



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 Rx Filter 1842.5 MHz LTE Band 3 SMD 1.1x0.9 mm (BW=75 MHz)

TST Part No.: TA1843DA

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Michael Yang *Michael*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2021/08/02

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 1842.5 MHz

MODEL NO.:TA1843DA

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage: 3 V
3. Operating Temperature: -20 °C to +85 °C
4. Storage Temperature Range: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 3 (MSL 3)



Electrostatic Sensitive Device (ESD)

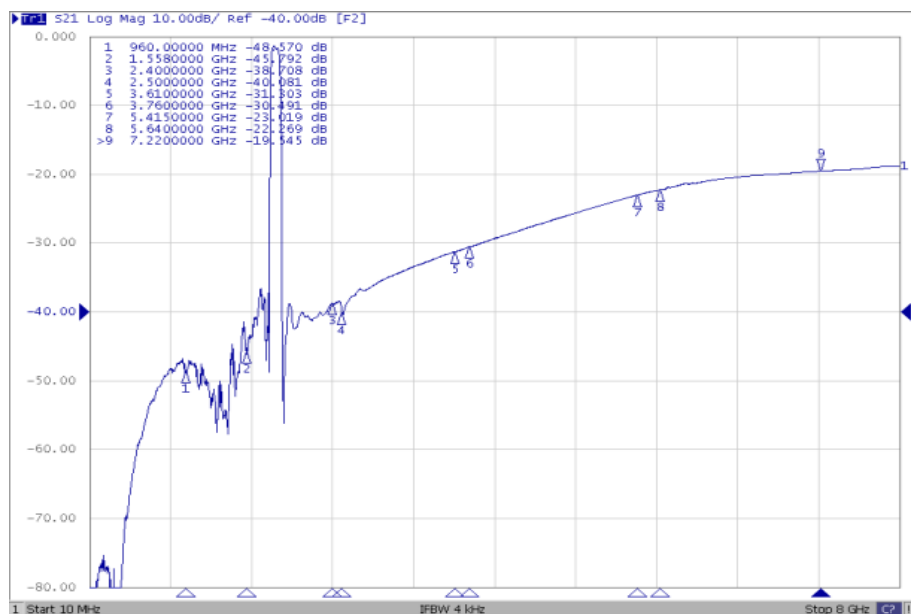
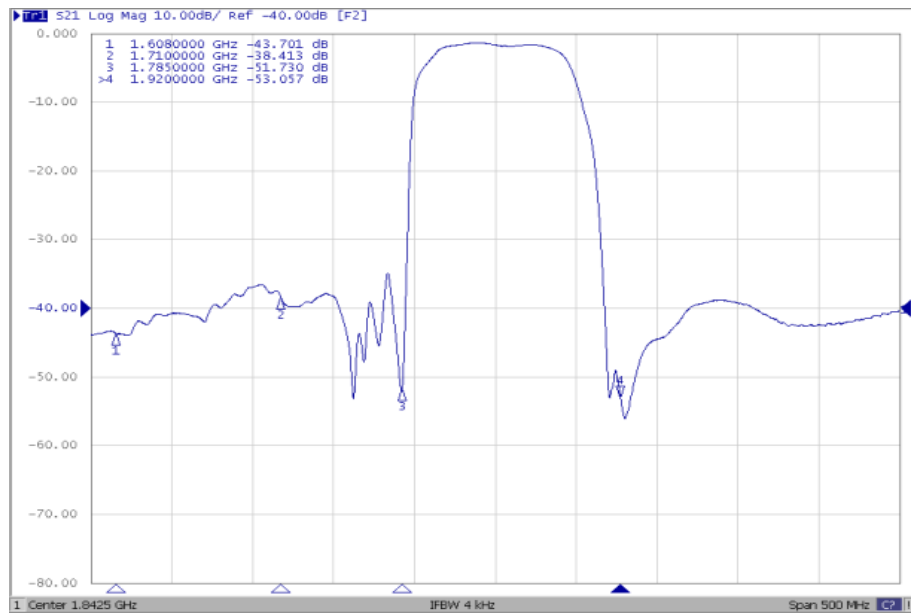
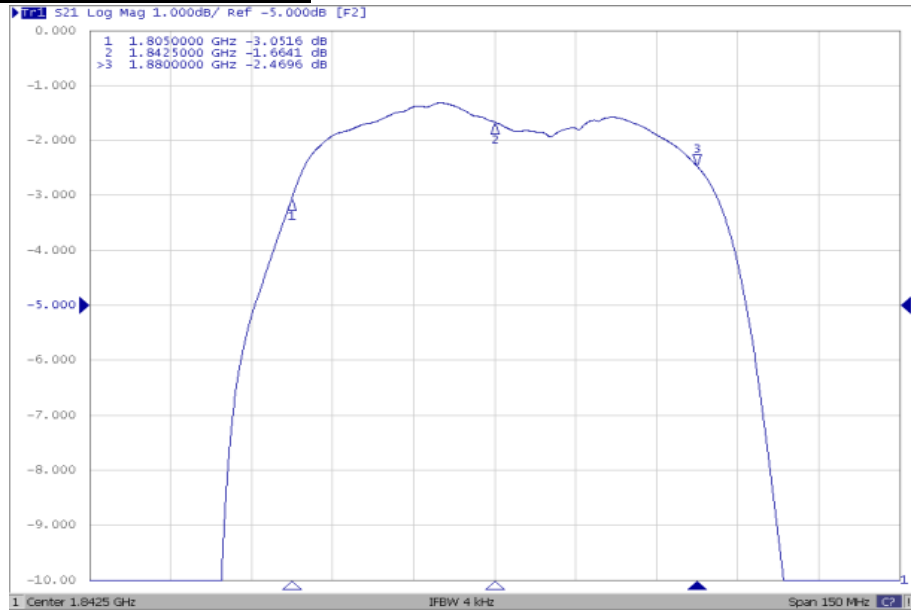
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance: $Z_s = 50 // 12nH \Omega$ (Single-ended)

Terminating load impedance: $Z_L = 50 // 12nH \Omega$ (Single-ended)

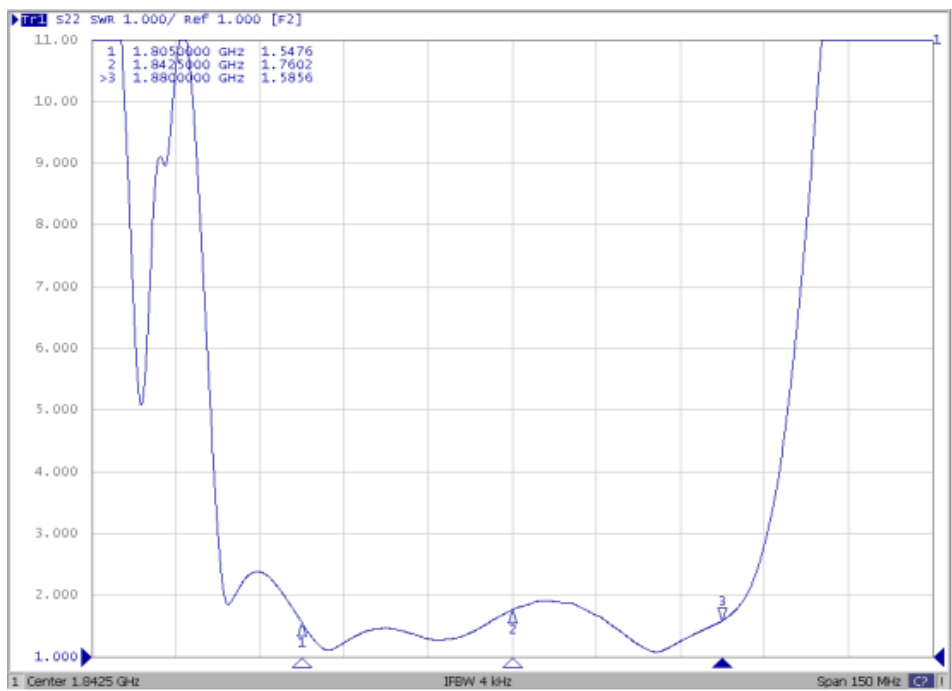
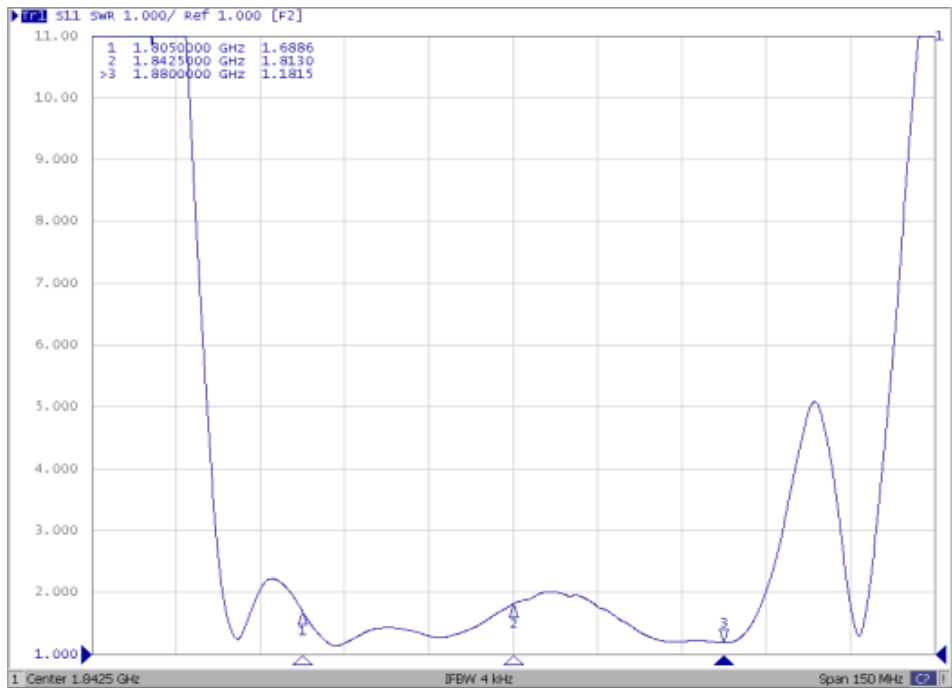
Item	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	1842.5	-
Insertion Loss (1805 ~ 1880 MHz) IL	dB	-	3.1	4.0
Amplitude Ripple (1805 ~ 1880 MHz)	dB _{p-p}	-	1.8	3.0
VSWR (1805 ~ 1880 MHz)	-	-	2.0	2.5
Attenuation (Reference level from 0 dB)				
DC ~ 960 MHz	dB	40	46	-
1558 ~ 1608 MHz	dB	30	43	-
1710 ~ 1785 MHz	dB	20	37	-
1920 ~ 2400 MHz	dB	30	38	-
2400 ~ 2500 MHz	dB	30	38	-
2500 ~ 3610 MHz	dB	20	31	-
3610 ~ 3760 MHz	dB	20	30	-
3760 ~ 5415 MHz	dB	15	23	-
5415 ~ 5640 MHz	dB	15	22	-
5640 ~ 7220 MHz	dB	10	19	-
7220 ~ 7520 MHz	dB	10	19	-
7520 ~ 8000 MHz	dB	8	18	-

C. FREQUENCY CHARACTERISTIC:

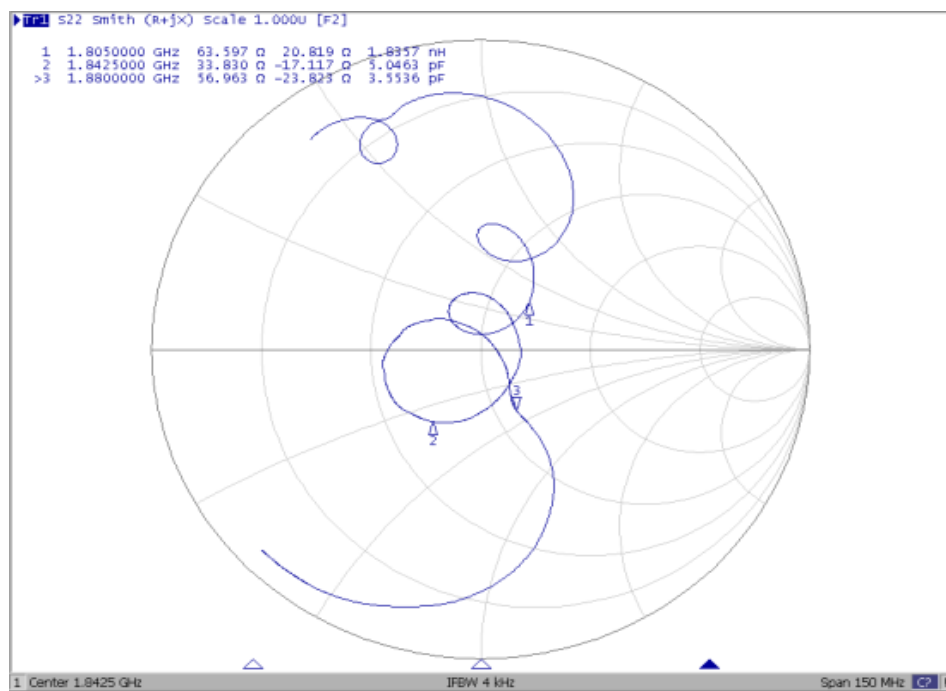
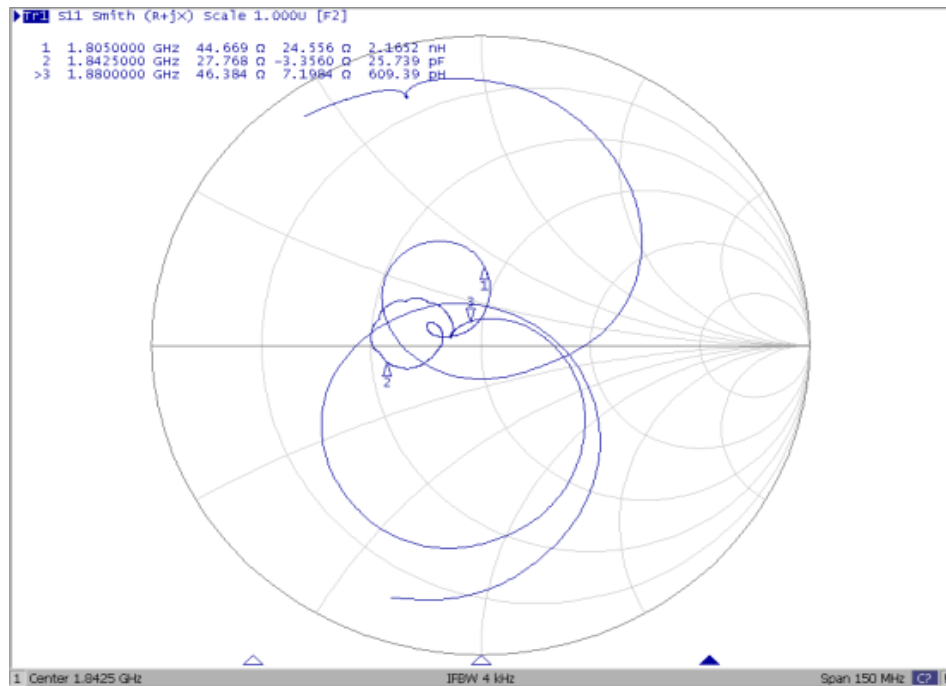


Reflection Functions:

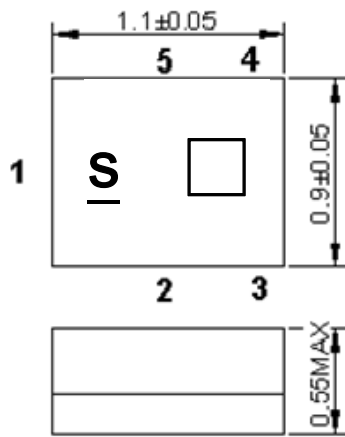
VSWR



Smith Chart



D. OUTLINE DRAWING:

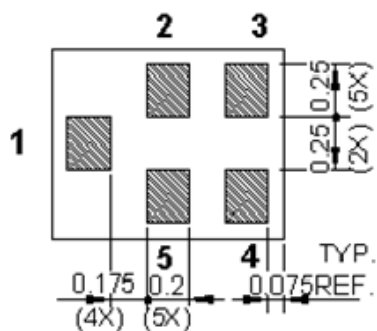


All tolerances are ± 0.05 mm unless otherwise specified

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

Marking description:

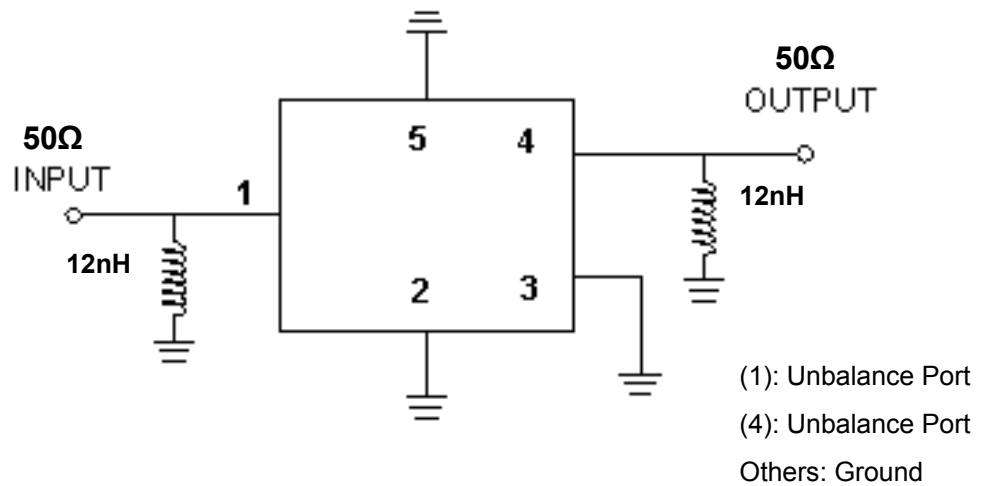
s : part symbol (small letter)

☐ : Year/Month Code

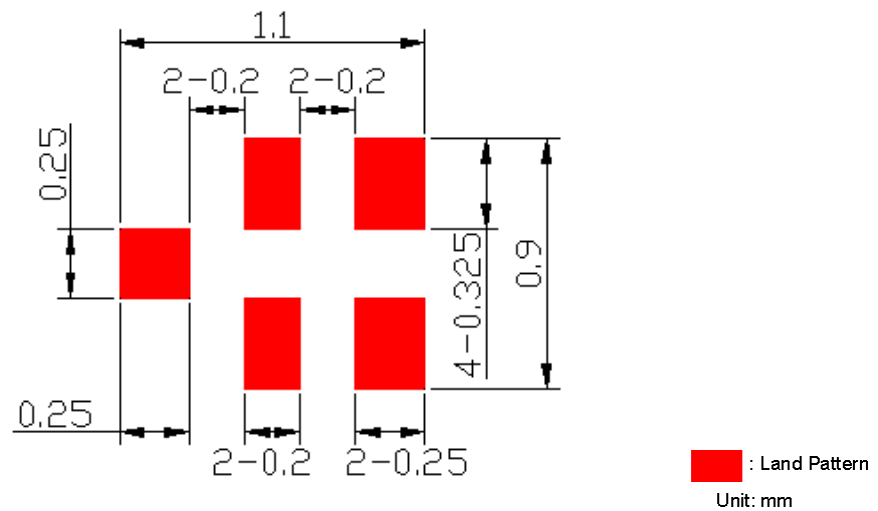
☐ : Year/Month Code(Follow the table)

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

E. MEASUREMENT CIRCUIT:



F. PCB Footprint:



(Please refer to FR-75D10 for packing quantity)



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 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

