

TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Name: SAW Rx Filter 1842.5 MHz LTE Band 3 SMD 1.1x0.9mm (BW=75 MHz)
TST Parts No.: TA1843D
Customer Parts No.:
Customer signature required
Company:
Division:
Approved by :
Date:
Checked by: David Chang
Approval by: Andy Yu Andy In
Date: 2019/01/16

- 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 1842.5 MHz

MODEL NO.:TA1843D **REV.3.0**

A. MAXIMUM RATING:

1. Maximum Input Power: 10 dBm

2. DC Voltage: 0 V

3. Operating Temperature: -20 °C to +85 °C

4. Storage Temperature Range: -40 °C to +85 °C

5. Moisture Sensitive Level: Level 3 (MSL 3)

6. ESD: 50 V(MM), 100 V(HBM)

RoHS Compliant Lead free Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. <u>ELECTRICAL CHARACTERISTICS</u>:

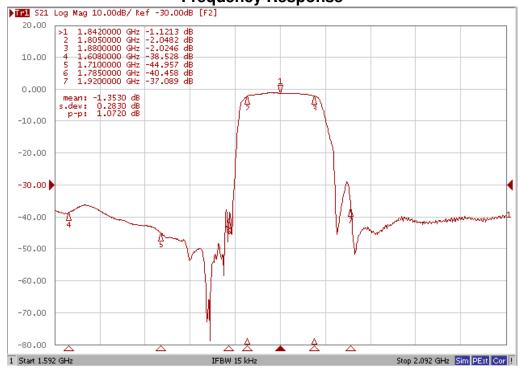
Terminating source impedance: Zs = 50//33nH Ω (Single-ended) Terminating load impedance: $Z_L = 50//12$ nH Ω (Single-ended)

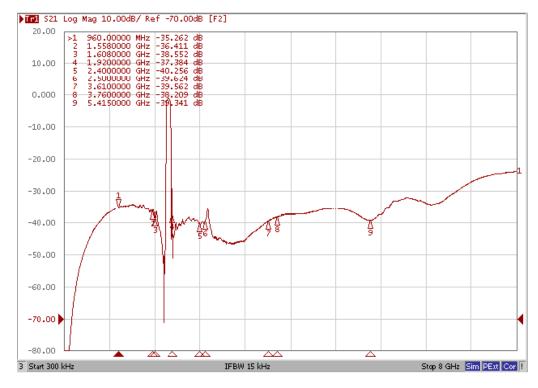
	Item		Unit	Min.	Тур.	Max.		
Center	Frequency		MHz	-	1842.5	-		
Insertion Loss (*1) 1805 ~ 1880 MHz				-	2.0	4.0		
Amplitu	ide Ripple	1805 ~ 1880 MHz	dB _{p-p}	-	1.0	3.3		
VSWR	Input	1805 ~ 1880 MHz	-	-	1.7	2.3		
	Output	1805 ~ 1880 MHz	-	-	1.6	2.2		
Attenuation (Reference level from 0 dB)								
	DC ~ 960 MHz		dB	32	35	-		
1558 ~ 1608 MHz				32	36	-		
1710 ~ 1785 MHz				34	38	-		
1920 ~ 2400 MHz				25	37	-		
2400 ~ 2500 MHz			dB	33	39	-		
2500 ~ 3610 MHz			dB	25	35	-		
3610 ~ 3760 MHz				25	38	-		
3760 ~ 5415 MHz				20	35	-		
5415 ~ 5640 MHz				20	36	-		
5640 ~ 7220 MHz				18	27	-		
7220 ~ 7520 MHz				16	25	-		
7520 ~ 8000 MHz				14	23	-		

^(*1) Specification of insertion loss excludes loss that comes from the test board.

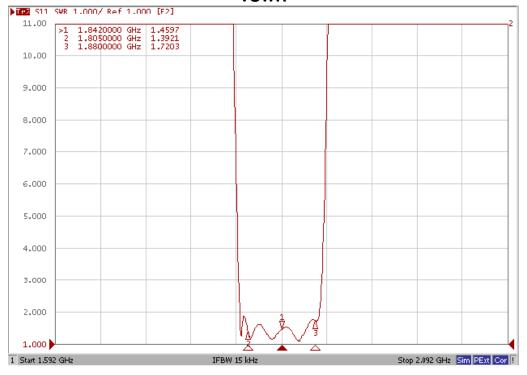
C. EFREQUENCY CHARACTERISTICS:

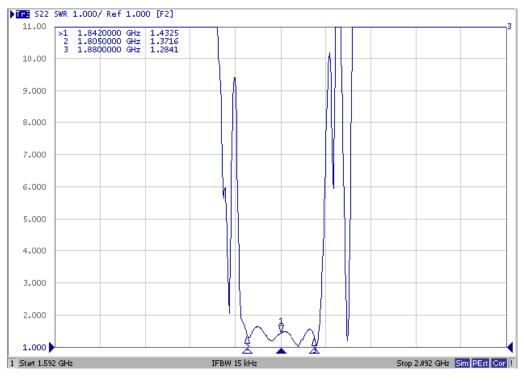
Frequency Response



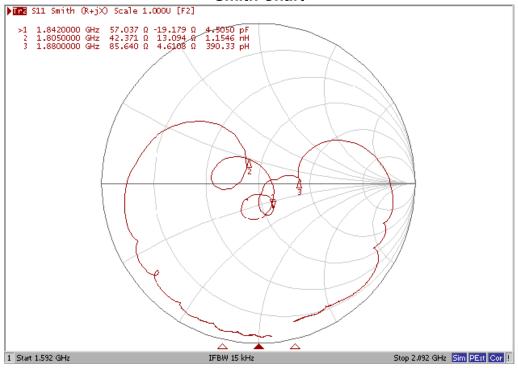


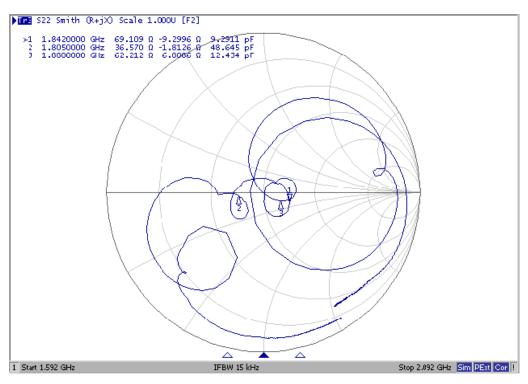
VSWR



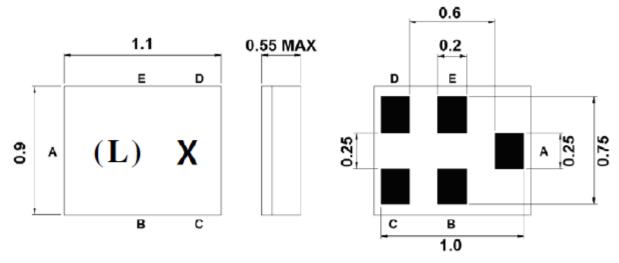


Smith Chart





D. **OUTLINE DRAWING**:



Pin Description							
B, C, E	Ground						
Α	Input						
D	Output						

Marking Descriptions:

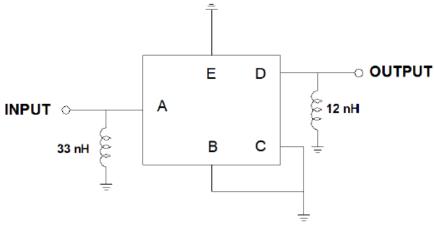
(L): Series Number

X : Year/Month Code (Follow the table)

Date Code (Year/Month Code)

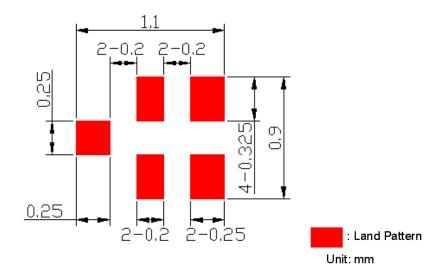
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	Α	В	С	D	Е	F	G	Н	J	K	L	M
2014	N	Р	Q	R	S	Т	U	V	W	X	Υ	Z
2015	а	b	С	d	е	f	g	h	j	k	I	m
2016	n	р	q	r	s	t	u	V	W	X	У	Z
2017	<u>A</u>	В	<u>C</u>	D	<u>E</u>	<u>F</u>	G	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	M
2018	N	<u>P</u>	Ø	<u>R</u>	<u>s</u>	<u>T</u>		V	W	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>C</u>	d	e	<u>f</u>	g	<u>h</u>	į	<u>k</u>	l	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	S	<u>t</u>	<u>u</u>	<u>v</u>	W	<u>X</u>	Y	<u>z</u>

E. MEASUREMENT CIRCUIT:



Source & Load Impedance: 50 Ω

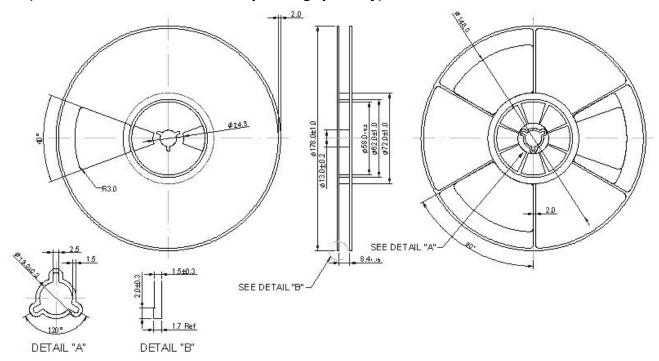
F. PCB Footprint:

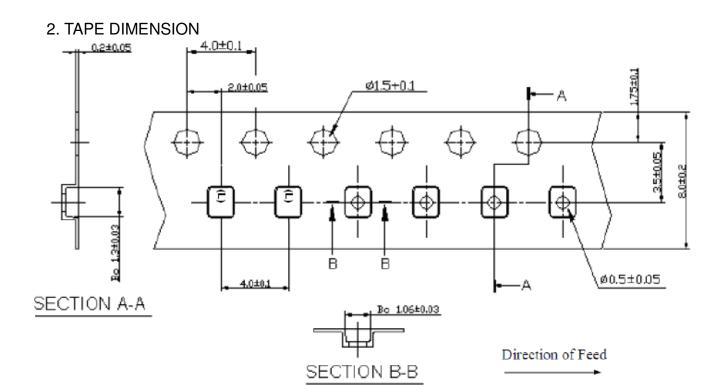


G. PACKING: (Ref: WI-75M03)

1. REEL DIMENSION

(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.
- 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.

