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 1950 MHz SMD 3.0x3.0 mm (BW=100MHz)

TST Part No.: TA1981A

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Sam Lin

Approved by: Andy Yu

Date: 2018/05/03

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 1950 MHz

MODEL NO.: TA1981A REV. NO.:2

A. MAXIMUM RATING:

1. Input Power Level: 10 dB_m
2. DC voltage: 3 V
3. Operating Temperature: -40°C to 85°C
4. Storage Temperature: -40°C to +85° C
5. Moisture Sensitivity Level: Level 1 (MSL1)

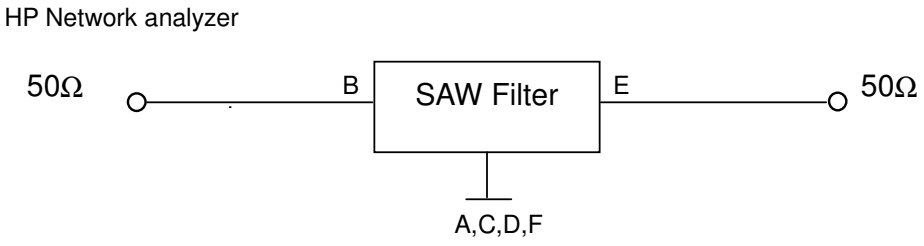
RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

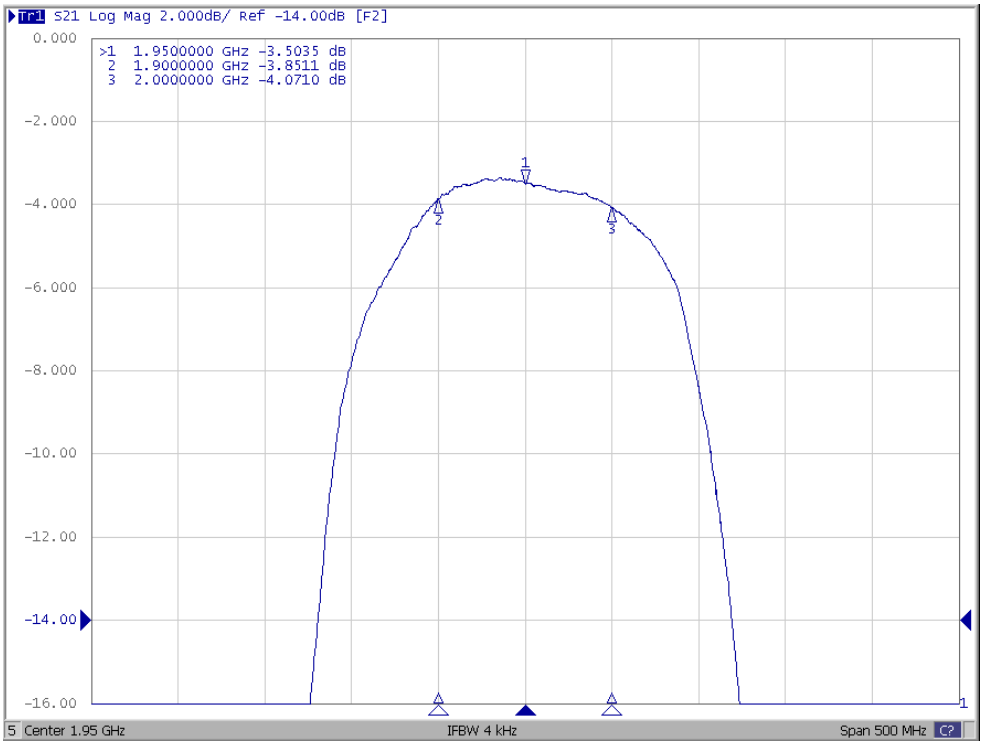
B. CHARACTERISTICS:

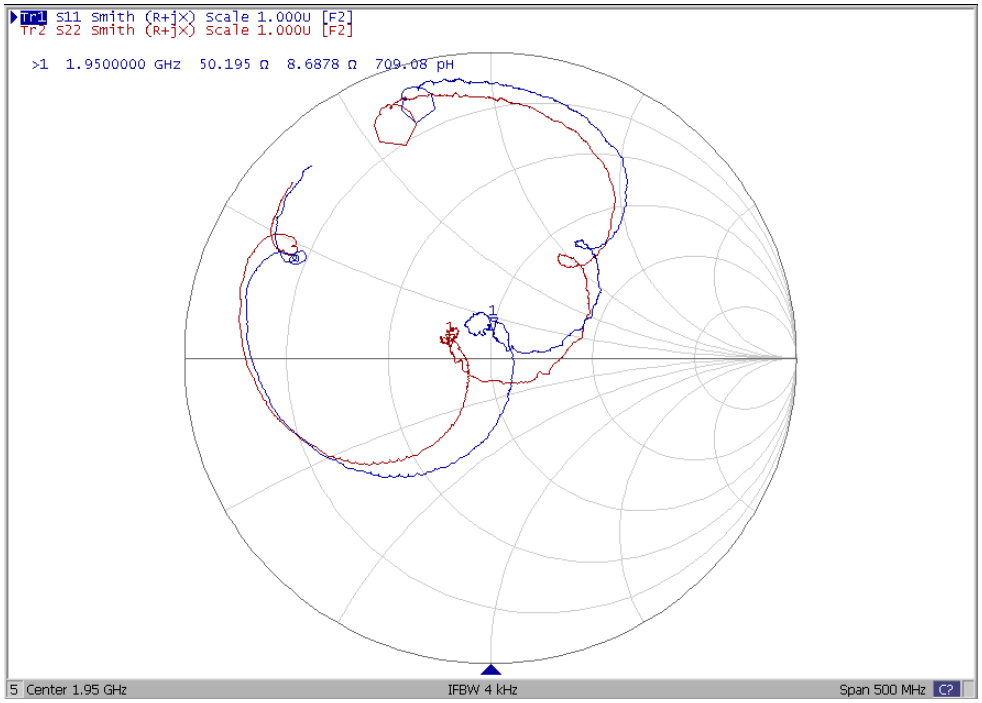
Item		Unit	Min.	Typical	Max.
Center frequency	**Fc**	MHz	-	1950	-
Insertion loss (1900 ~ 2000 MHz)	**IL**	dB	-	3.8	4.2
Amplitude ripple (1900 ~ 2000 MHz)		dB	-	0.8	1.5
VSWR (1900 ~ 2000 MHz)		-	-	2.1	2.4
Attenuation (Reference level from 0 dB)					
50.0 ~ 1450 MHz		dB	25	30	-
1450 ~ 1780 MHz		dB	20	33	-
2118 ~ 3000 MHz		dB	25	35	-
Temperature coefficient of frequency		ppm/k	-	-80	-

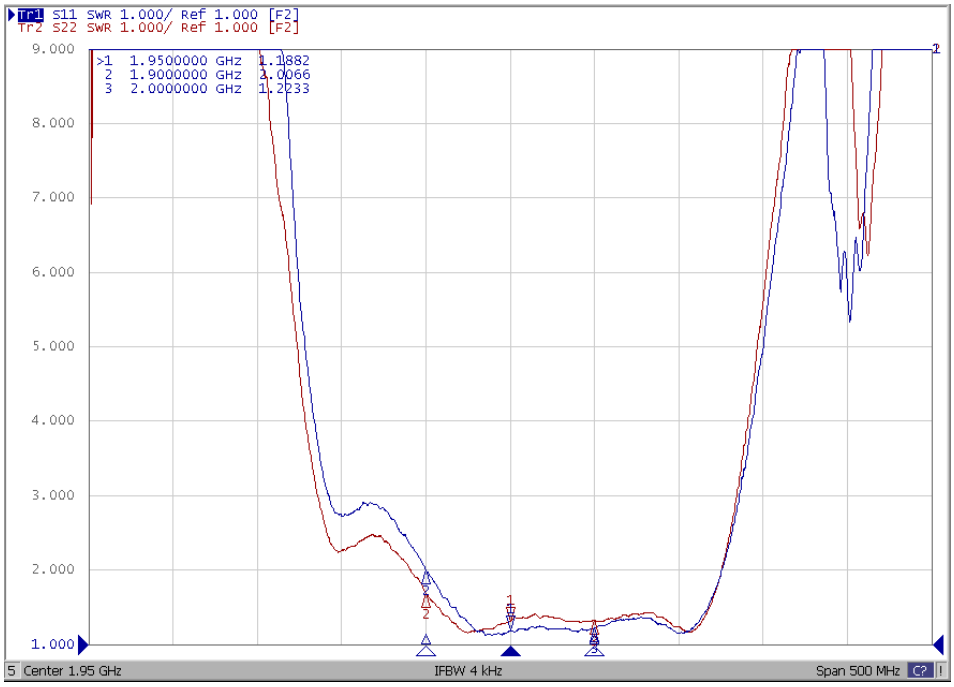
C. MEASUREMENT CIRCUIT:

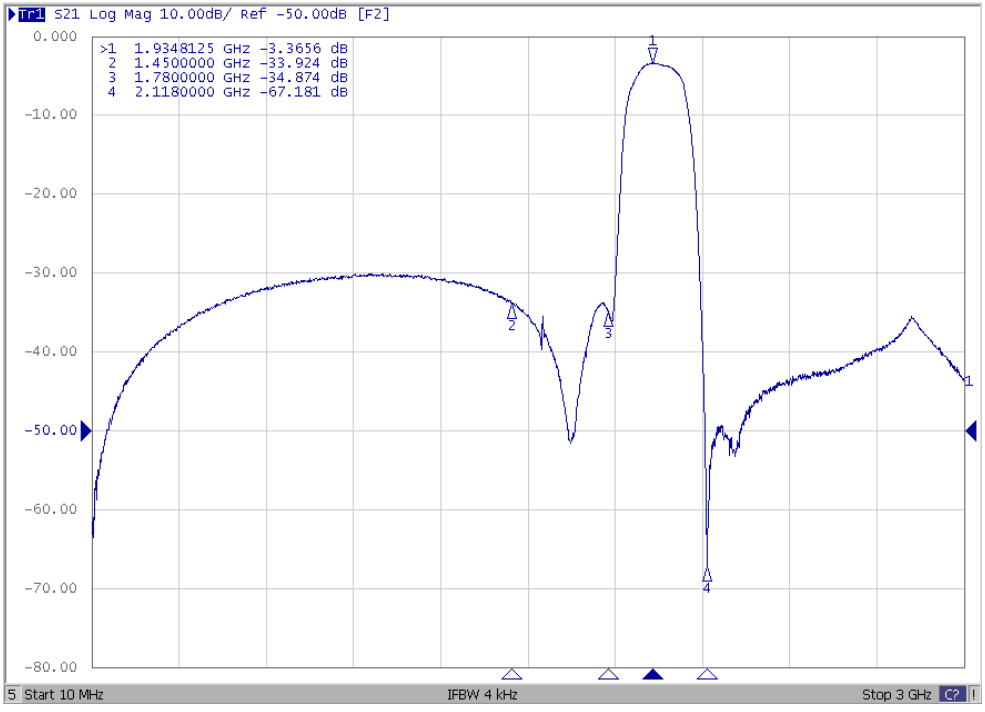


D. TRANSFER FUNCTION:

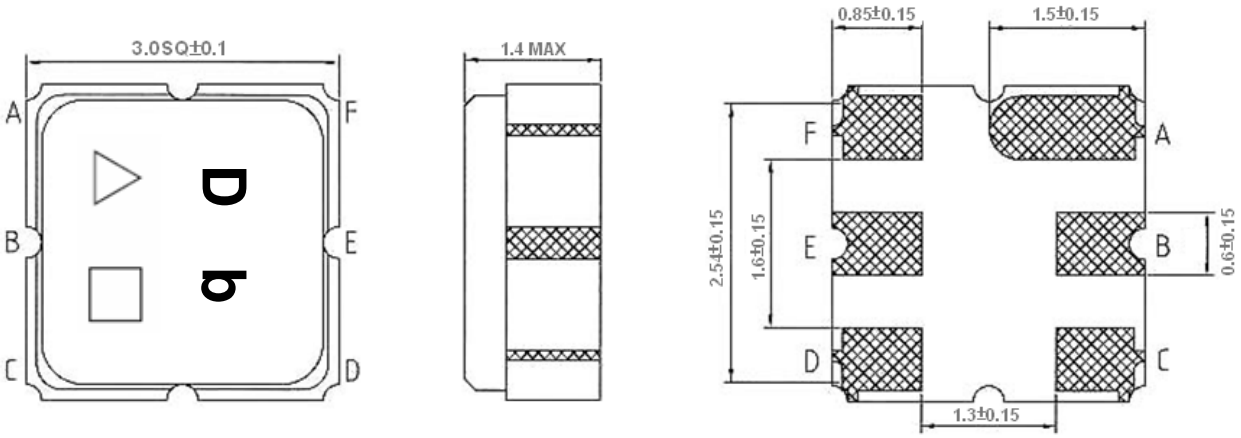





Tr1 S11 SWR 1.000/ Ref 1.000 [F2]
Tr2 S22 SWR 1.000/ Ref 1.000 [F2]
>1 1.9500000 GHz 1.1882
2 1.9000000 GHz 1.0066
3 2.0000000 GHz 1.2033
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
Center 1.95 GHz
IFBW 4 kHz
Span 500 MHz


Tr1 S21 Log Mag 10.00dB/ Ref -50.00dB [F2]
>1 1.9348125 GHz -3.3656 dB
2 1.4500000 GHz -33.924 dB
3 1.7800000 GHz -34.874 dB
4 2.1180000 GHz -67.181 dB
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
Start 10 MHz
IFBW 4 kHz
Stop 3 GHz

E. OUTLINE DRAWING:



B: Input

E: Output

A, C, D, F: Ground

Unit: mm

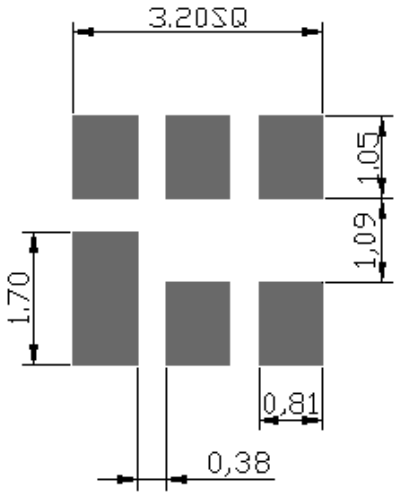
△ : Year Code (2011->1, 2012->2, …, 2019->9, 2020->0)

□ : Date Code

Date 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

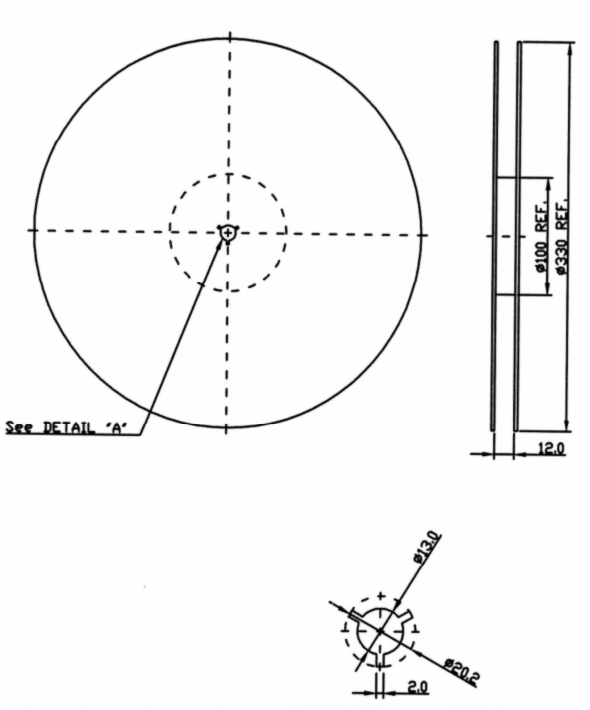
F. PCB Footprint:



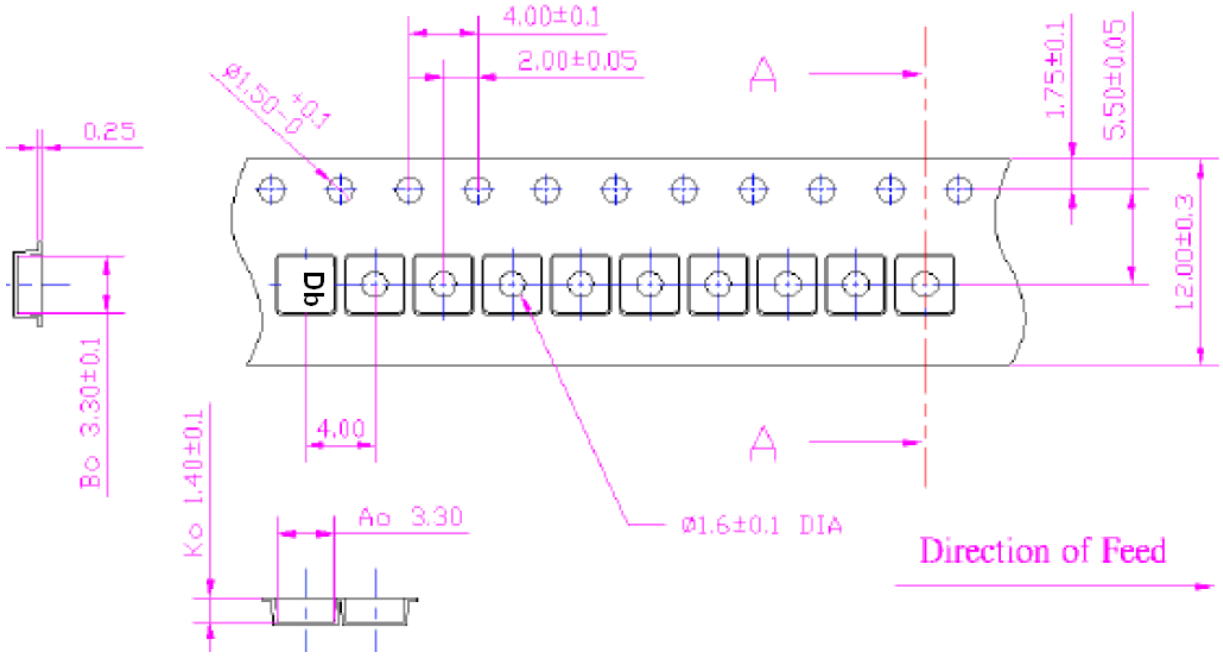
G. PACKING:

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.