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Product Specifications Approval Sheet

Product Description: SAW Filter 915 MHz SMD 2.0X1.6mm (BW=26MHz)

TST Part No.: TA1102A

Customer Part No.:_____

Customer signature required	
Company:	-
Division:	_
Approved by :	-
Date:	

Checked by:	Jun-Mao Chang 子表镜算	_
Approved by:	Andy Yu Andy In	-
Date:	03/12/2020	

- 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,

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: <u>tstsales@mail.taisaw.com</u> Web: <u>www.taisaw.com</u>

SAW Filter 915MHz

MODEL NO.: TA1102A

A. MAXIMUM RATING:

- 1. Input Power Level: 15dBm
- 2. DC Voltage : 3V
- 3. Operating Temperature: -40 ℃ to +85 ℃
- 4. Storage Temperature: -40 °C to +85 °C
- 5. Moisture Sensitivity Level:Leve1(MSL 1)

B. ELECTRICAL CHARACTERISTICS:

Item		Unit	Min	Typical	Max
Center Frequency	Fc	MHz	-	915	-
Insertion Loss (902~928 MHz)	IL	dB	-	2	3
Amplitude Ripple (902~928 MHz)		dB	-	0.8	1.5
Group Delay Variation (902~928 MHz)		ns	-	35	50
Input/Output Return Loss(902~928 MHz)		dB	8	9.5	-
Attenuation (Reference level from 0 dB)					
10 ~ 857.5 MHz		dB	40	55	-
857.5 ~ 882.5 MHz		dB	35	48	-
970 ~ 1005 MHz		dB	35	48	-
1005 ~ 1110 MHz		dB	45	52	-
1110 ~ 3000 MHz		dB	30	35	-
Source / Load Impedance		Ω	-	50	-

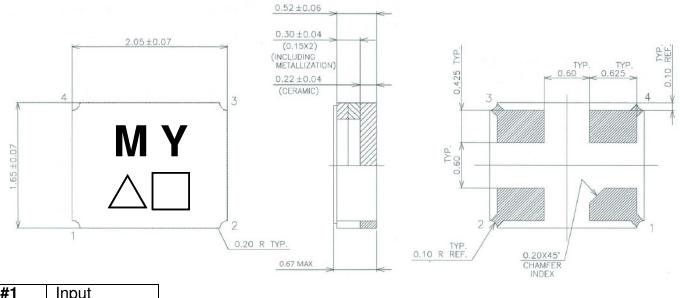
REV. NO.:3

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

C.OUTLINE DRAWING:

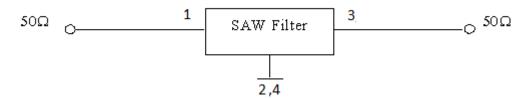


#1	Input
#3	Output
#2,4	Ground
Unit:	mm

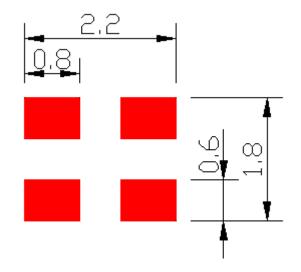
△: Year(2020->0, 2021->1, 2022->2...)
□: Week(A~Z:Week01~26, a~z:Week27~52)

D. MEASUREMENT CIRCUIT:

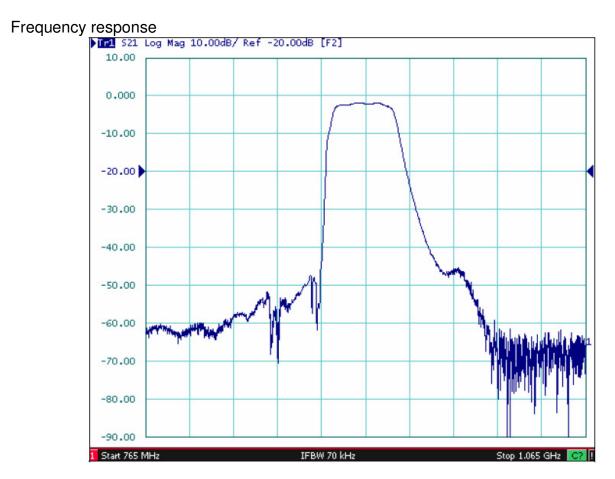
Network analyzer



E. PCB Footprint:

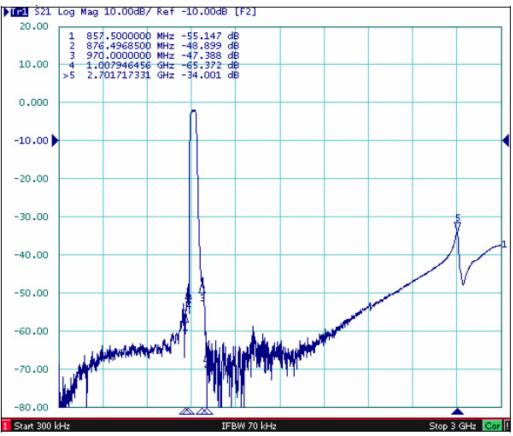


F. Frequency Characteristics(Demo board):

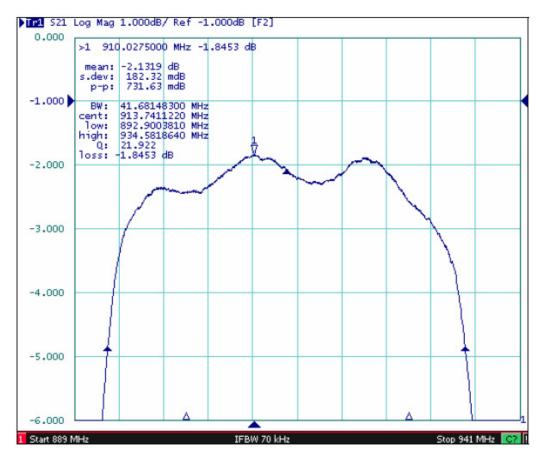


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Wide band response



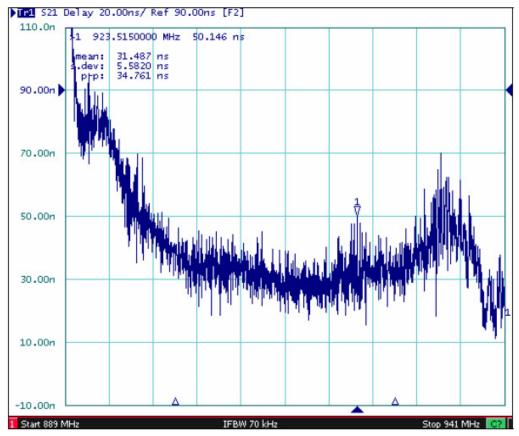
Pass band response



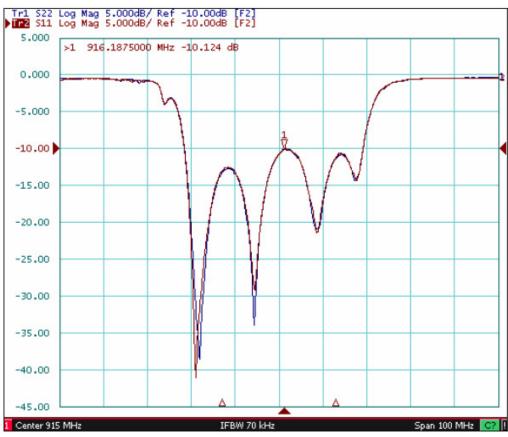
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TST DCC Release document

Group delay

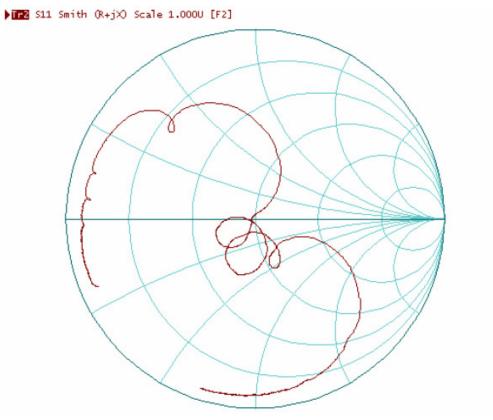


Return loss

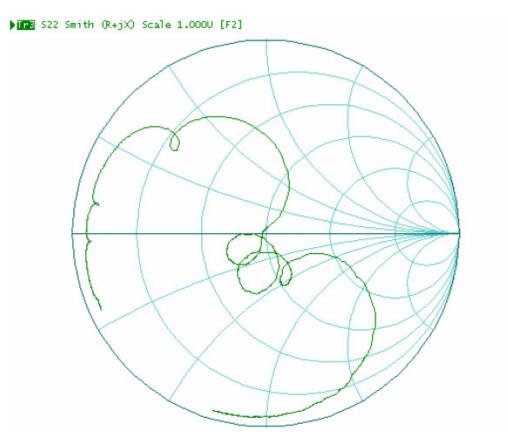


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S11 Smith chart

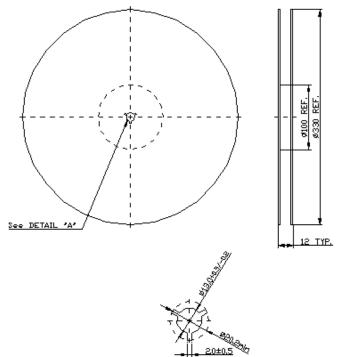


S22 Smith chart



G. <u>PACKING:</u>

1. REEL DIMENSION



2. TAPE DIMENSION 3kpcs maximum /reel 4.0±0.1 ø1.55±0.05 1.75±0.1 2.0±0.05 0.25±0.05 3.5±0.05 8.0±0.3 С О ⊳≤ ⊳≤ ⊳≤ □ -< □-< □ -< BO 2.30±0.05 U 4.0±0.1 KO 0.90±0.05 Ø0.5±0.05 AO 1.90±0.05

H . RECOMMENDED REFLOW PROFILE :

- 1. Preheating shall be fixed at $150 \sim 180^{\circ}$ C for $60 \sim 90$ 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 peak (min. 20~40sec).
- 4. Time : 2 times.

