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 1900MHz LTE Band 39 SMD 1109

TST Parts No.:TA2018A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Michael Yang _____

Approval by:_____ Bob Chau _____

Date:_____ 2017, 04. 05 _____

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 Rx Filter 1900MHz LTE Band 39 SMD 1109 (40MHz BW)

MODEL NO.:TA2018A REV. NO.:2

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40℃ to +85℃
4. Storage Temperature: -40℃ to +105℃
5. Moisture Sensitivity Level: Level 3
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

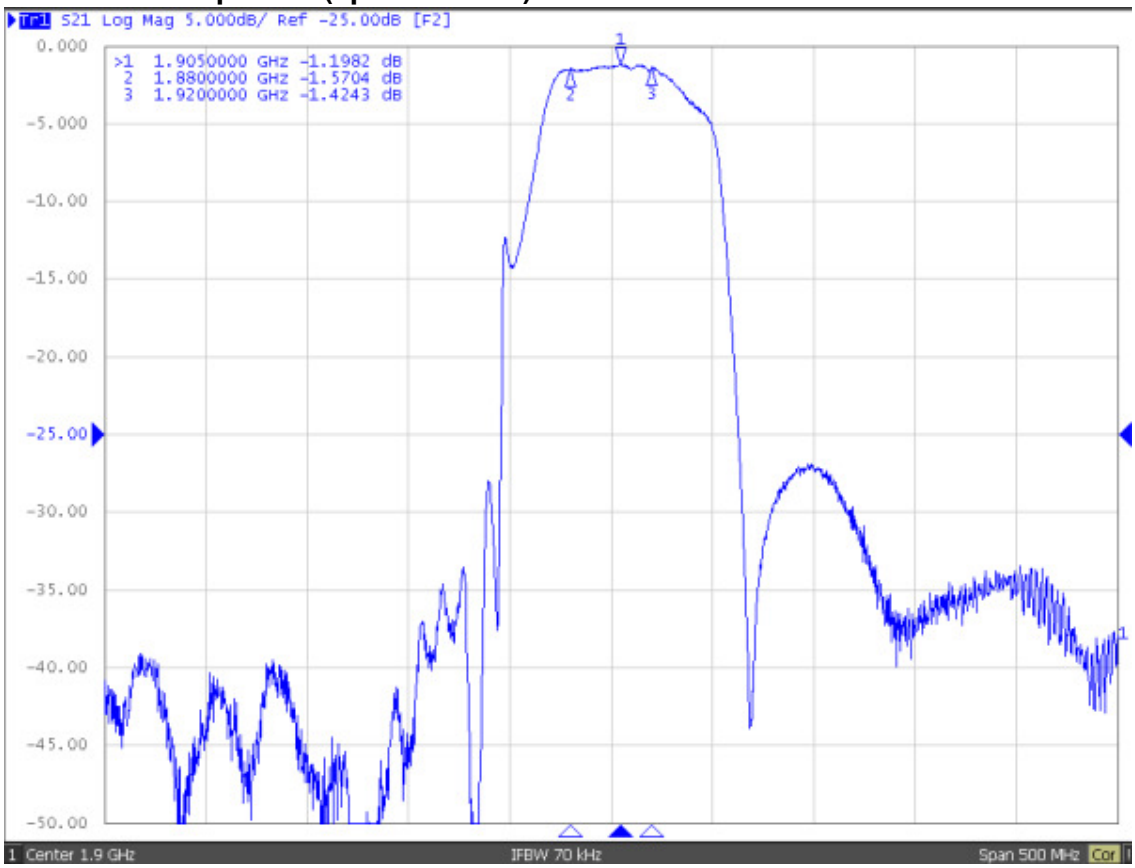
Electrostatic **S**ensitive **D**evice (**ESD**)

B. ELECTRICAL CHARACTERISTICS:

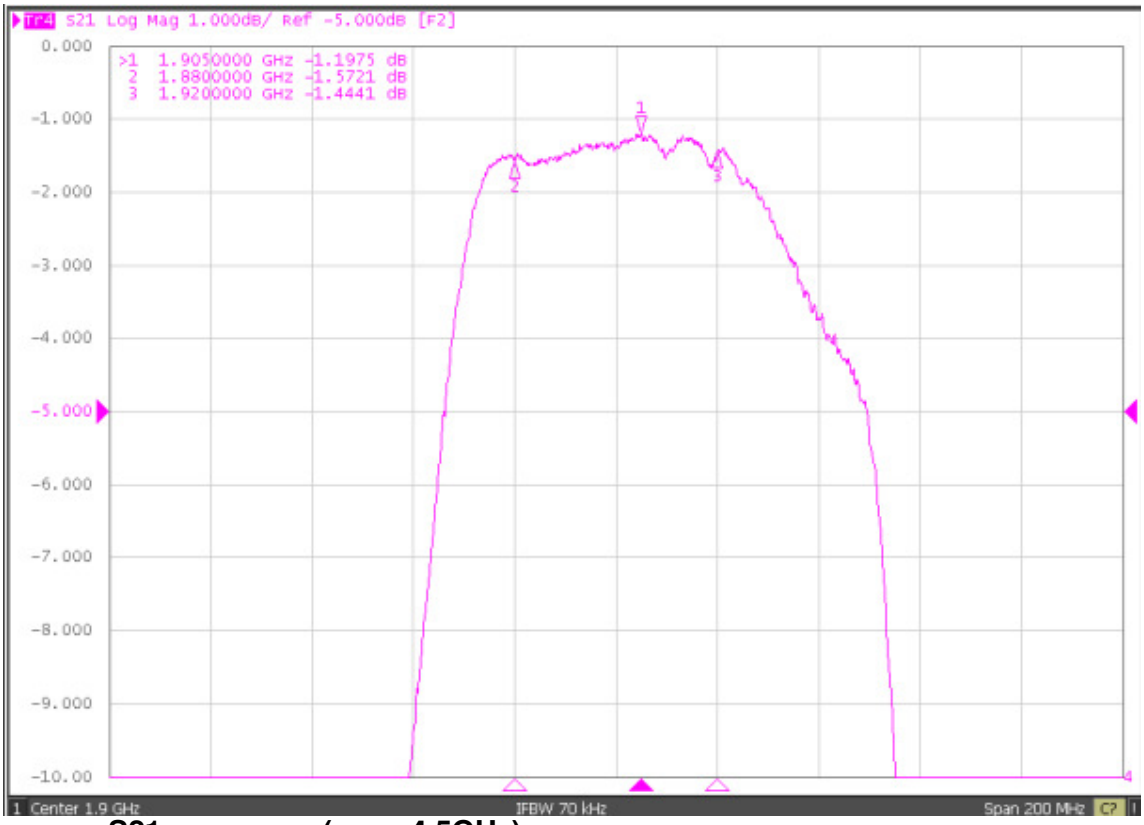
Item	Unit	Min.	Type.	Max.	Note
Center Frequency (Fc)	MHz	-	1900	-	-
Insertion Loss (1880~1920 MHz) **IL**	dB	-	1.4	2	-
VSWR (1880~1920 MHz)		-	1.4	2	
Amplitude ripple (1880~1920 MHz)	dB	-	0.5	1.4	-
Attenuation					-
10 ~ 1710 MHz	dB	30	35	-	
1710 ~ 1805 MHz	dB	35	43	-	-
1805 ~ 1840 MHz	dB	25	30	-	-
1840 ~ 1850 MHz	dB	10	13	-	-
2000 ~ 2110 MHz	dB	25	30	-	
2110 ~ 2200 MHz	dB	30	35	-	-
2200 ~ 4000 MHz	dB	30	38	-	-
4000 ~ 6000 MHz	dB	27	34	-	-
				-	-
Package size	mm	SMD 1.1x0.9			

C.FREQUENCY CHARACTERISTICS:

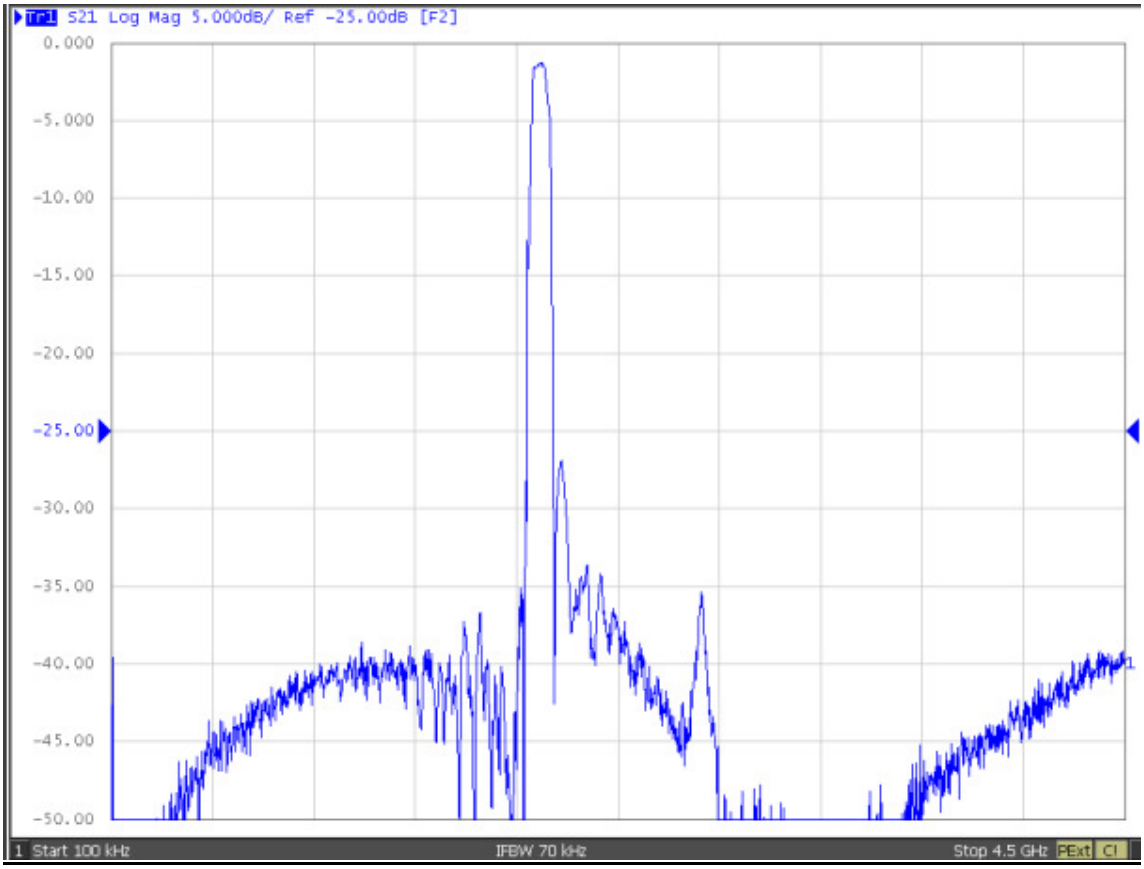
S21 response: (span 500MHz)



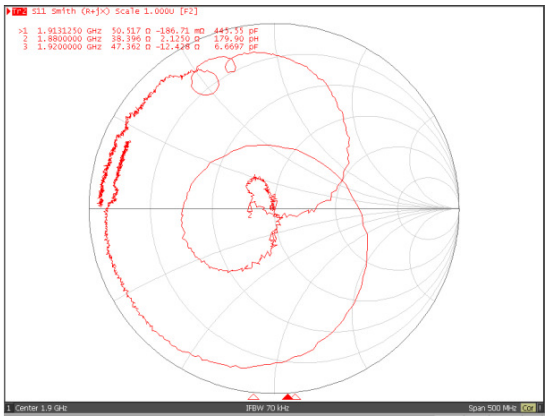
S21 response: (span 200MHz)

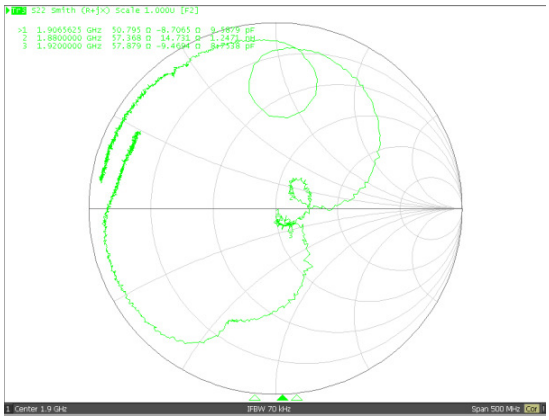


S21 response: (span 4.5GHz)

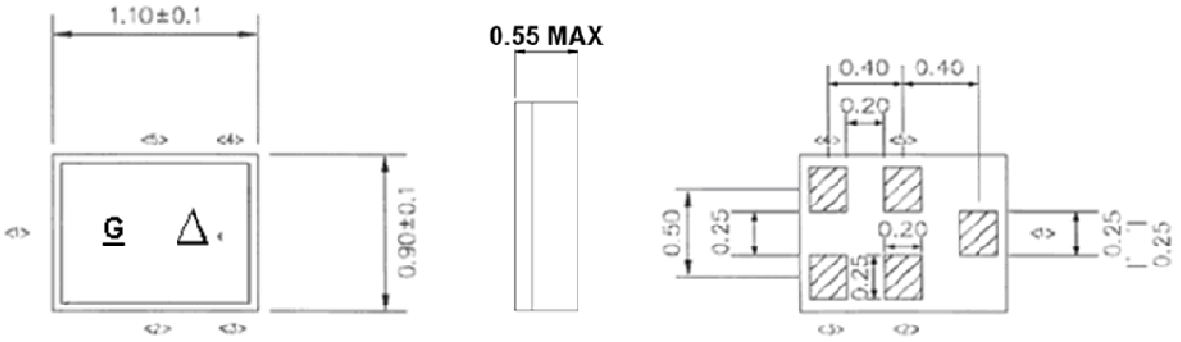


S11/S22 response:


S11 Smith (R+jX) Scale 1.000U [F2]
>1 1.9131250 GHz 50.517 Ω -186.71 mΩ 445.15 pF
2 1.8800000 GHz 38.396 Ω 2.1250 Ω 179.90 pH
3 1.9200000 GHz 47.362 Ω -12.428 Ω 6.6697 pF
1 Center 1.9 GHz
IFBW 70 kHz
Span 500 MHz


S22 Smith (R+jX) Scale 1.000U [F2]
>1 1.9065625 GHz 50.795 Ω -8.7065 Ω 9.4879 pF
2 1.8800000 GHz 57.368 Ω 14.731 Ω 1.2471 nH
3 1.9200000 GHz 57.879 Ω -9.4694 Ω 847538 pF
1 Center 1.9 GHz
IFBW 70 kHz
Span 500 MHz

D.OUTLINE DRAWING:



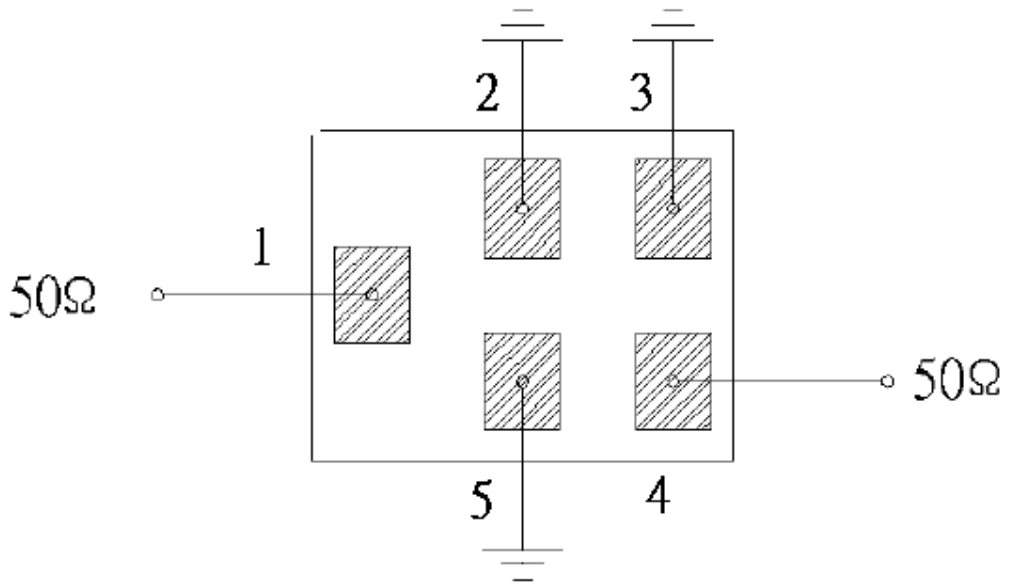
Unit: mm

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

Δ : Year/Month Code (Follow the table)

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	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**
2018	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
2019	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**j**	**k**	**l**	**m**
2020	**n**	**p**	**q**	**r**	**s**	**t**	**u**	**v**	**w**	**x**	**y**	**z**

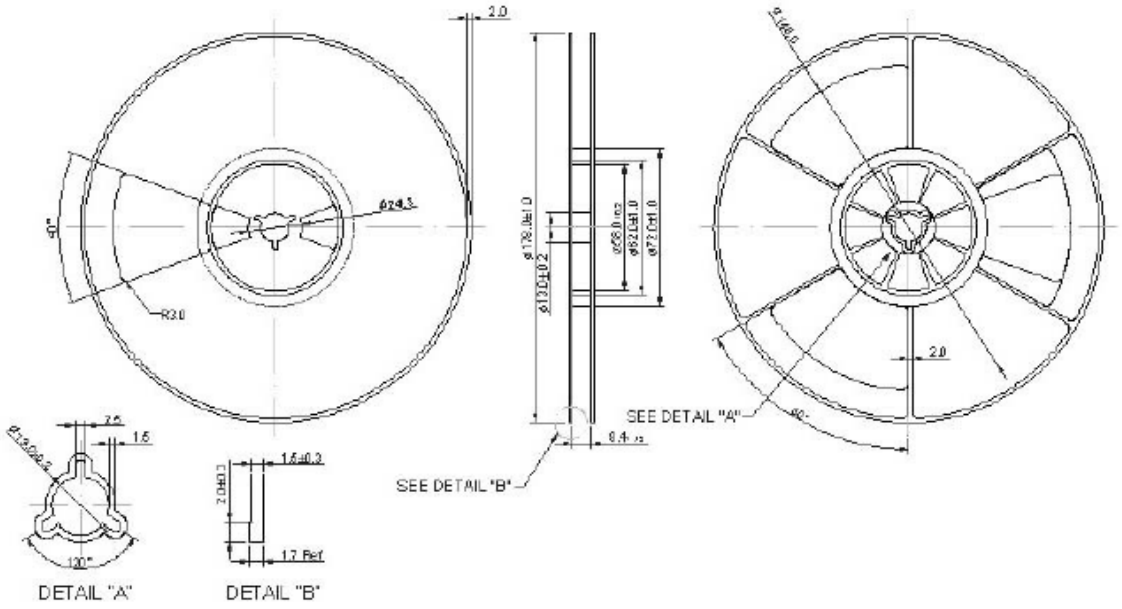
E. MEASUREMENT CIRCUIT:



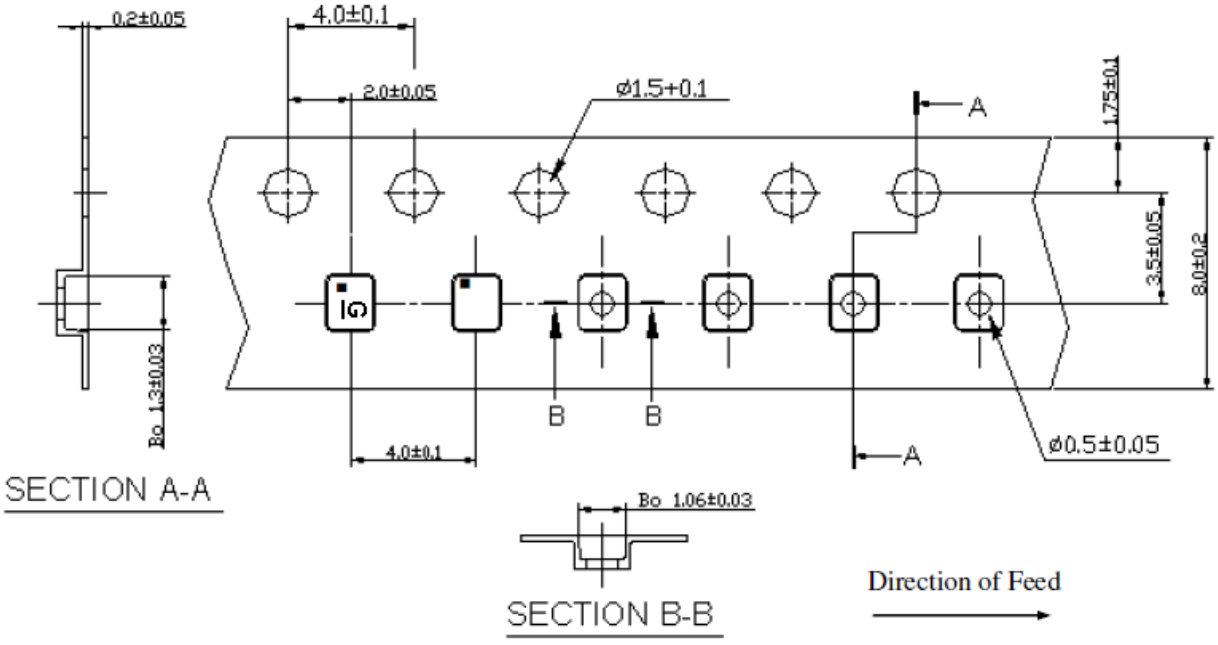
F. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



G. RECOMMENDED REFLOW PROFILE :

1. Preheating shall be fixed at 150~180℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 260℃+0/-5℃ peak (20~40sec).
4. Time: 2 times.