



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 Filter 901.5 MHz (BW 1MHz) SMD 3.0X3.0 mm

TST Parts No.: TA1948A

Customer Parts No.:

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Michael Yang *Michael*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2019/08/28

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 901.5MHz

MODEL NO.:TA1948A

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 5V
3. Operating Temperature: -40℃ to +85℃
4. Storage Temperature: -40℃ to +85℃
5. Moisture Sensitivity Level: Level 1

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

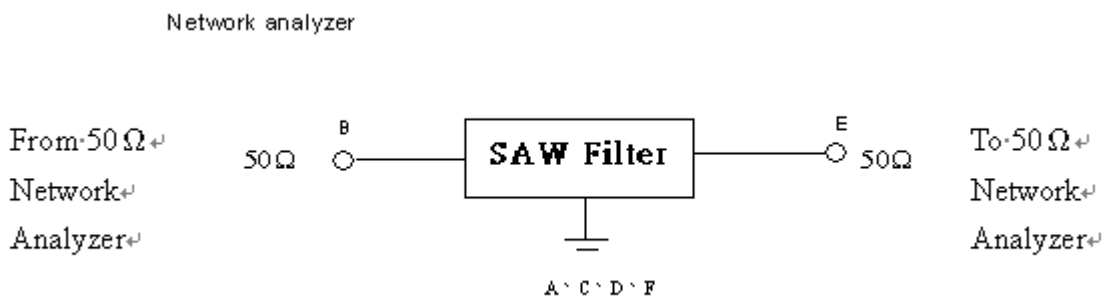
B. ELECTRICAL CHARACTERISTICS:

Terminating source/load impedance (single) : $Z_s = 50 \Omega / Z_L = 50 \Omega$

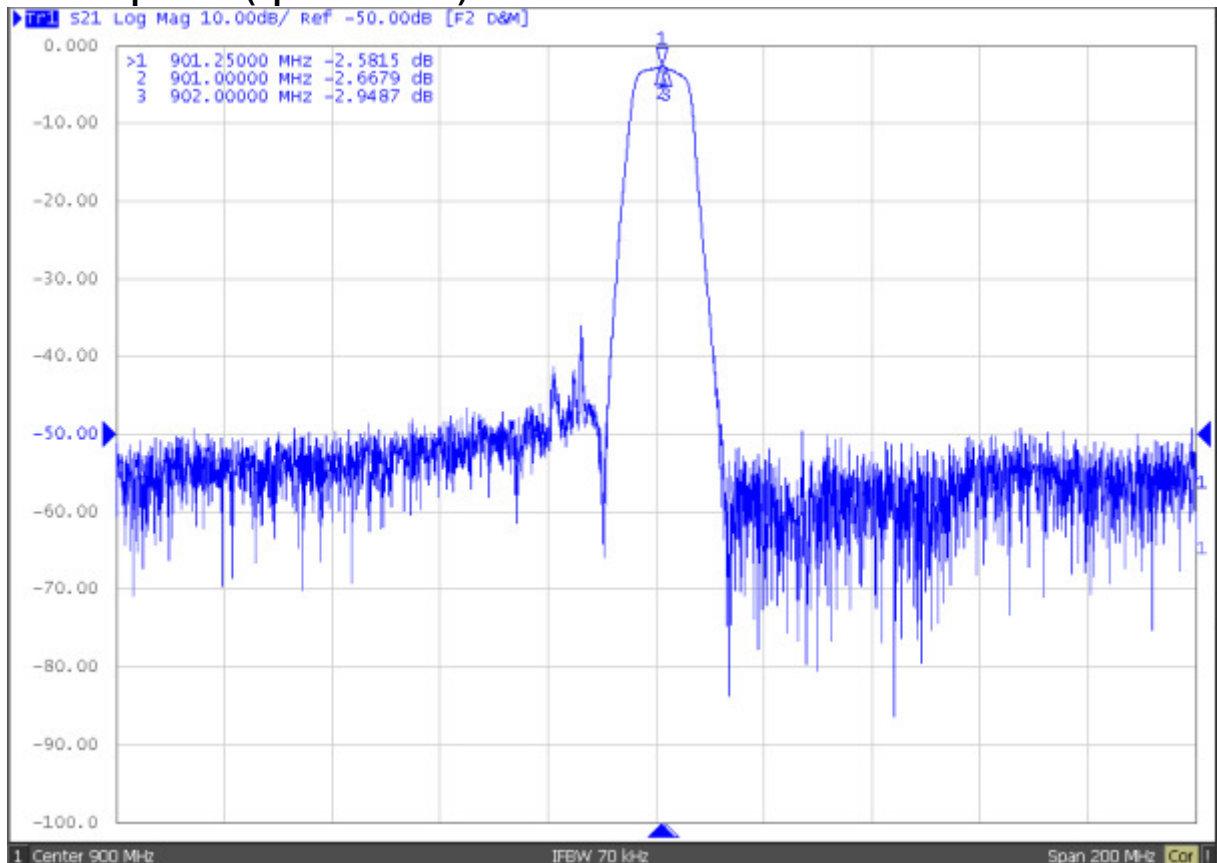
Test Temperature 25℃

Item	Unit	Min	Type.	Max	Note
Center Frequency Fc	MHz	-	901.5	-	
Insertion Loss (901~902 MHz) IL	dB		3.0	4.0	
VSWR (901~902 MHz)			1.3	2.0	23 ~ 27℃
Amplitude ripple					
(901~902 MHz)	dB		1.0	2.0	
Attenuation					
50 ~ 861 MHz	dB	45	50		
861 ~ 890 MHz	dB	35	40		
930 ~ 941 MHz	dB	45	50		
941 ~ 1000 MHz	dB	45	50		
Temperature coefficient	ppm/℃	-36			
Package size	mm	SMD 3x3			

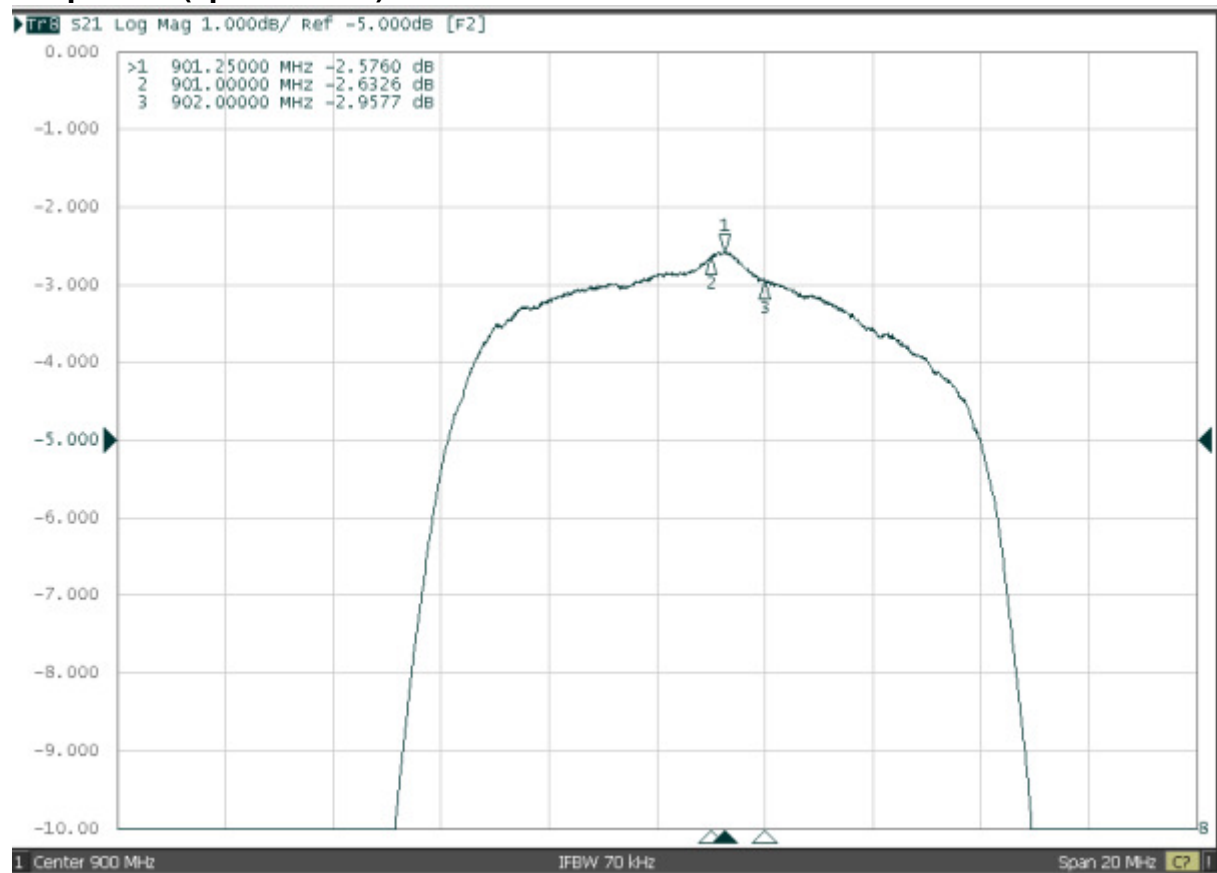
C. TEST CIRCUIT:



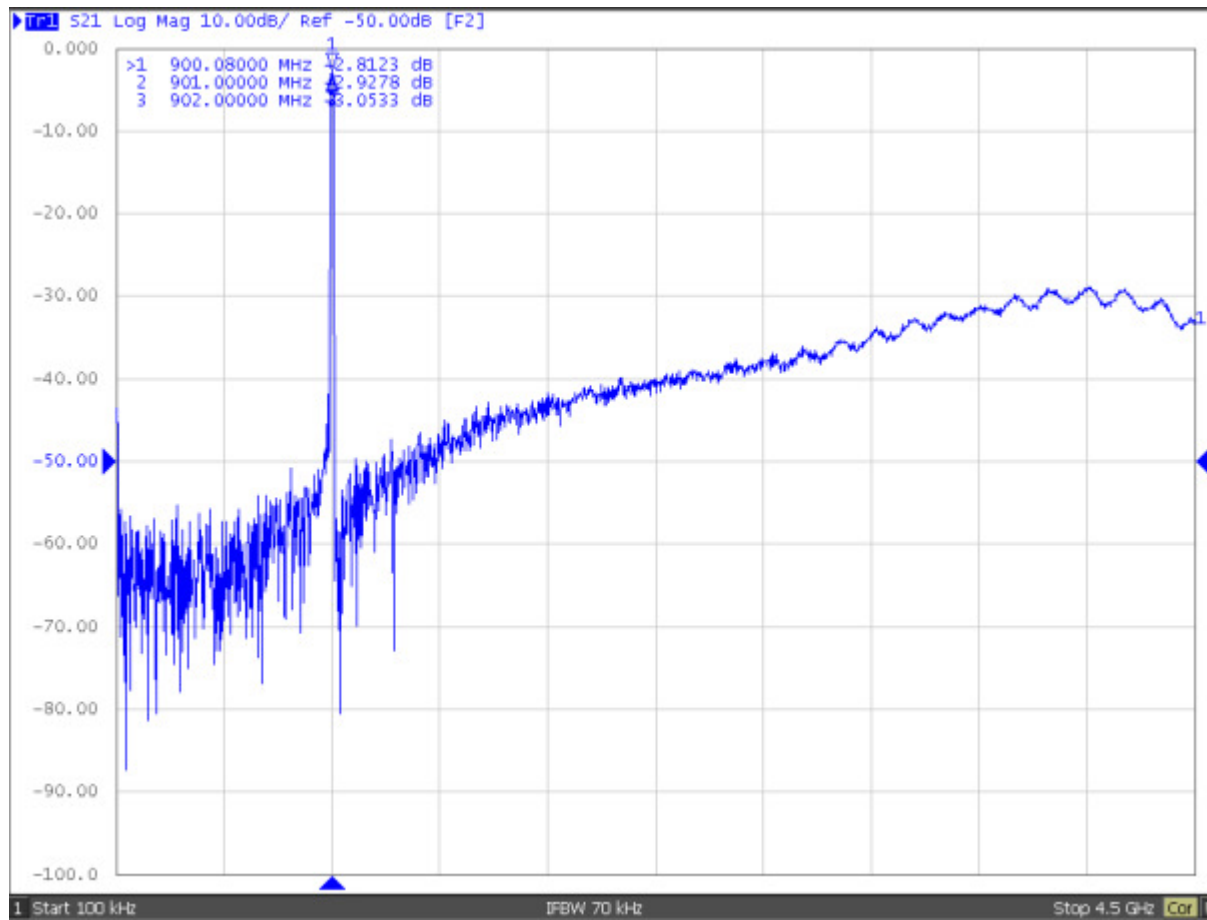
D. Frequency Characteristics: S21 response: (span 200MHz)



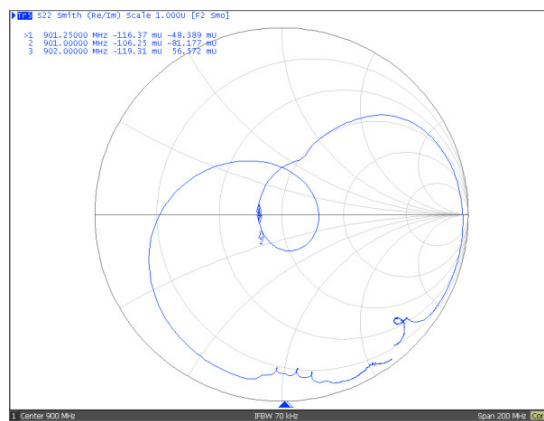
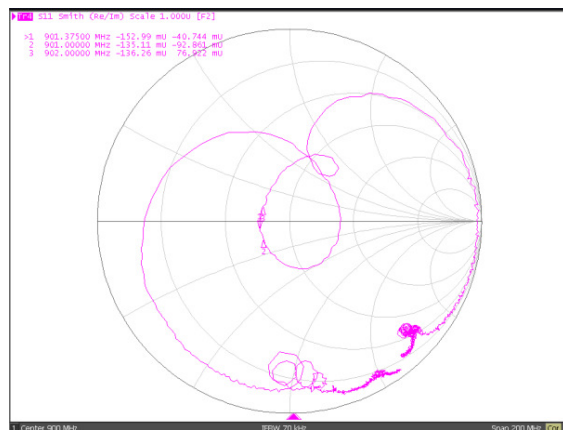
S21 response: (span 20MHz)



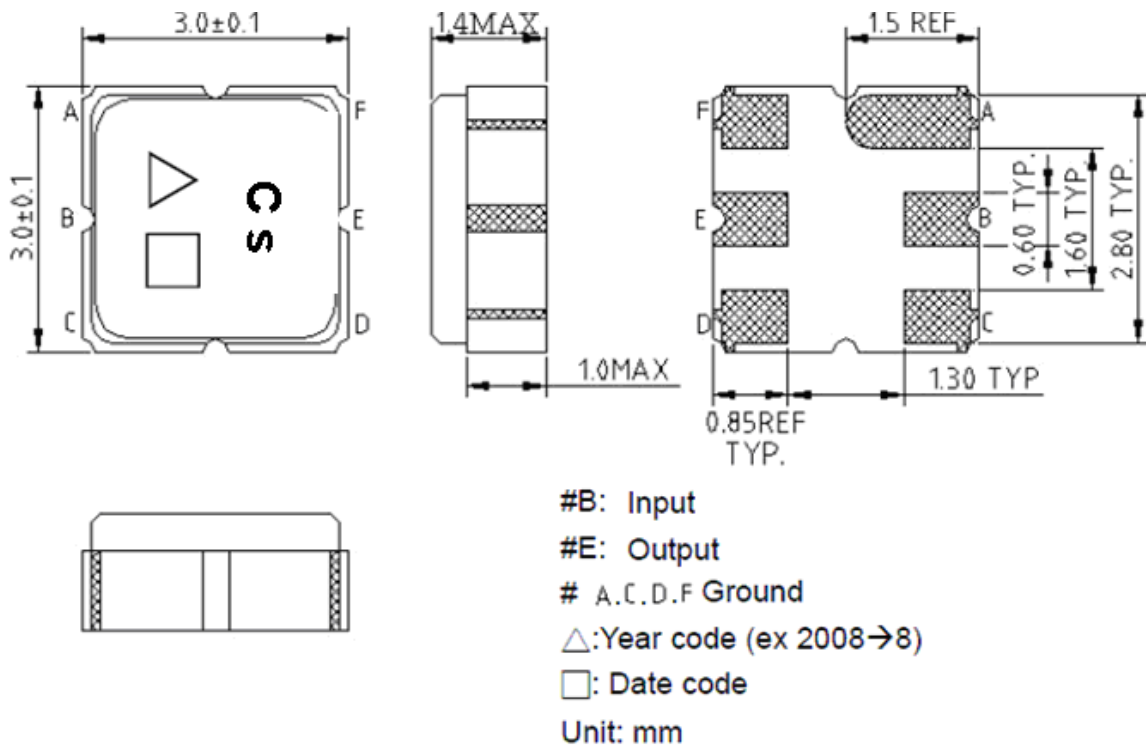
S21 response: (span 3GHz)



S11/S22 response:



E.OUTLINE DRAWING:



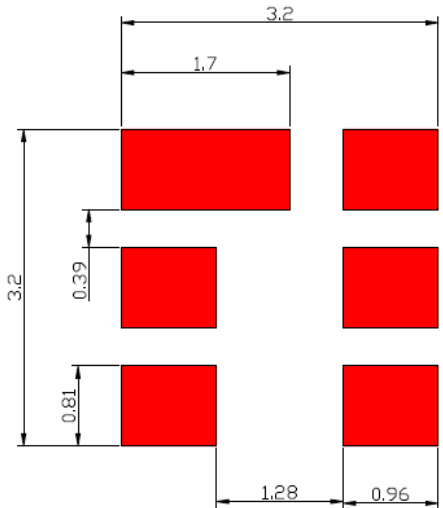
Data code : See the table

WK	01	02	...	26	27	28	...	52
Code	A	B	...	Z	a	b	...	z

△ Year code : See the table

Year	2008	2009	2010	2011	...	2019	2020
Code	8	9	0	1	...	9	0

F. Foot Print:



1. REEL DIMENSION

See DETAIL 'A'

12 TYP.

Technical drawing showing a circular structure with a central hole. The drawing includes a top view (left) and a side view (right). The top view shows a large circle with a central hole, indicated by a dashed line. A dimension line indicates the hole size as $\phi 100$ REF. and $\phi 330$ REF. The side view shows a cross-section of the structure, with a dimension line indicating a thickness of 12 TYP. A detailed view of the central hole is shown at the bottom, labeled 'DETAIL A', showing a circular hole with a diameter of $\phi 100 \pm 0.3$ and a thickness of 20 ± 0.5 .

Technical drawing of a multi-hole punch die. The drawing includes a top view, a side view, and a cross-sectional view. Key dimensions and features are labeled:

- Top View:**
 - Overall width: 12.0 ± 0.3
 - Overall length: 5.5 ± 0.05
 - Distance from left edge to first hole center: 1.75 ± 0.1
 - Distance between hole centers: 4.0 ± 0.1
 - Distance from last hole center to right edge: 2.0 ± 0.05
 - Hole diameter: $\phi 1.6 \pm 0.1$ DIA
 - Section line A-A is indicated.
- Side View:**
 - Overall height: 0.25 ± 0.05
 - Section line B-B is indicated.
- Cross-sectional View (Bottom):**
 - Overall height: 1.4 ± 0.1
 - Section line K-K is indicated.
 - Distance between hole centers: 3.3 ± 0.1

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.

