



# 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 Description: SAW Filter 831.5 MHz SMD 3.0×3.0 mm (BW=35 MHz)

TST Part No.: TA1494B

Customer Part No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ David Chang *David*

Approved by: \_\_\_\_\_ Andy Yu *Andy Yu*

Date: \_\_\_\_\_ 2020/06/23

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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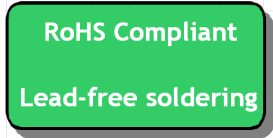
## SAW Filter 831.5 MHz

MODEL NO.: TA1494B

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 15 dB<sub>m</sub>
2. DC voltage: 5 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 1(MSL1)

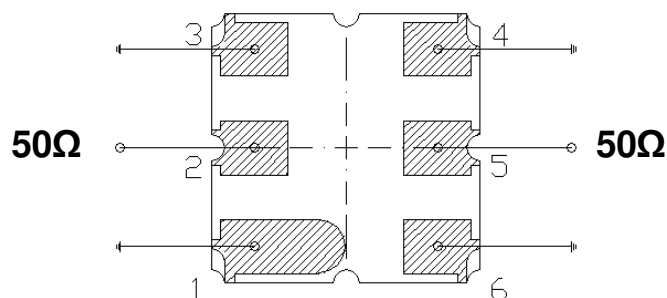


Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

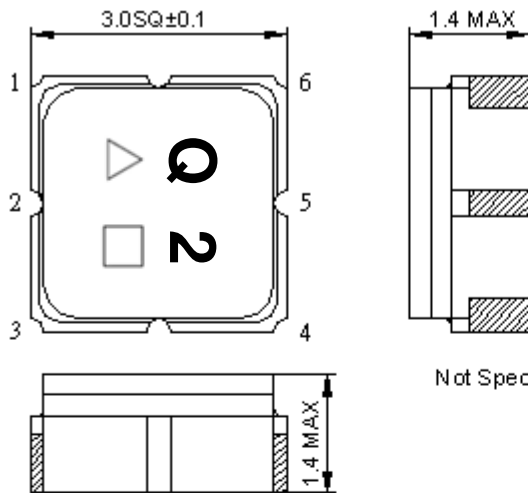
Item	Unit	Min.	Typ.	Max.
Center frequency <b>Fc</b>	MHz	-	831.5	-
Insertion Loss (814~849 MHz) <b>IL</b>	dB	-	3.0	4.5
Amplitude Ripple (814~849 MHz)	dB	-	1.1	2.8
VSWR (814~849 MHz)	-	-	2.5	2.6
<b>Attenuation</b> (Reference level from 0 dB)				
DC ~ 794 MHz	dB	30	46	-
869 ~ 900 MHz	dB	18	31	-
900 ~ 2300 MHz	dB	25	33	-
2300 ~ 2600 MHz	dB	25	30	-
2600 ~ 2800 MHz	dB	20	29	-
2800 ~ 3200 MHz	dB	5	26	-
3200 ~ 6000 MHz	dB	2	4	-
Temperature Coefficient of Frequency	Ppm/°C	-	-36	-

### C. MEASUREMENT CIRCUIT:

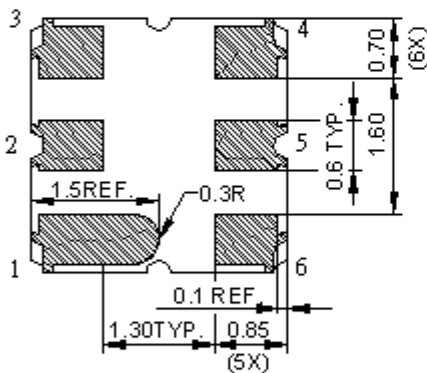


(2): Unbalance Port  
 (5): Unbalance Port  
 Others: Ground

**D. OUTLINE DRAWING:**



Not Specified Tolerance : +/-0.15 mm



Pin No.	Symbol	Function
1	GND	Ground
2	IN	Input
3	GND	Ground
4	GND	Ground
5	OUT	Output
6	GND	Ground

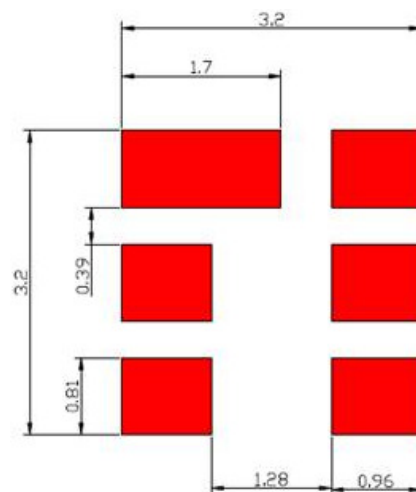
△ : Year Code (2020->0, 2021->1, ..., 2029->9, 2030->0)

□ : Date Code

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

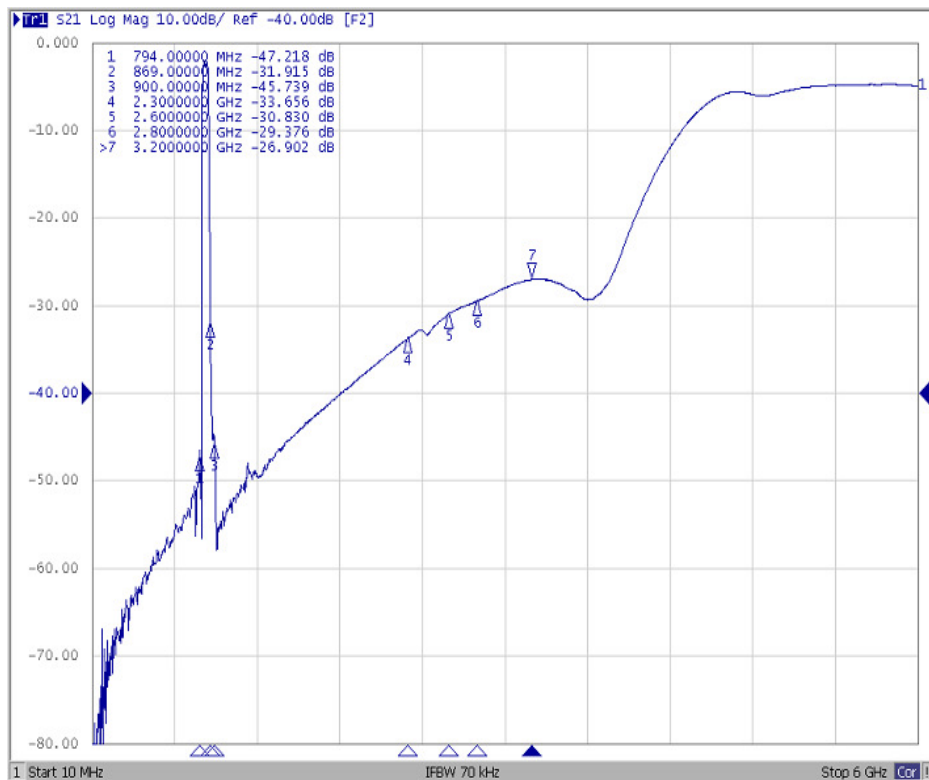
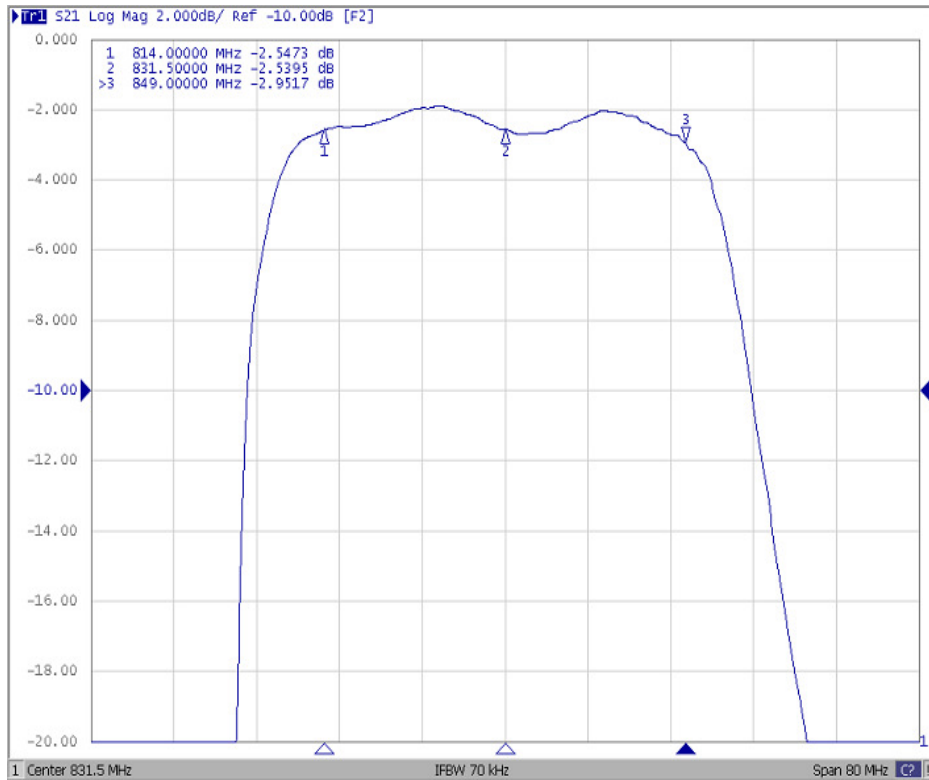
**E. PCB Footprint:**



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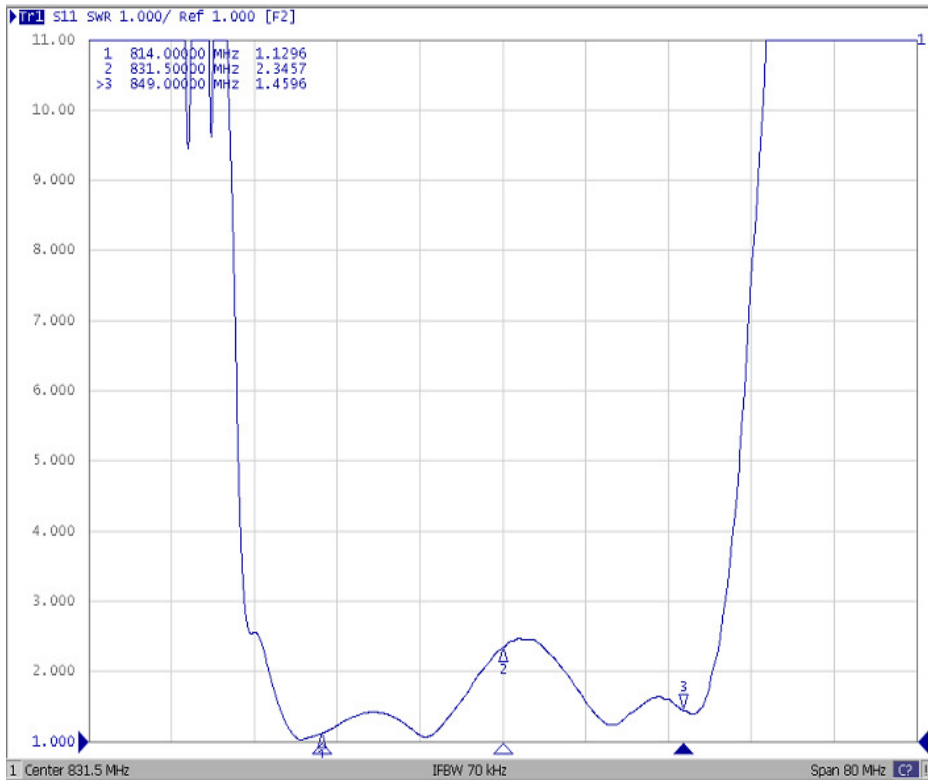
TST DCC  
Release document

## F. Frequency Characteristics:

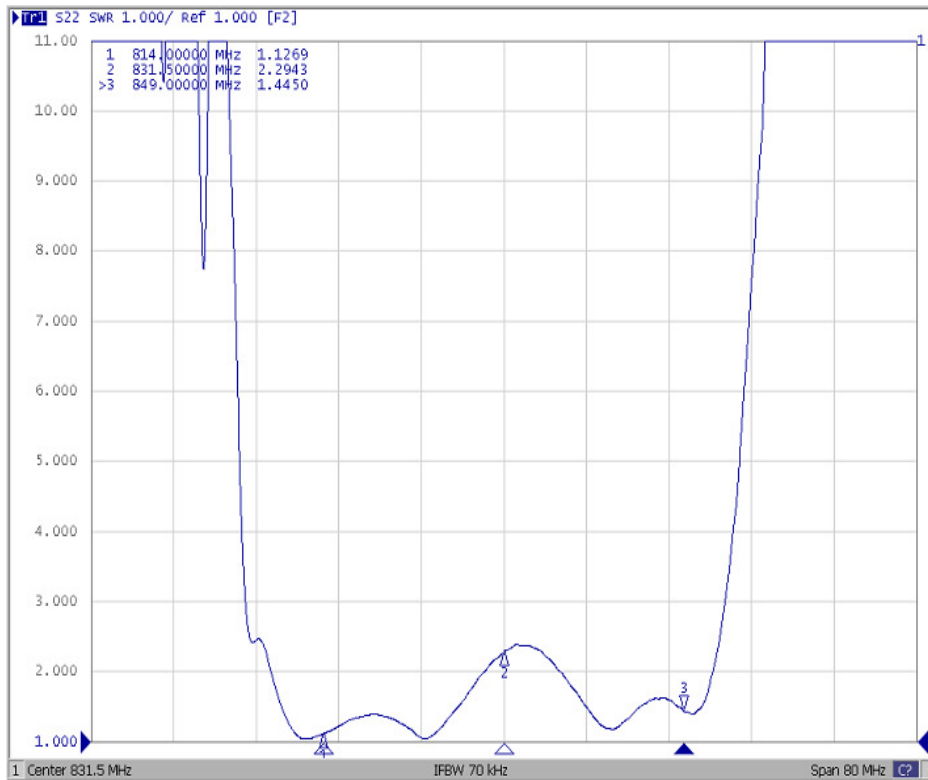


# Reflection Functions:

## S11



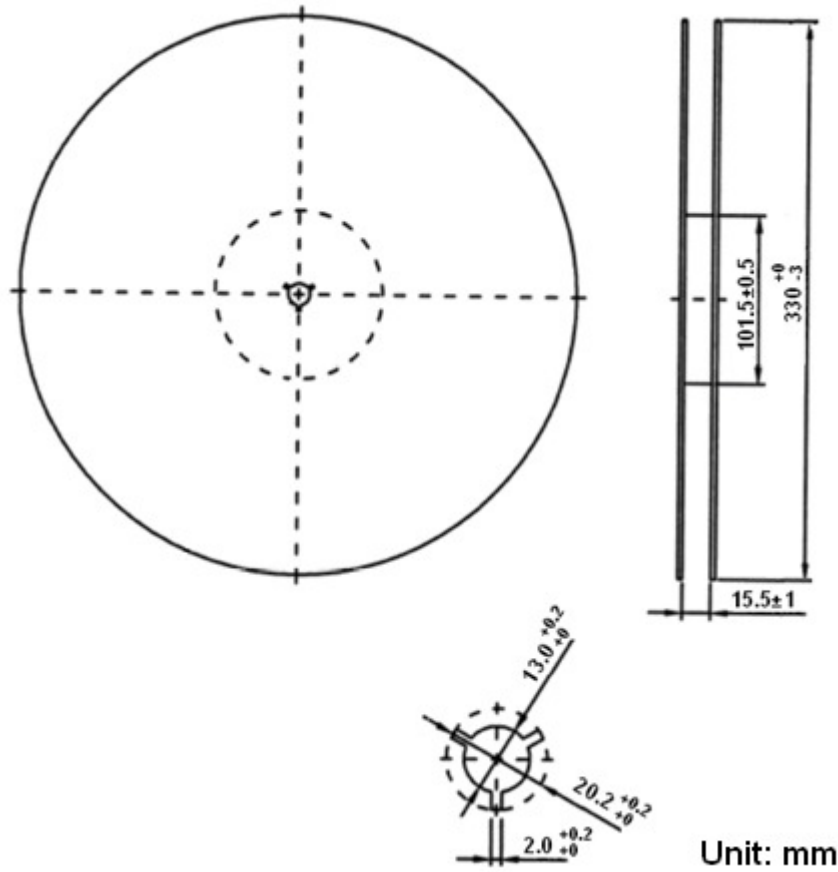
## S22



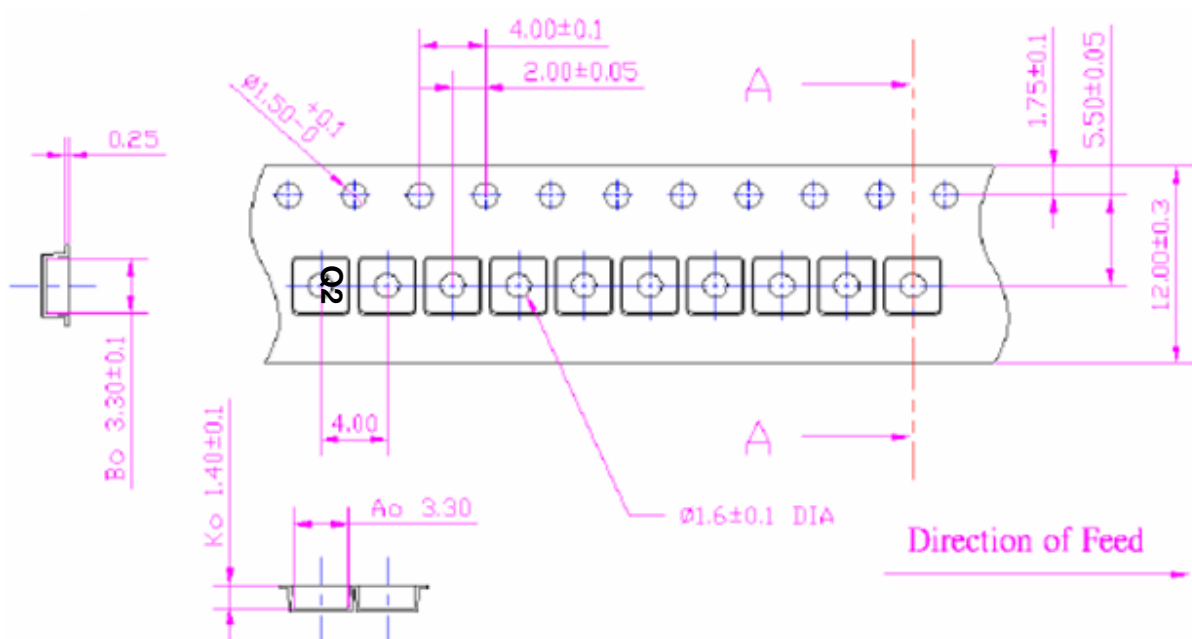
**G. PACKING: (Ref. WI-75M03)**

**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 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

