



# 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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Product Specifications Approval Sheet

Product Name: SAW Rx Filter 942.5 MHz LTE Band 8 SMD 1.1x0.9mm (BW=35 MHz)

TST Parts No.: TA1839D

Customer Parts No.: \_\_\_\_\_

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ Hayley Chou *Hayley Chou*

Approval by: \_\_\_\_\_ Andy Yu *Andy Yu*

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.



# 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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

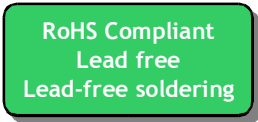
## SAW Filter 942.5 MHz

MODEL NO.:TA1839D

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: 100 V(MM), 200 V(HBM)



Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

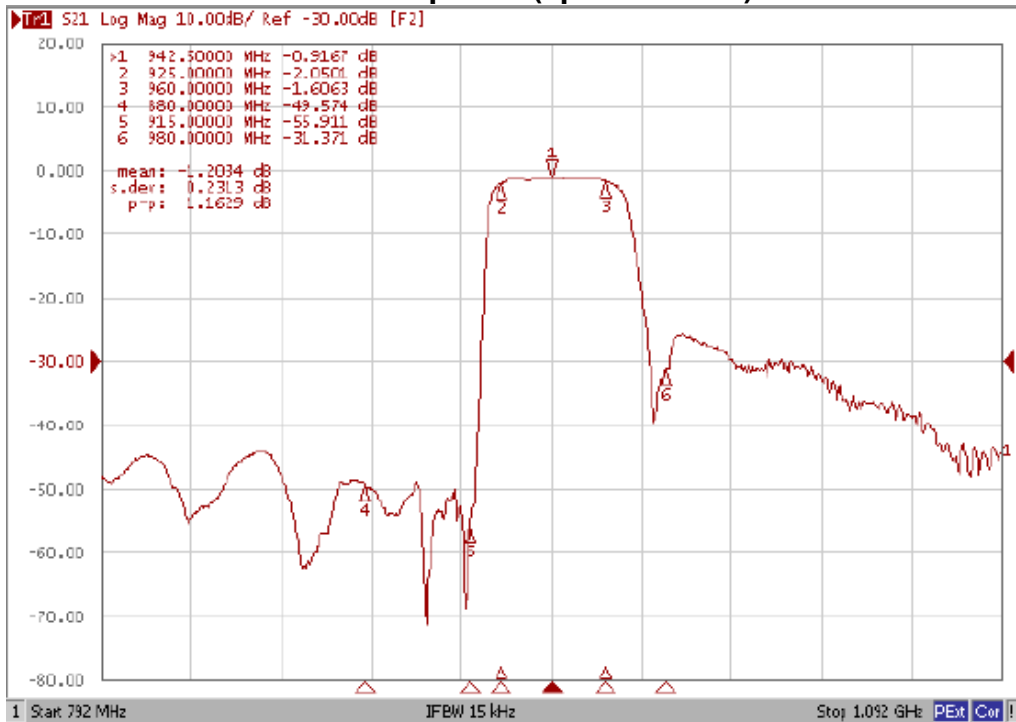
Terminating source impedance:  $Z_s = 50 \Omega$

Terminating load impedance:  $Z_L = 50 \Omega$

Item	Unit	Min.	Typ.	Max.
<b>Center Frequency</b>	<b>Fc</b> MHz	-	942.5	-
<b>Insertion Loss</b> (925 ~ 960 MHz)	<b>IL</b> dB	-	2.0	3.0
<b>Amplitude Ripple</b> (925 ~ 960 MHz)	dB	-	1.2	2.3
<b>Input VSWR</b> (925 ~ 960 MHz)	-	-	1.9	2.3
<b>Output VSWR</b> (925 ~ 960 MHz)	-	-	1.9	2.3
<b>Attenuation</b> (Reference level from 0 dB)				
880 ~ 915 MHz	dB	46	49	-
980 ~ 1558 MHz	dB	15	25	-
1559 ~ 1607 MHz	dB	40	55	-
1850 ~ 1920 MHz	dB	35	48	-
2400 ~ 2500 MHz	dB	30	40	-
2775 ~ 2880 MHz	dB	28	37	-
3700 ~ 3840 MHz	dB	25	33	-
4625 ~ 4800 MHz	dB	20	34	-
4900 ~ 5950 MHz	dB	18	34	-
5550 ~ 5725 MHz	dB	18	36	-
6475 ~ 6720 MHz	dB	15	32	-
7400 ~ 7680 MHz	dB	15	25	-

### C. EFREQUENCY CHARACTERISTICS:

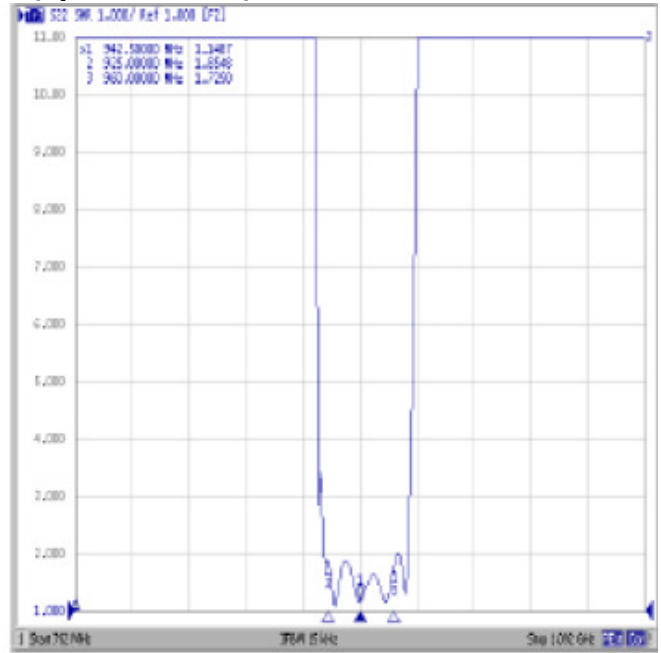
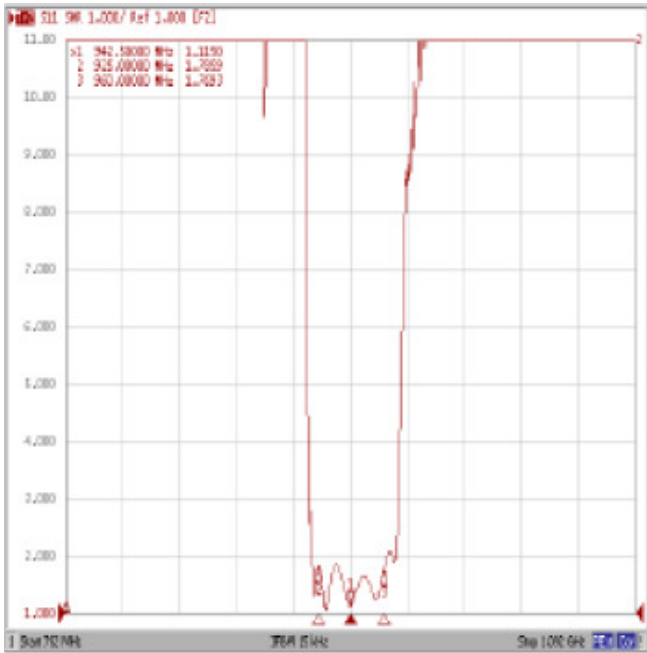
#### 1. S21 Response (span 300MHz):



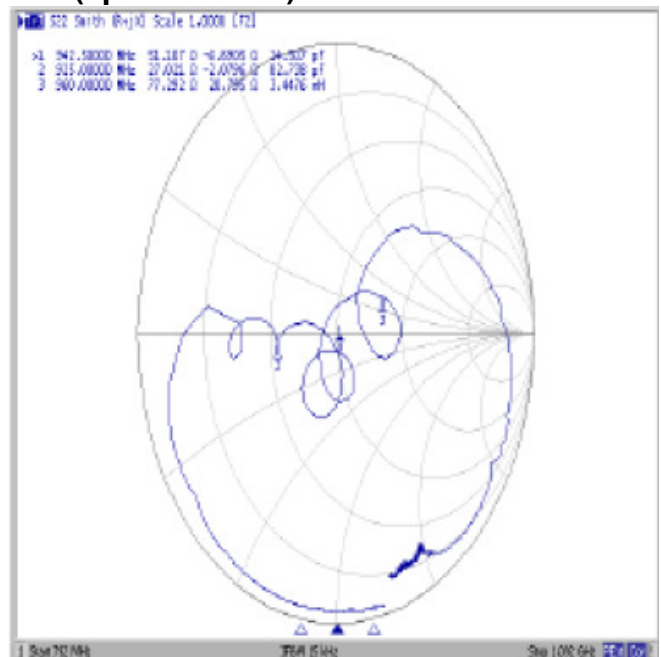
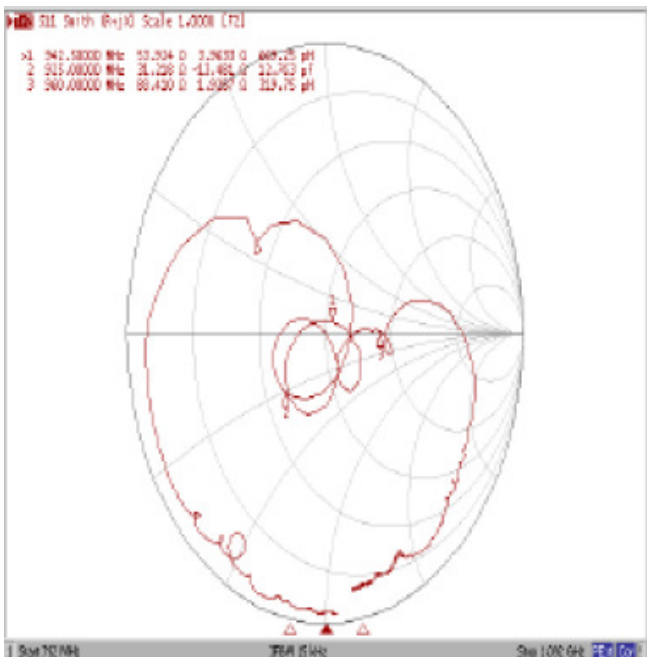
#### 2. S21 Response (span 8GHz):



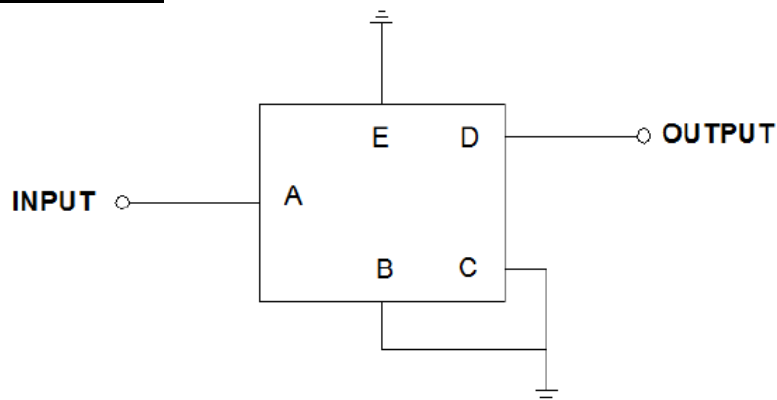
### 3. S11 & S22 VSWR (span 300MHz):



### 4. S11 & S22 Smith Chart (span 300MHz):

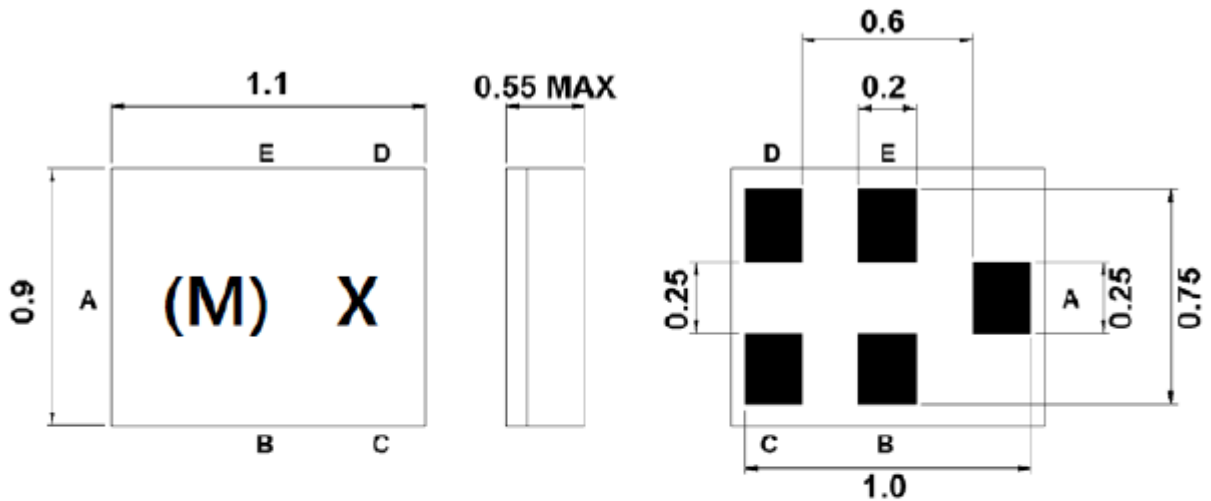


### D. MEASUREMENT CIRCUIT:



Source & Load Impedance: 50 Ω  
TAI-SAW TECHNOLOGY CO., LTD.

**E. OUTLINE DRAWING:**



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

**Marking Descriptions:**

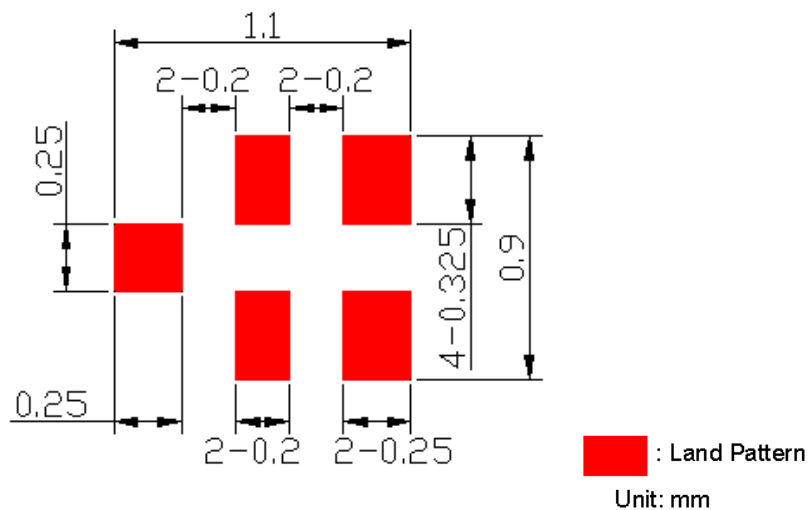
(M) : Series Number

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	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<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	<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	<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	<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>

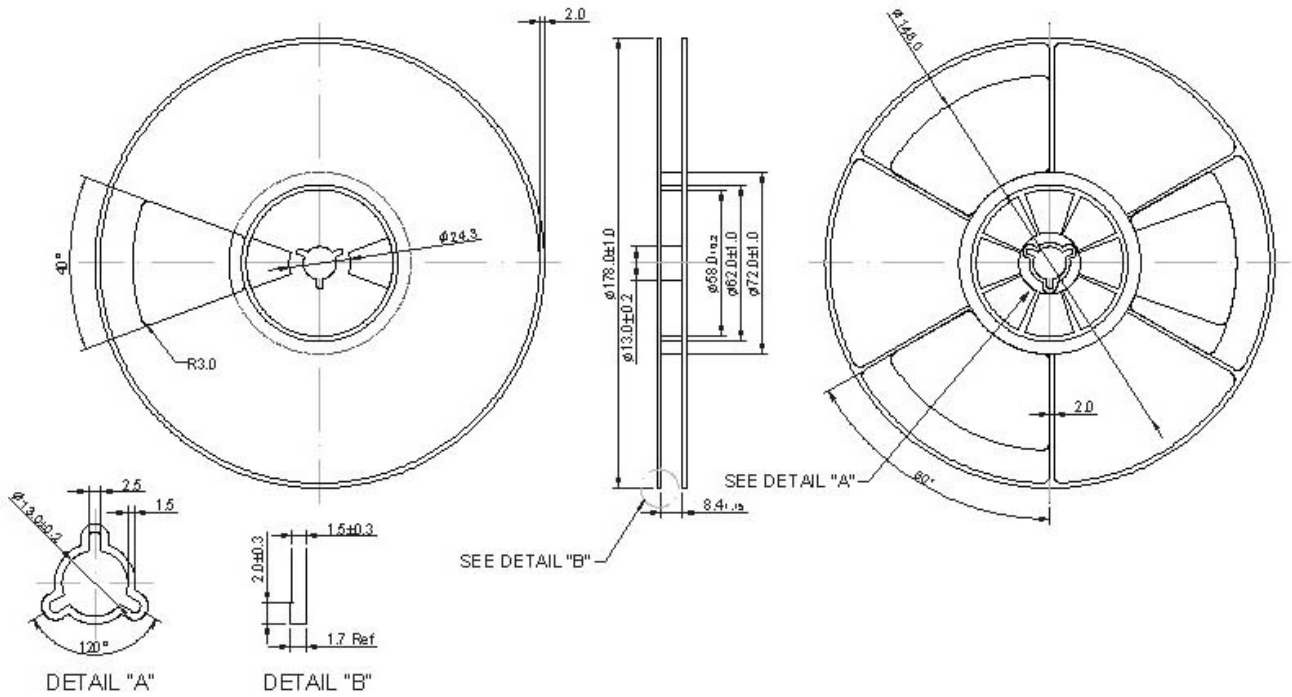
**F. PCB Footprint:**



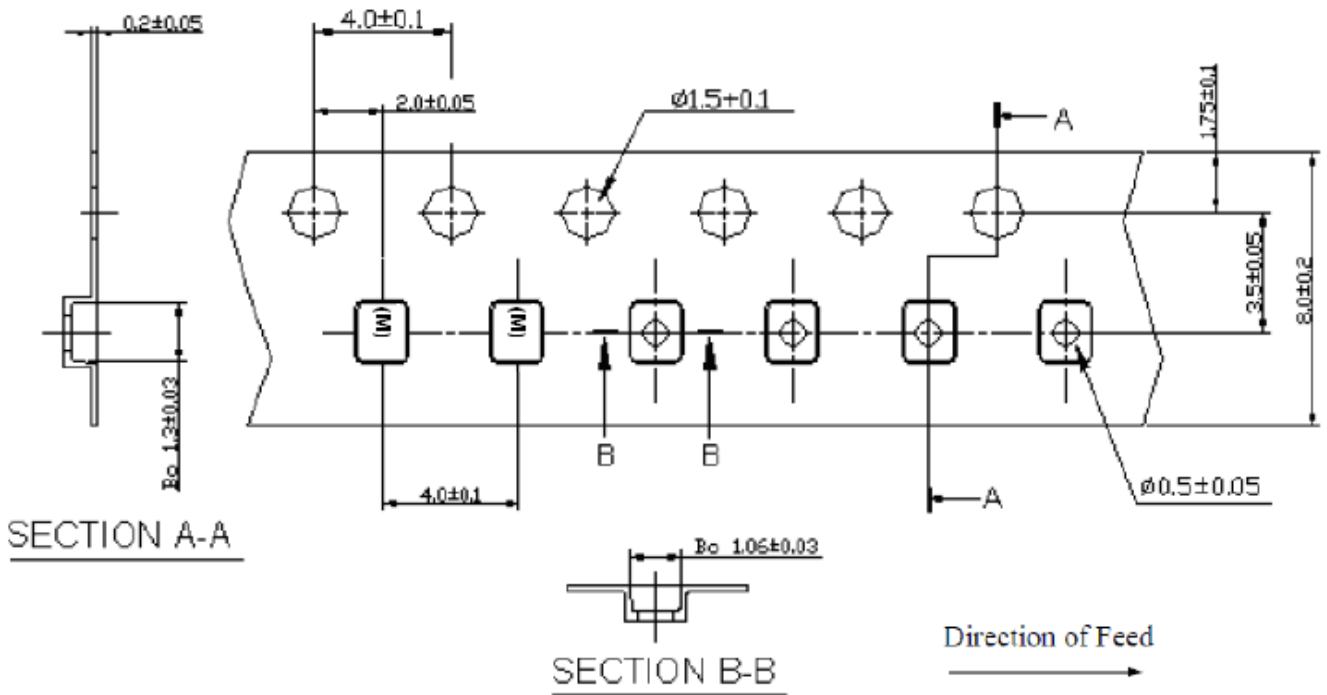
**G. PACKING:** (Ref: WI-75M03)

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

