



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.

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Product Specifications Approval Sheet

Product Description: SAW Filter 868 MHz SMD 3.8×3.8 mm (BW=2 MHz)

TST Part No.: TA1972A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ David Chang *David*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2020/07/10

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 868 MHz

MODEL NO.:TA1972A

REV. NO.:2

A. MAXIMUM RATING:

1. Input Power Level: +27 dBm
2. DC Voltage : 5 V
3. Operating Temperature: -40℃ to +95℃
4. Storage Temperature: -40℃ to +105℃
5. Moisture Sensitivity Level: Level 1(**MSL1**)

RoHS Compliant

Lead-free soldering

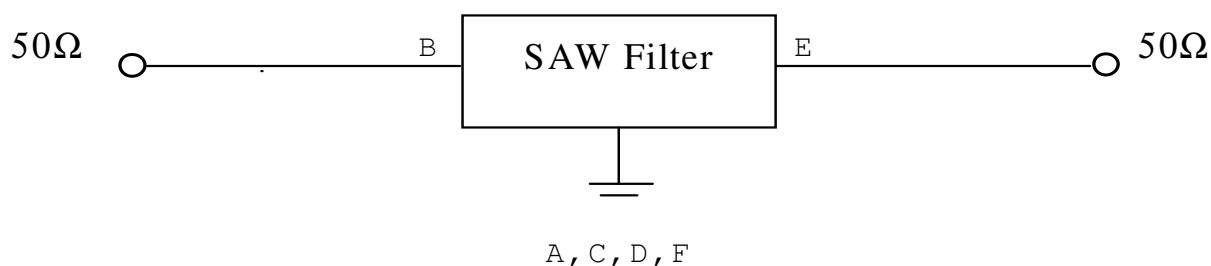
Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

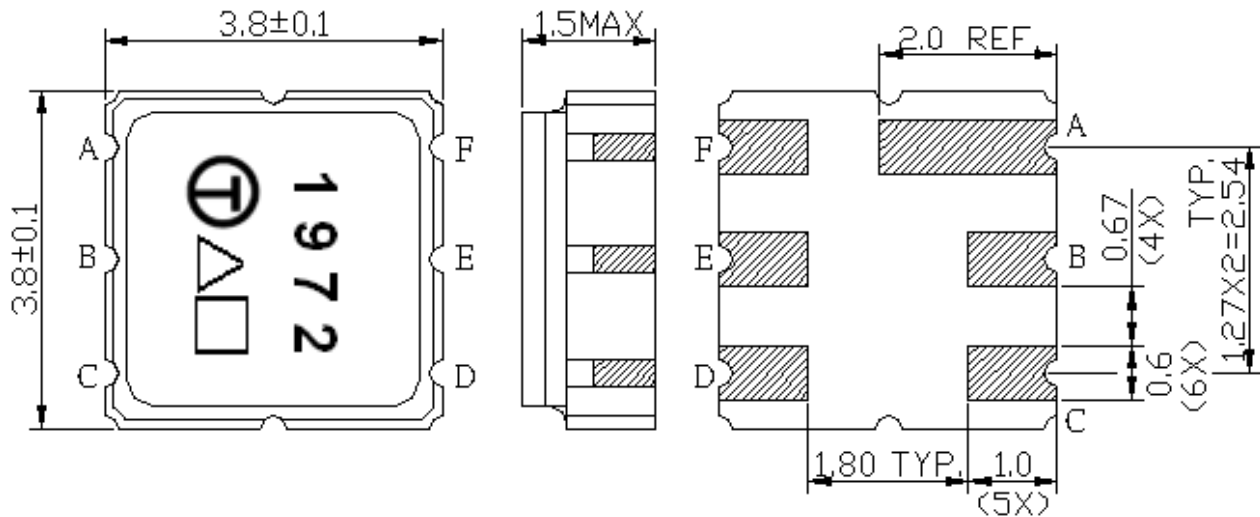
Item	Unit	Min.	Typ.	Max.
Center frequency F_c	MHz	-	868	-
Insertion loss (867~869 MHz) IL	dB	-	3.0	4.2
Amplitude Ripple (867~869 MHz)	dB	-	0.1	1.5
Group Delay Ripple (867~869 MHz)	ns	-	4	35
Attenuation (Reference level from 0 dB)				
DC ~ 800 MHz	dB	37	43	-
800 ~ 838 MHz	dB	35	42	-
880 ~ 905 MHz	dB	10	31	
905 ~ 915 MHz	dB	35	57	
915 ~ 970 MHz	dB	38	54	
Temperature Coefficient of Frequency	ppm/℃	-	-36	-

C. MEASUREMENT CIRCUIT:

HP Network analyzer



D. OUTLINE DRAWING:



B: Input
E: Output
A, C, D, F: Ground
Unit: mm
△: Year Code
□: Date Code

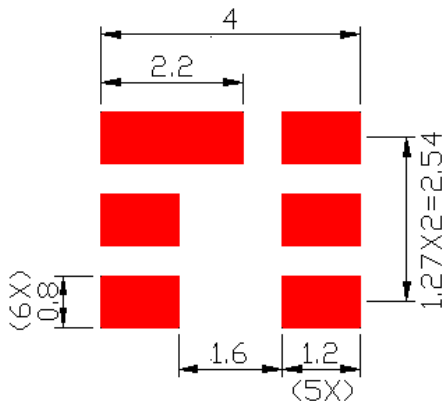
Product Year Code

Year	2019	2020
	2021	2022
	2023	2024
	2025	2026
Product Code	A	a

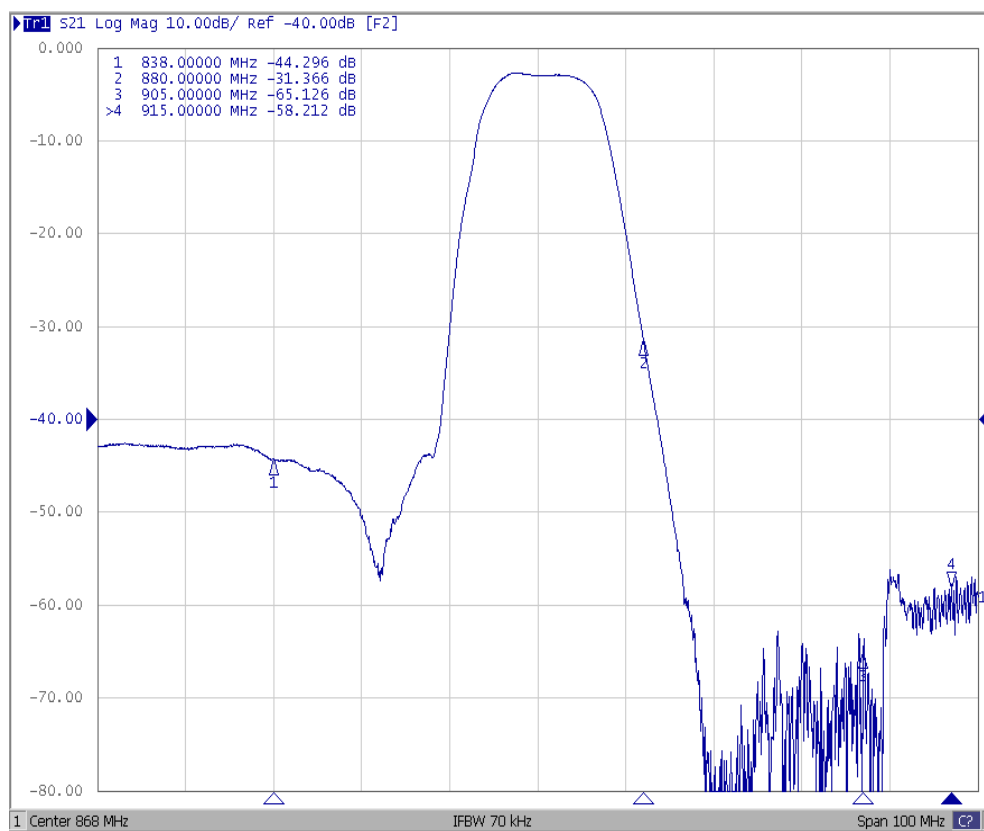
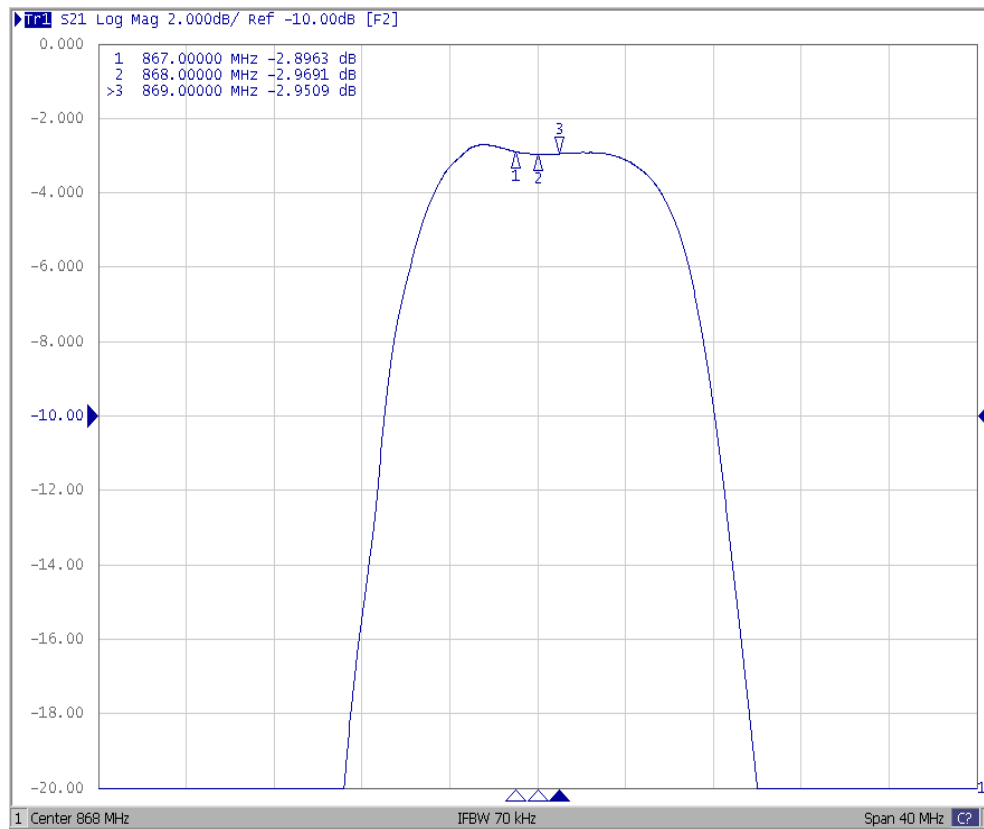
Date Code Table:

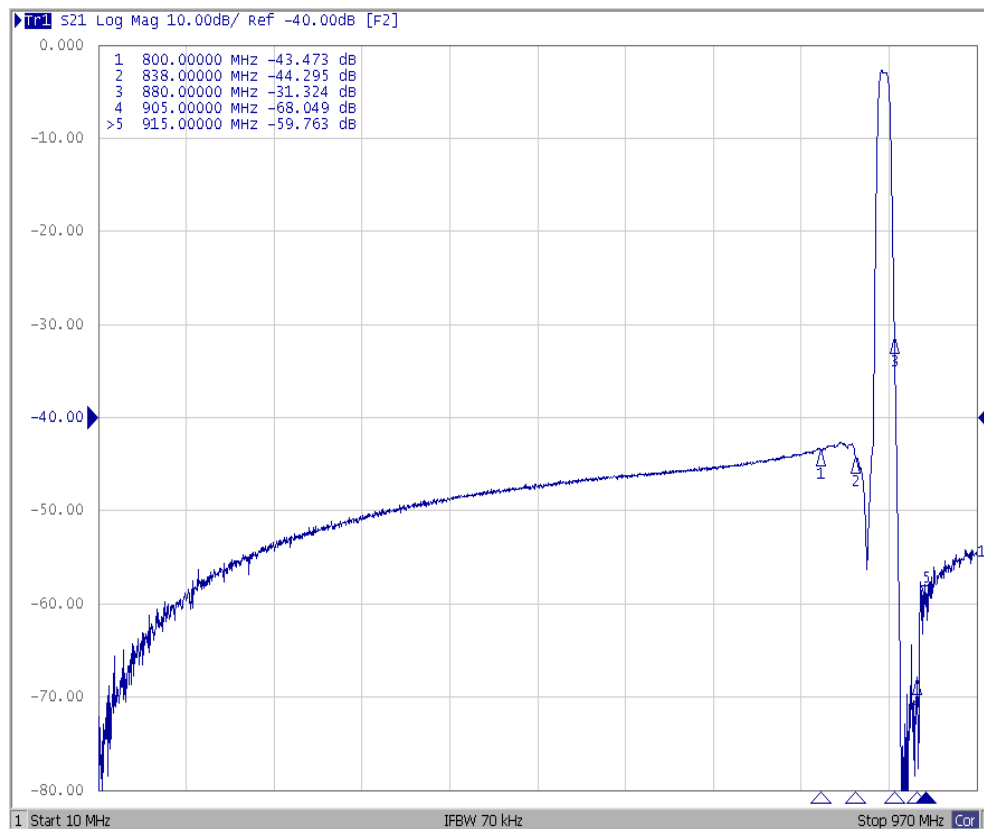
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

E. PCB Footprint

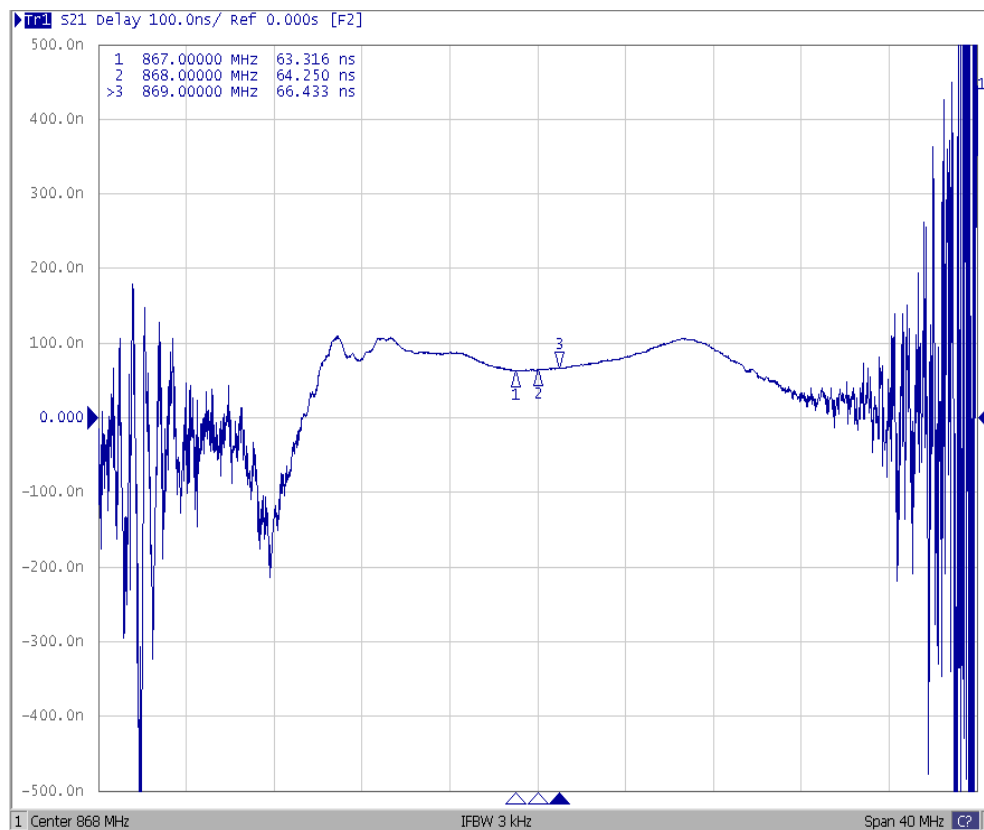


F. Frequency Characteristics:





Group Delay



1. REEL DIMENSION

Technical drawing of a mechanical part showing three views: front view, side view, and a detail view of a hole.

Front View: A circle with a dashed center line. A small semi-circular feature is located at the center of the circle.

Side View: A rectangular profile with the following dimensions:

- Overall width: 15.5 ± 1
- Overall height: 330 ± 3
- Internal feature height: 101.5 ± 0.5

Detail View: A circular detail of a hole with the following dimensions:

- Overall diameter: 13.0 ± 0.2
- Inner diameter: 20.2 ± 0.2
- Thickness: 2.0 ± 0.2

Unit: mm

Section A-A

Direction of Feed

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.

