



# 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

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## Product Specifications Approval Sheet

Product Name: SAW Filter 866.5 MHz SMD 3.0x3.0 mm (BW=7 MHz)

TST Parts No.: TA0801B

Customer Parts No.: \_\_\_\_\_

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ Hayley Chou *Hayley Chou*

Approval by: \_\_\_\_\_ Andy Yu *Andy Yu*

Date: \_\_\_\_\_ 2020/07/09

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 866.5 MHz

MODEL NO.: TA0801B

REV. NO.:3.0

### A. MAXIMUM RATING:

1. Input Power Level: 18 dBm
2. DC Voltage: 3 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1 (MSL 1)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

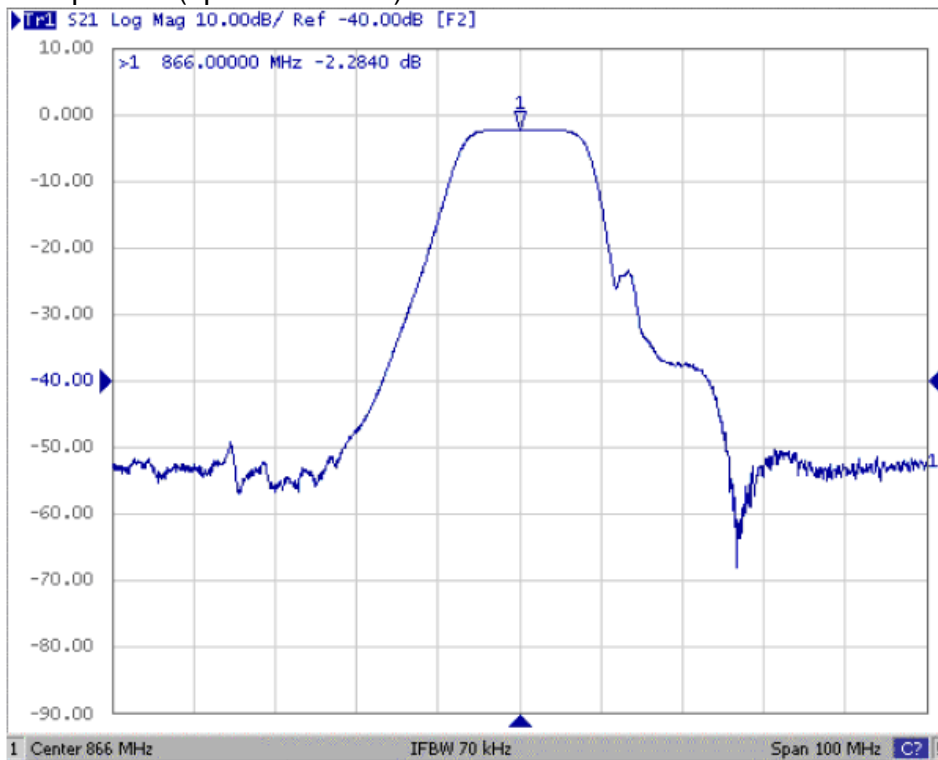
Terminating source impedance:  $Z_s=50 \Omega$

Terminating load impedance:  $Z_L=50 \Omega$

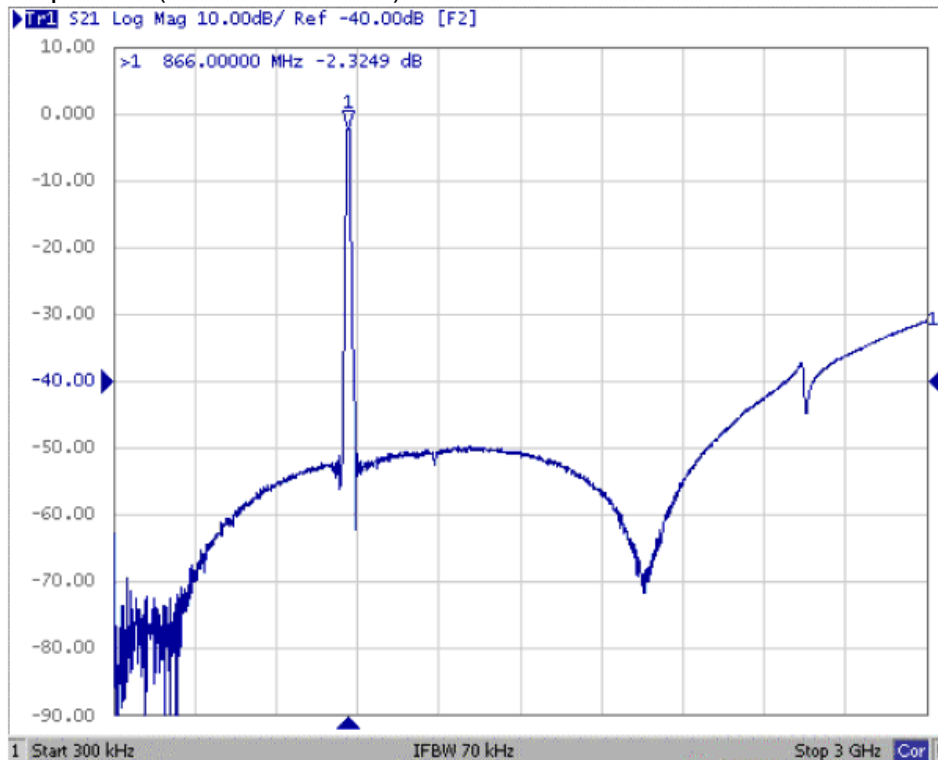
Item	Unit	Min.	Typ.	Max.
<b>Center Frequency</b> $F_o$	MHz	-	866.5	-
<b>Insertion Loss at Fc</b> $A_{max}$	dB	-	2.3	3.0
<b>Ripple</b> (863~870 MHz)	dB	-	0.3	1.3
<b>VSWR</b> (863~870 MHz)	-	-	1.2	2.0
<b>Attenuation</b> (Reference level from $A_{max}$ )				
10 ~ 830 MHz	dB	45	49	-
830 ~ 850 MHz	dB	22	35	-
885 ~ 905 MHz	dB	27	35	-
905 ~ 950 MHz	dB	45	49	-
950 ~ 1500 MHz	dB	40	47	-
1500 ~ 3000 MHz	dB	25	28	-
<b>Temperature Coefficient of Frequency</b>	ppm/°C	-36		

### C. FREQUENCY CHARACTERISTIC:

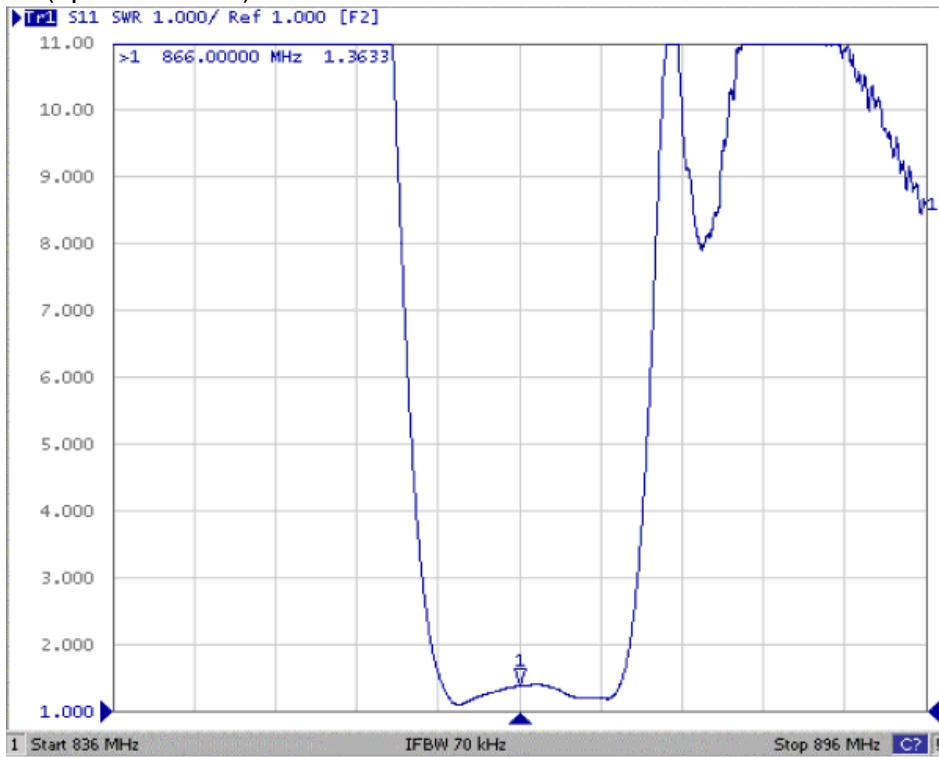
(1) Wide band response: (span 100 MHz)



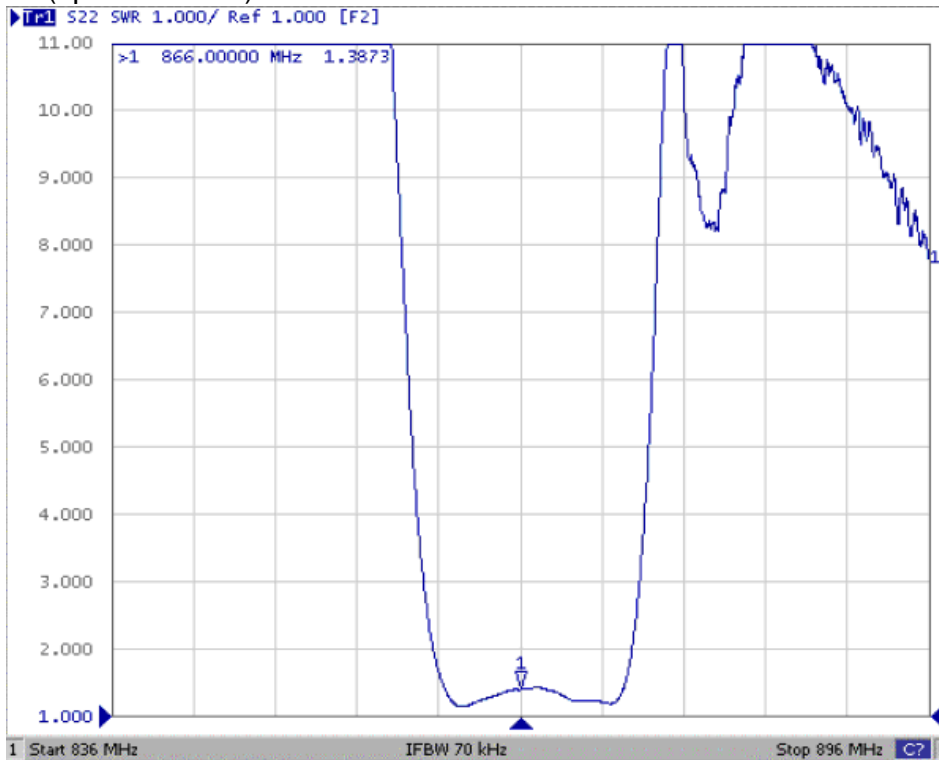
(2) Full band response: (300 kHz~3 GHz)



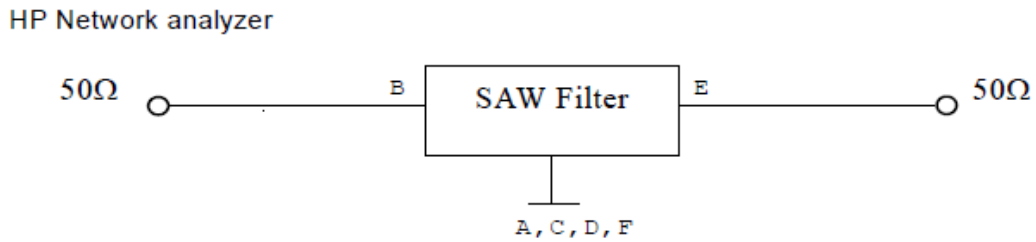
(3) S11 VSWR: (span 60 MHz)



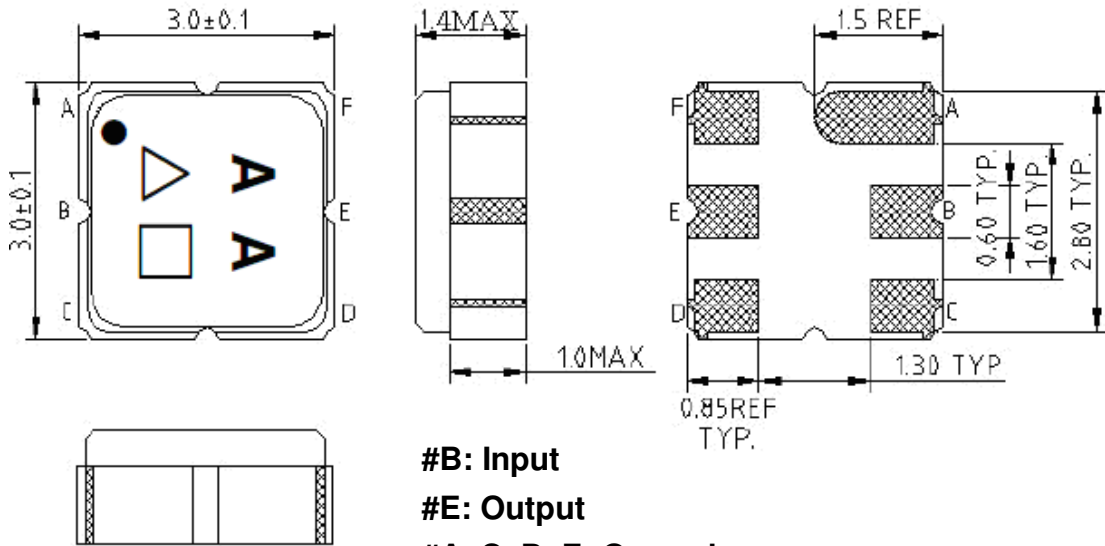
(4) S22 VSWR: (span 60 MHz)



**D. MEASUREMENT CIRCUIT:**



**E. OUTLINE DRAWING:**



#B: Input

#E: Output

#A, C, D, F: Ground

All tolerances are +/-0.15 mm unless otherwise specified.

Unit: mm

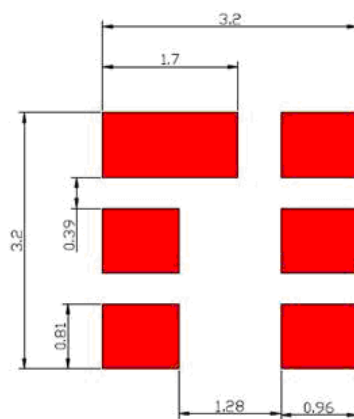
△: Year Code (2019→9, 2020→0, 2021→1... 2029→9...)

□: Date Code (Follow the table from planner each year)

**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

**F. PCB FOOTPRINT:**



■ : Land Pattern  
Unit : mm

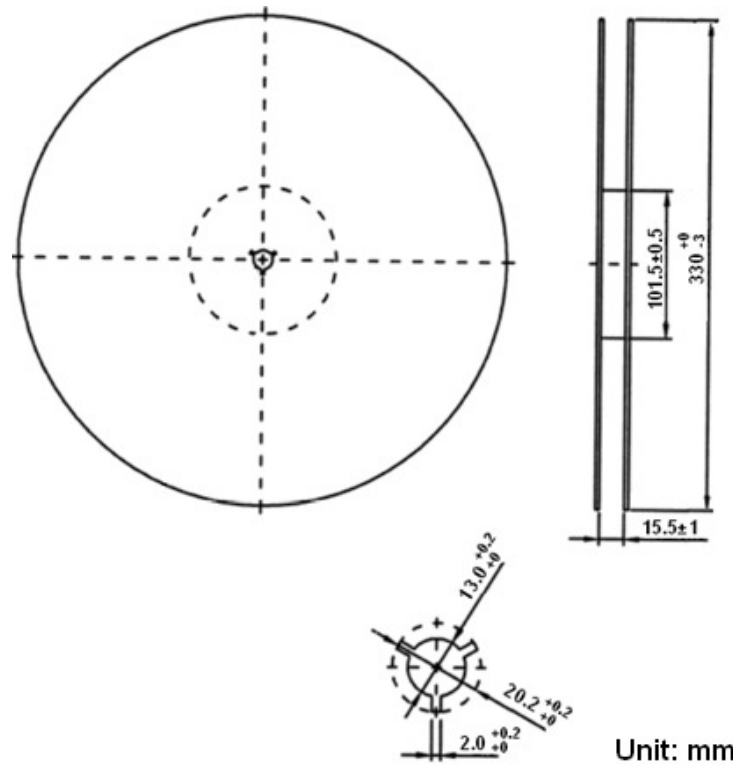
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IST DCC  
Release document

**G. PACKING:** (Ref. WI-75M03)

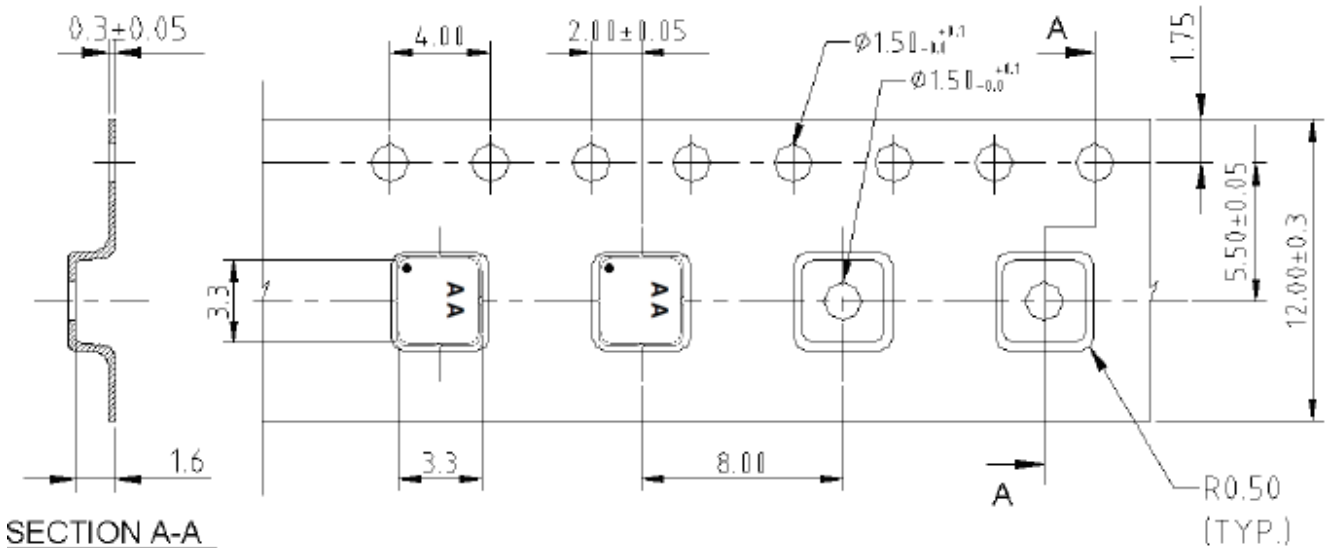
1. REEL DIMENSION

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



Unit: mm

2. TAPE DIMENSION



Direction of Feed  
→

Unit: mm

## 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.

