

# 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 Name: SAW Rx Filter 881.5 MHz LTE Band 5 SMD 1.1x0.9 mm (BW=25 MHz	z)
rst Parts No.: TA1811B (This part is compliant by AEC-Q200)	
Customer Part No.:	
Customer signature required	
Company:	
Division:	
Approved by :	
Date:	
Checked by: Hayley Chou Hayley Chou	
Checked by: Hayley Chou Hayley	
Date: 2018/07/23	

- 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 881.5 MHz

MODEL NO.: TA1811B REV. No.: 1.0

# A. MAXIMUM RATING:

1. Maximum Input Power: 10 dBm

2. DC voltage: 0 V

3. Operating Temperature: -40 °C to +85 °C

4. Storage Temperature: -40 °C to +85 °C 5. Moisture Sensitivity Level: Level 1 (MSL 1)

6. ESD: 100 V(MM), 200 V(HBM)

**RoHS Compliant** Lead-free soldering

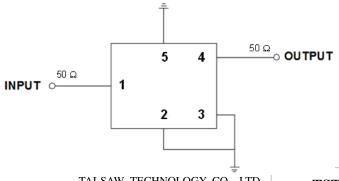
Electrostatic Sensitive Device (ESD)

# **B. ELECTRICAL CHARACTERISTICS:**

Terminating source impedance:  $Zs = 50 \Omega$  (Single-ended) Terminating load impedance:  $Z_L = 50 \Omega$  (Single-ended)

Parameters Description	Unit	Min.	Тур.	Max.					
Center Frequency Fc	MHz	-	881.5	-					
Insertion Loss (869~894 MHz) IL	dB	-	1.6	2.5					
Amplitude Ripple (869~894 MHz)	dB <sub>p-p</sub>	-	0.4	1.5					
<b>VSWR</b> (869~894 MHz)	-	-	1.6	2.2					
Attenuation (Reference level from 0 dB)									
DC ~ 824 MHz	dB	40	51	-					
824 ~ 849 MHz	dB	38	46	-					
914 ~ 970 MHz	dB	23	35	-					
970 ~ 1049 MHz	dB	38	52	-					
1049 ~ 2000 MHz	dB	33	43	-					
2000 ~ 3000 MHz	dB	25	39	-					
3000 ~ 6000 MHz	dB	20	36	-					

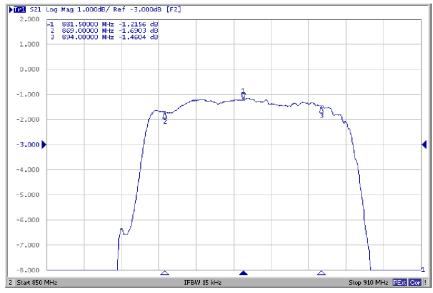
#### **C. MEASUREMENT CIRCUIT:**

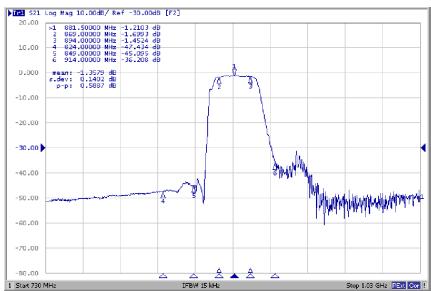


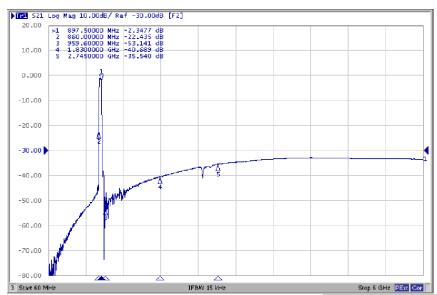
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# D. FREQUENCY CHARACTERISTIC:





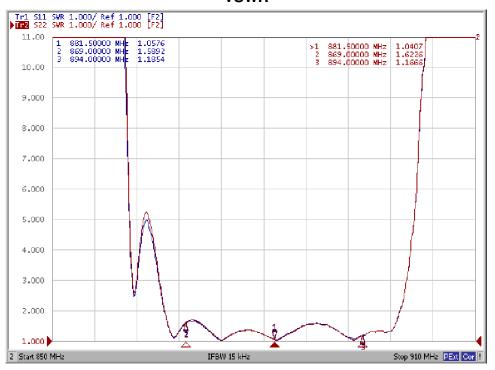


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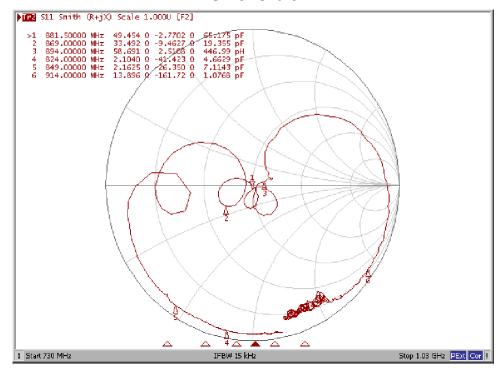
TST DCC
Release document

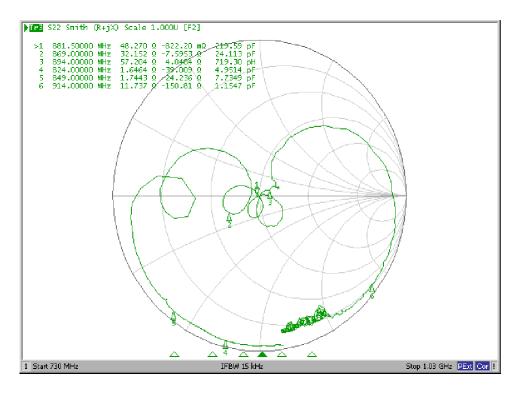
# **Reflection Functions:**

# **VSWR**

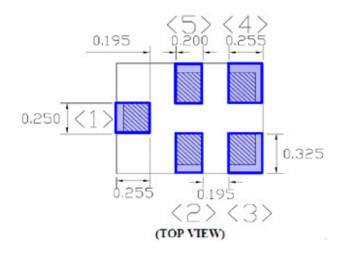


#### **Smith Chart**



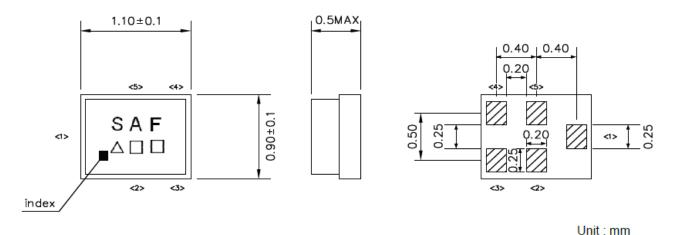


# E. PCB Footprint:



# F **OUTLINE DRAWING** (Mass Production):

Device size: 1.1typ. x 0.9typ. x 0.5max.



# **Pin Configuration**

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

 $\triangle$ : Date Code

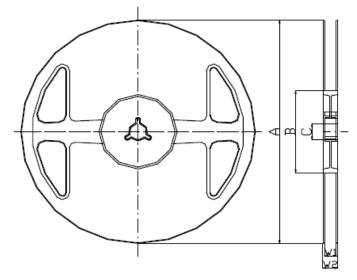
☐ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and I)

# **Date Code:**

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2017	Α	В	С	Ð	Е	F	G	Н	J	K	L	Μ
2018	Z	Р	ß	R	S	Т	U	∇	W	X	Υ	Z
2019	a	b	O	d	е	f	g	h	j	k	_	3
2020	n	р	q	r	S	t	u	>	w	Х	у	Z

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

# 1. REEL DIMENSION



#### Materials of Reel

Material: Polystyrene + Carbon

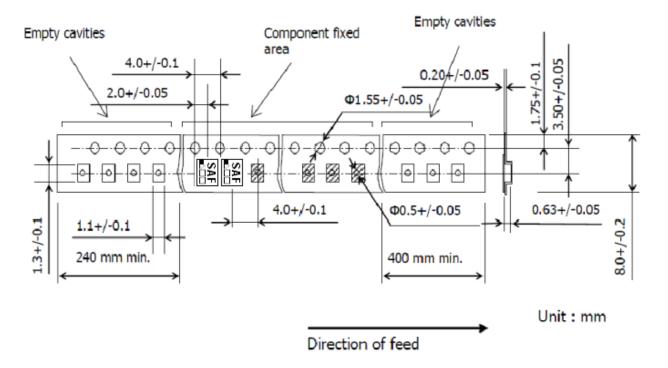
Color: Black

Surface resistance (reference value) :  $10^9\Omega/\text{sq}$  Max.

Unit: mm

Code	Quantity	Α	В	С	W1	W2
J	5,000 pcs	ф 180.0 +0.0/-1.5	ф 66.0 +/-0.5	φ 13.0 +/-0.2	9.0 +1.0/-0.0	11.4 +/-1.0

# 2. TAPE DIMENSION



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# H. Recommended Reflow Profile:

- 1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
- 2. Ascending time to preheating temperature 150 $^{\circ}$ 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.

