: 0.25 ± 0.05 , $Bo\ 3.3 \pm 0.1$, 4.0 ± 0.1 , 2.0 ± 0.05 , 4.0 ± 0.1 , 1.75 ± 0.1 , 5.5 ± 0.05 , and 12.0 ± 0.3 . The cross-sectional view shows a diameter of $\phi 1.5^{+0.1}_{-0}$ and a diameter of $\phi 1.6 \pm 0.1$ DIA. The drawing also includes a section line A-A and a note $Ko\ 1.4 \pm 0.1$.

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.

