



TAI-SAW TECHNOLOGY CO., LTD.

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

Product Description: SAW Filter 1189 MHz SMD 1.1X0.9 mm (BW=50MHz)

TST Parts No.: TA2448B

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Bob Chau 

Approval by: _____ Andy Yu 

Date: _____ 2021/06/11

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 1189MHz 50MHz BW SMD 1.1x0.9mm

MODEL NO.:TA2448B

REV. NO.:3.0

A. MAXIMUM RATING:

1. Input Power Level: 13 dBm (2000h)
2. DC Voltage : 3 V
3. Operating Temperature: -40°C to +105°C
4. Storage Temperature: -40°C to +105°C
5. ESD Machine Mode : 50V
6. ESD Human Body Mode : 100V
7. Moisture Sensitive Level (MSL): Level 2a

RoHS Compliant
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Temperature range for specification : Tspec = -40°C to +105°C

Terminating source impedance : Zs = 50 Ω

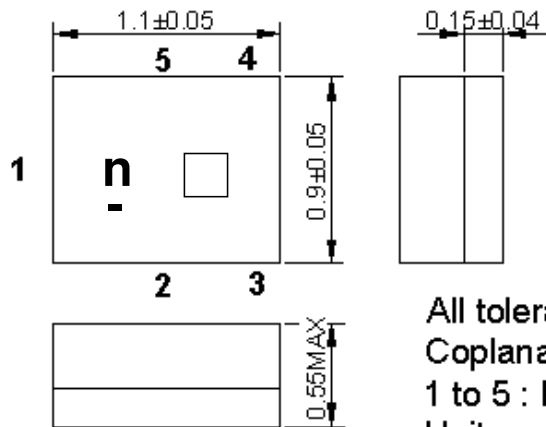
Terminating load impedance : ZL = 50 Ω

Item	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	1189	-
Insertion Loss (1164~1189 MHz) IL	dB	-	1.5	2.3 ⁽¹⁾
Insertion Loss (1164~1189 MHz) IL	dB	-	1.5	2.4
Insertion Loss (1189~1214 MHz) IL	dB	-	1.8	2.3 ⁽¹⁾
Insertion Loss (1189~1214 MHz) IL	dB	-	1.8	2.5
Amplitude Ripple (1164~1189 MHz)	dB _{p-p}	-	0.3	1.3
Amplitude Ripple (1189~1214 MHz)	dB _{p-p}	-	0.5	1.4
VSWR (1164~1214 MHz)		-	1.8	2.1
Group Delay Deviation (1189~1214 MHz)	ns	-	9	15 ⁽¹⁾
Group Delay Deviation (1189~1214 MHz)	ns	-	9	20
Attenuation (refer to 0 dB)				
100 ~ 814 MHz	dB	35	39	-
814 ~ 849 MHz	dB	33	39	-
849 ~ 980 MHz	dB	30	37	-
980 ~ 1010 MHz	dB	35	38	-
1010 ~ 1100 MHz	dB	33	36	-
1100 ~ 1130 MHz	dB	20	30	-
1250 ~ 1427 MHz	dB	25	32	-

1427 ~ 1463 MHz	dB	33	36	-
1710 ~ 2025 MHz	dB	33	38	-
2300 ~ 2690 MHz	dB	28	32	-
2690 ~ 3000 MHz	dB	25	30	-
3000 ~ 6000 MHz	dB	20	23	-
Temperature Coefficient	ppm/K	-	-36	-

(1). Temperature range -20°C to +85°C

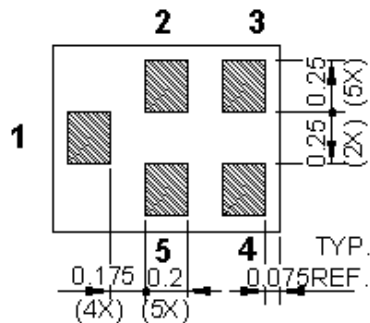
C.OUTLINE DRAWING:



All tolerances are ± 0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

Unit : mm

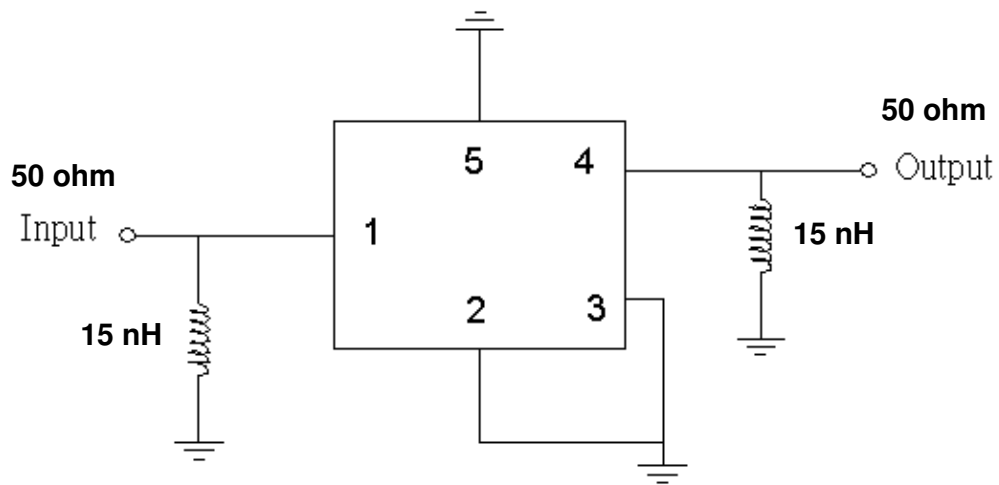


Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

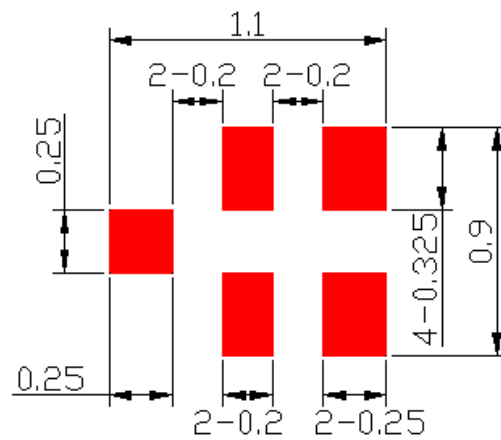
□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013/2021	A	B	C	D	E	F	G	H	J	K	L	M
2014/2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015/2023	a	b	c	d	e	f	g	h	j	k	l	m
2016/2024	n	p	q	r	s	t	u	v	w	x	y	z
2017/2025	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018/2026	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019/2027	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>j</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020/2028	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

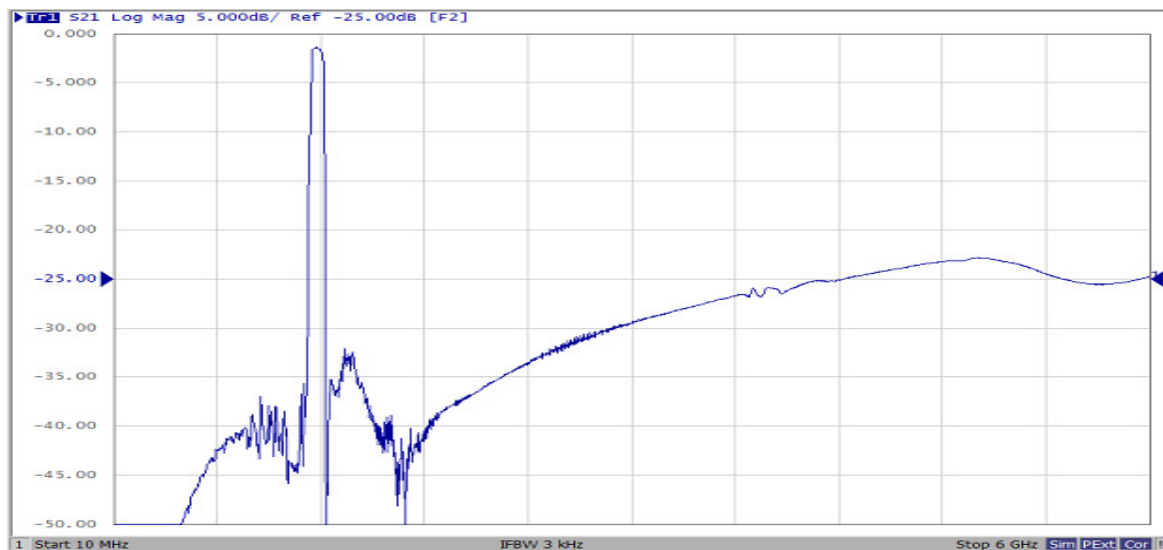
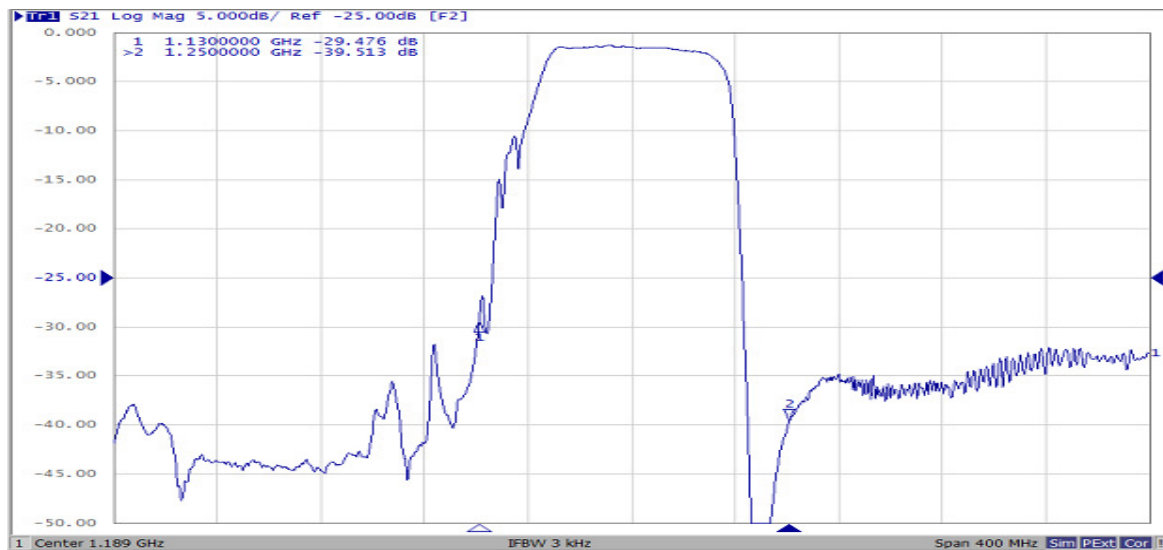
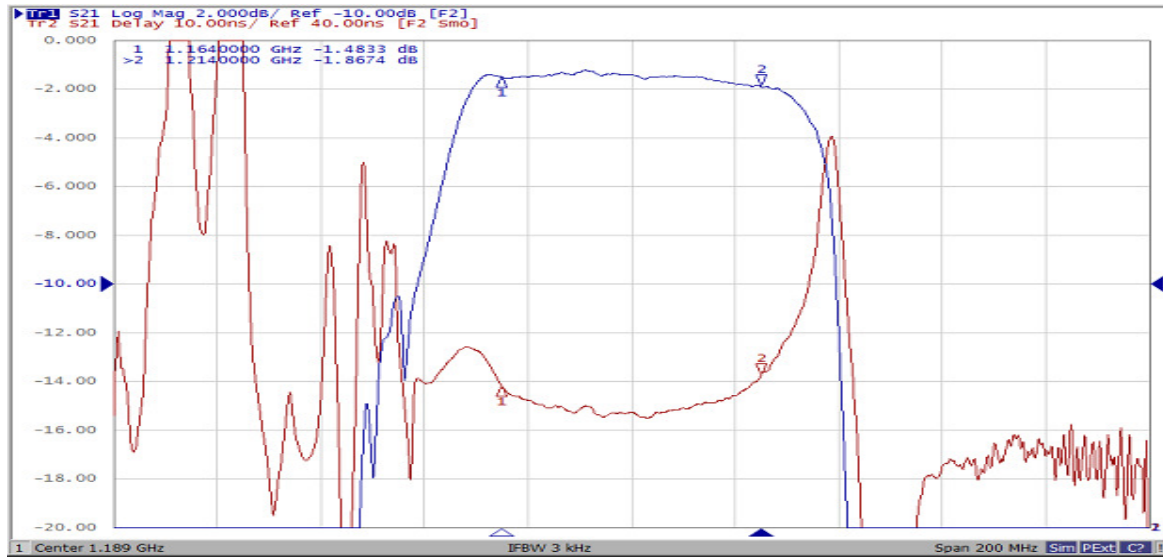
D. MEASUREMENT CIRCUIT:

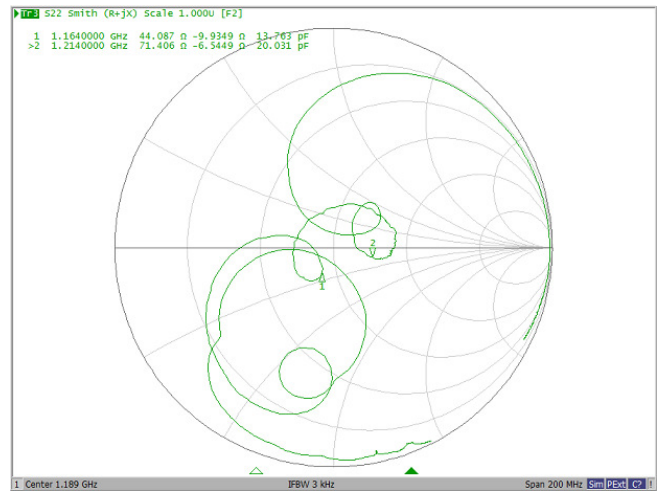
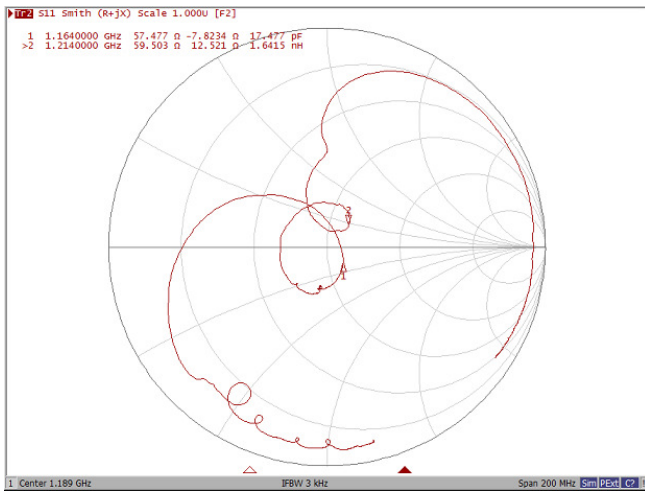
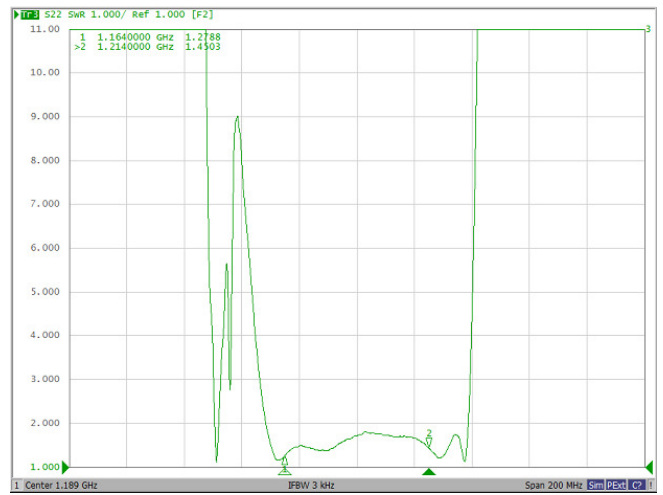
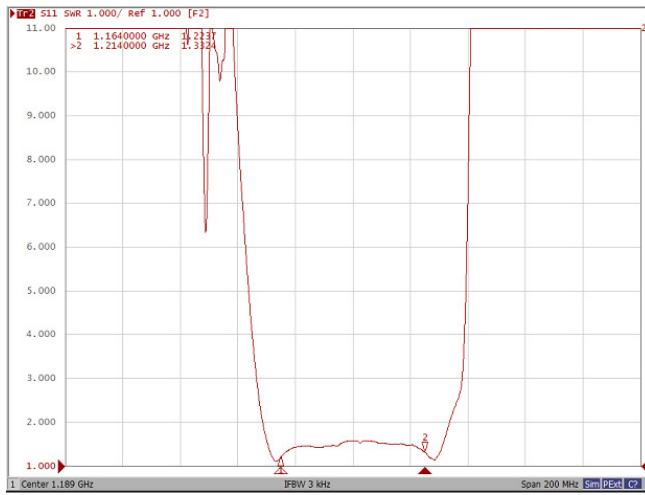


E. PCB Footprint :



F. Frequency Characteristics:

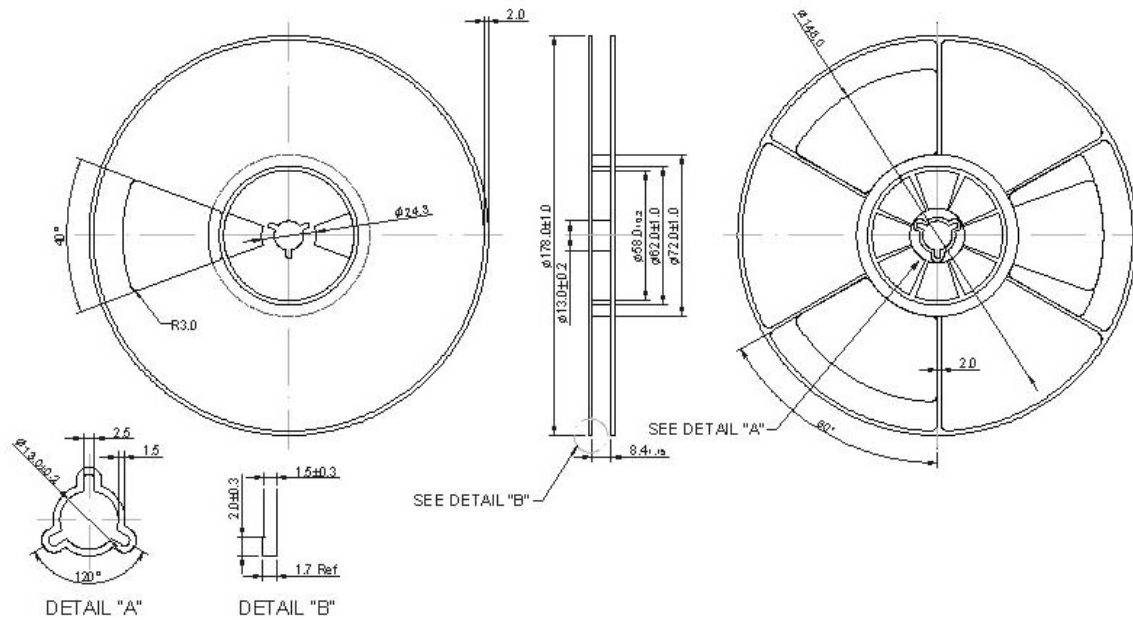




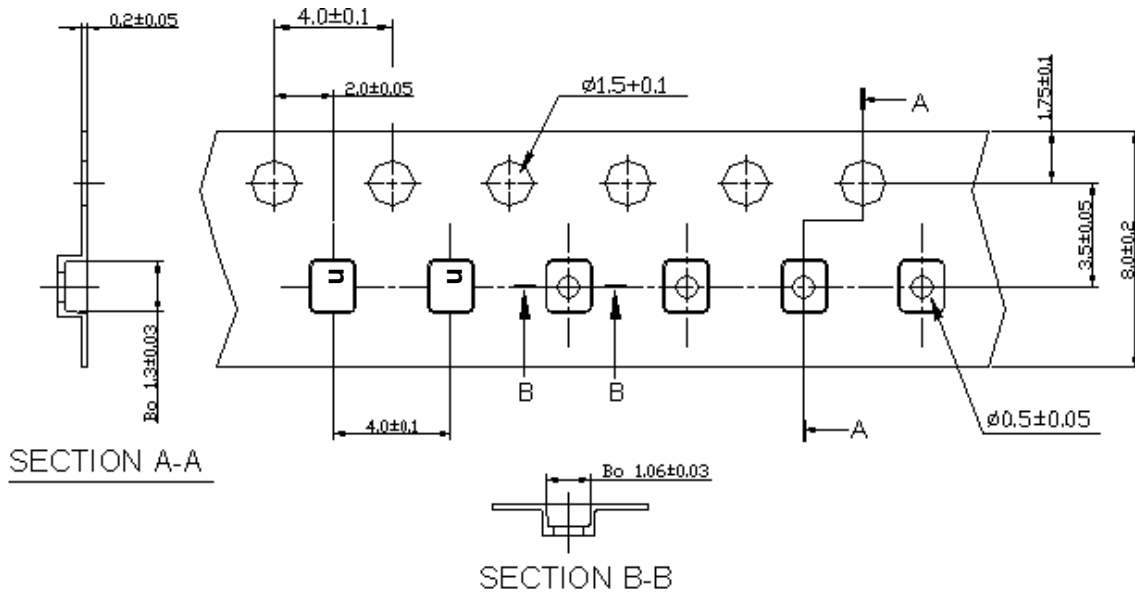
G. PACKING:

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°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 245~260°C peak (min. 10sec).
4. Time : 2 times.

