



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 Filter 1800MHz SMD 3.8X3.8 mm(BW=12MHz)

TST Part No.: TA0939A

Customer Part No.: _____

Customer signature required

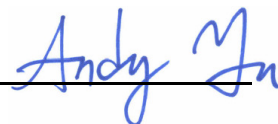
Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Anne Chen 

Approved by: _____ Andy Yu 

Date: _____ 2019/08/14

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 Web: www.taisaw.com

SAW Filter 1800MHz

MODEL NO.: TA0939A

REV. NO : 3.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dB_m
2. DC voltage: 3 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -50 °C to +85 °C
5. Moisture Sensitivity Level: Level 1 (MSL1)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

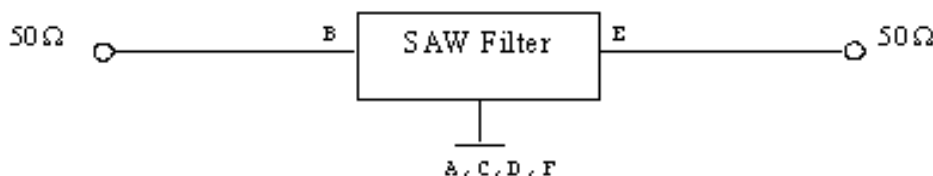
B. ELECTRICAL CHARACTERISTICS:

Item		Min.	Typ.	Max.
Center frequency	F _c MHz	-	1800	-
Insertion loss(1794 ~ 1806MHz)	IL dB	-	1.89	3.5
Amplitude ripple(1794~1806 MHz)	dB	-	0.28	2.0
Group delay (1794~1806 MHz)	ns	-	17.1	40
Return loss (1794~1806 MHz)	dB	10	16.47	-
Attenuation (Reference level from 0 dB)				
800 ~ 1720 MHz	dB	30	39.1	-
1720 ~ 1745 MHz	dB	20	32.8	-
1745 ~ 1755 MHz	dB	6	19.0	-
1840 ~ 1850 MHz	dB	10	45.8	-
1850 ~ 2800 MHz	dB	30	43.7	-
Temperature Coefficient	Ppm/°C	-	-36	-
Source impedance	Z _s Ω	-	50	-
Load impedance	Z _L Ω	-	50	-

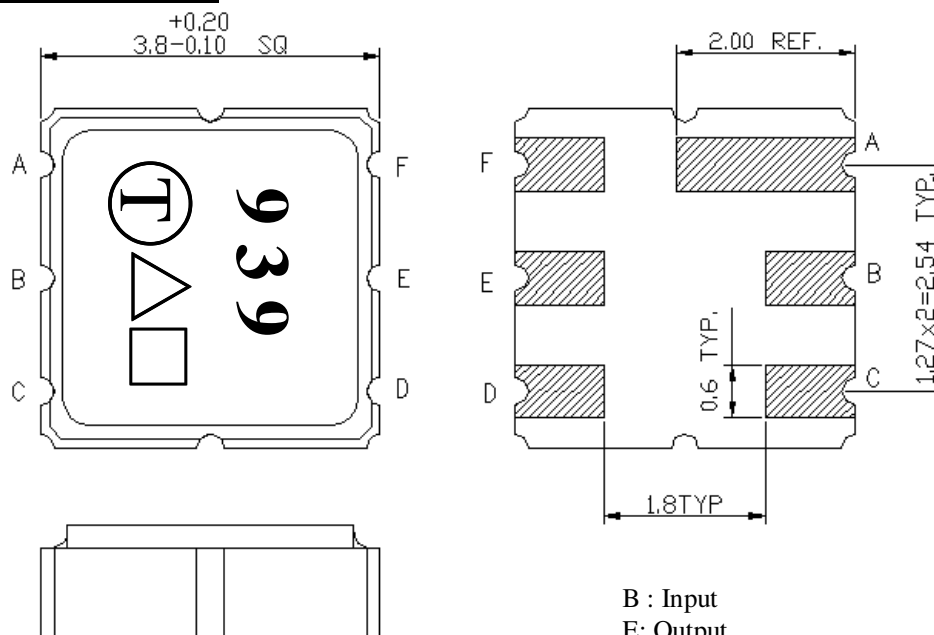
C. MEASUREMENT CIRCUIT:

50 Ohm Test circuit (single-ended / single-ended)

HP Network analyzer



D. OUTLINE DRAWING:



Marking name : **939**

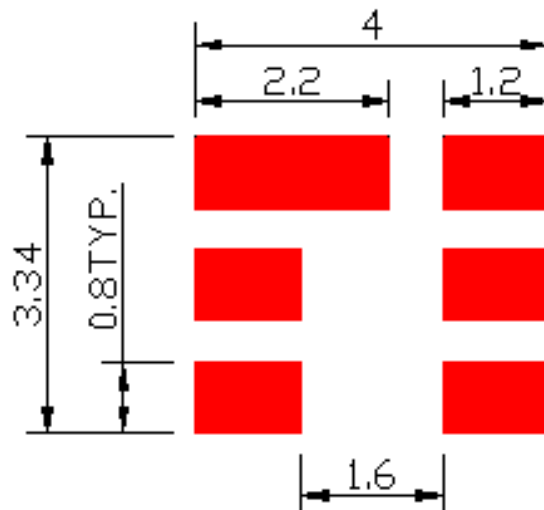
△ : Year code

□ : Week code

Product Year
Code

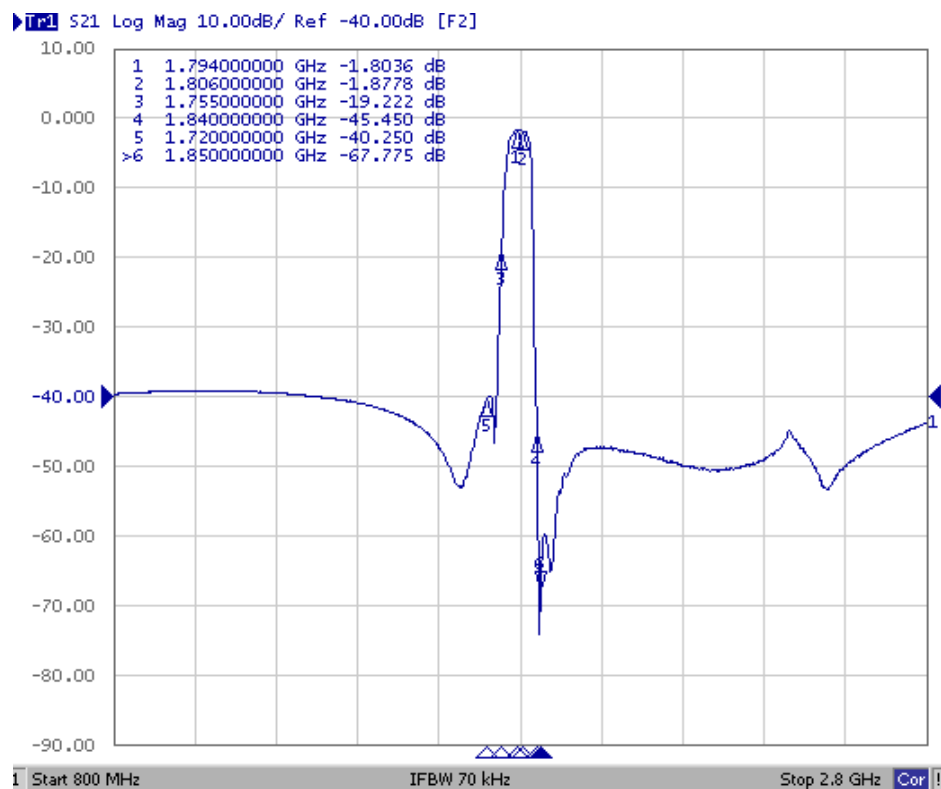
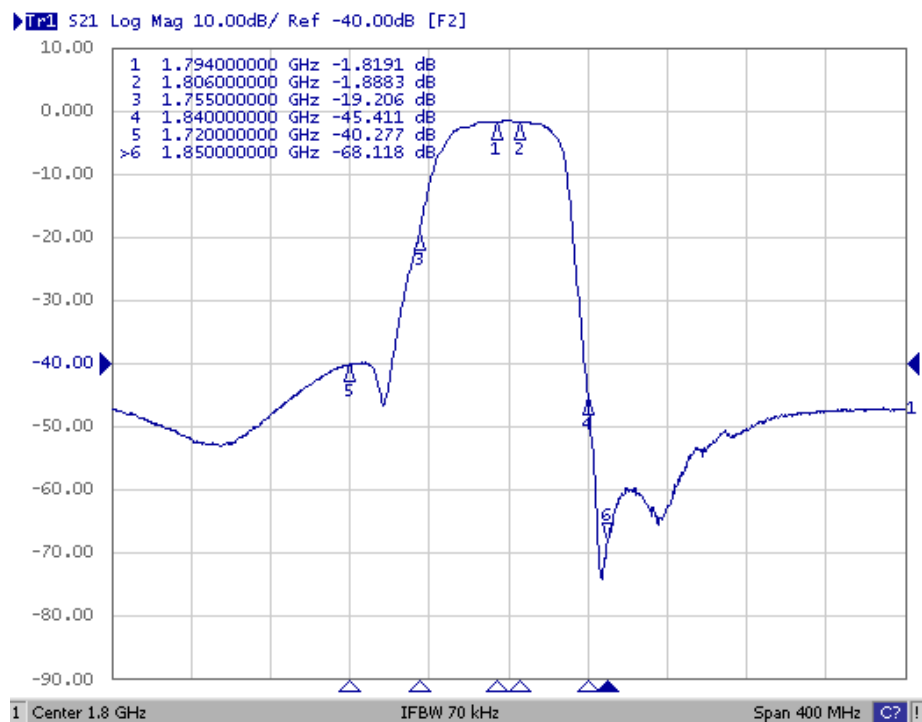
Year	2019 2021	2020 2022
Product Code	A	a

E. PCB Footprint :

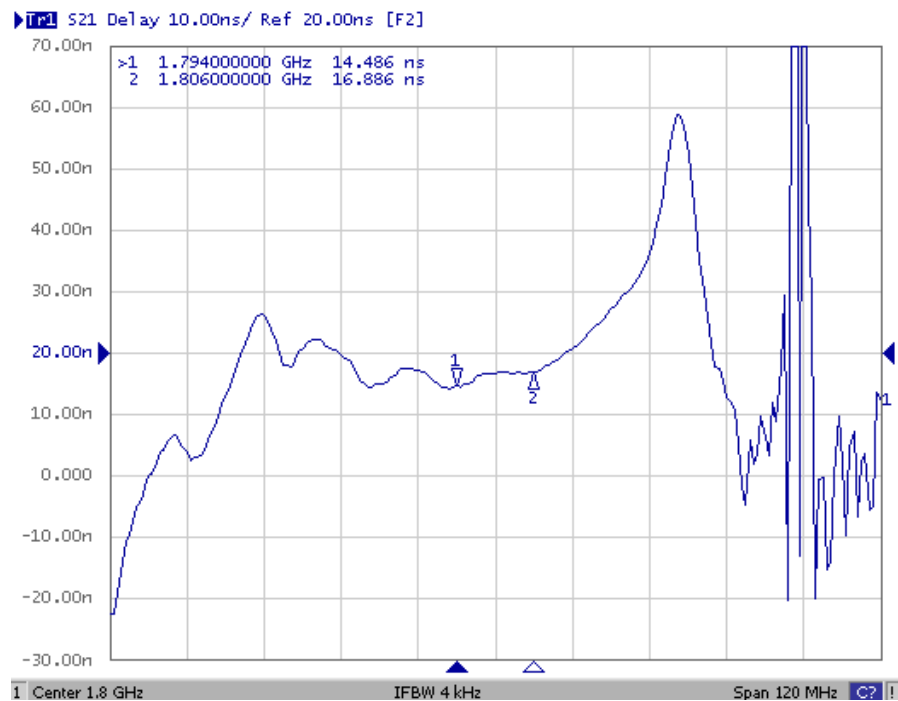


F. Frequency Characteristics :

Transfer function

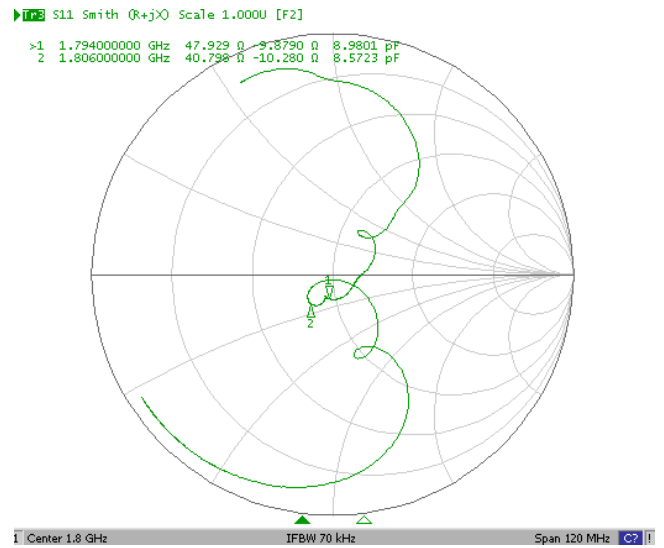
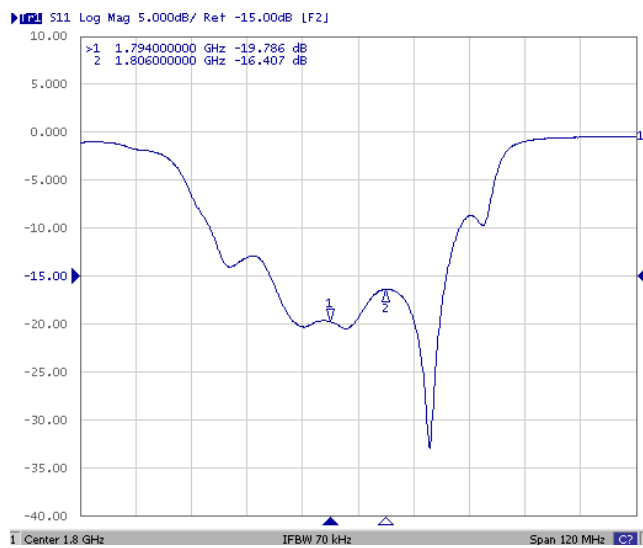


Group delay :

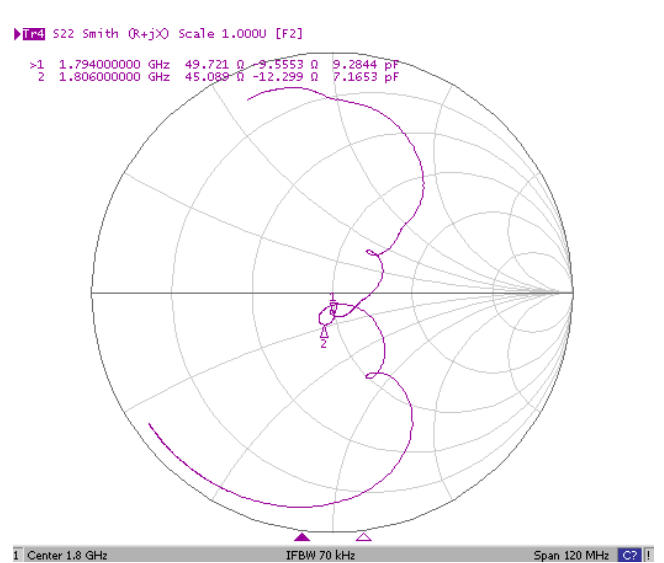


Reflection Functions :

S11



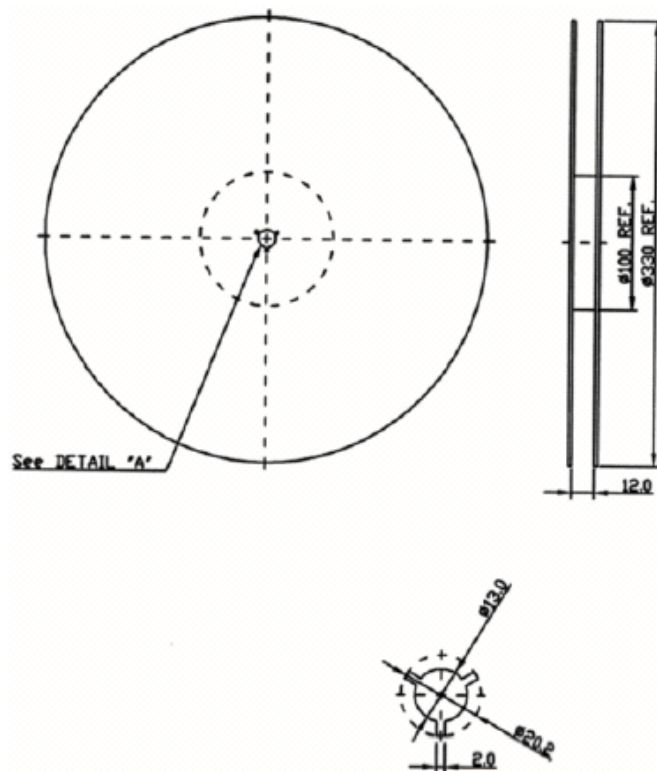
S22



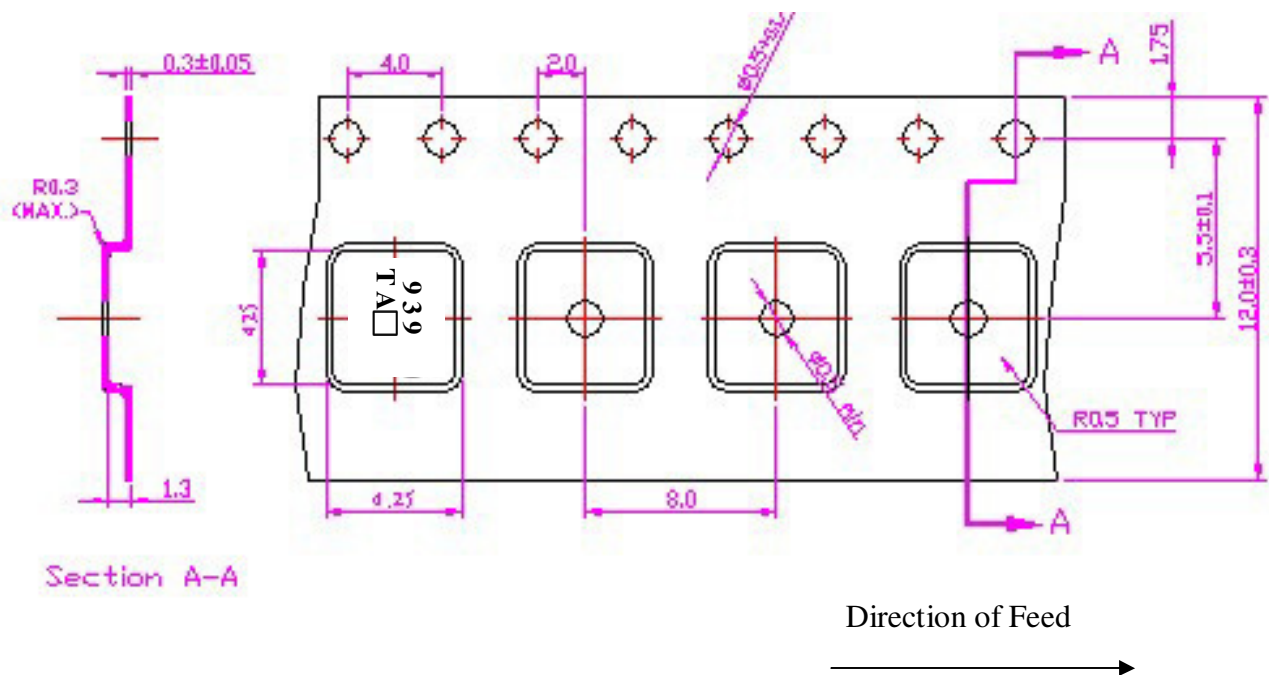
G. PACKING:

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 245~260°C peak (min. 10sec).
4. Time : 2 times.

