



# 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 3700 MHz SMD 3.0x3.0 mm (BW=200 MHz)

TST Part No.: TA2350A

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

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

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

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

Date: \_\_\_\_\_ 2018/01/25

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 3700 MHz

MODEL NO.: TA2350A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level:

@ input port(3600~3800 MHz): 21 dB<sub>m</sub>, Continuous wave for 1000 h @105 °C

@ input port(3600~3800 MHz): 22 dB<sub>m</sub>, Continuous wave for 1000 h @95 °C

@ input port(3600~3800 MHz): 24 dB<sub>m</sub>, Continuous wave for 2 h @105 °C

@ input port(3600~3800 MHz): 25 dB<sub>m</sub>, Continuous wave for 2 h @95 °C

2. DC voltage: 0 V

3. Operating Temperature: -40°C to +105°C

4. Storage Temperature: -40°C to +105°C

5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant  
Lead free  
Lead-free soldering

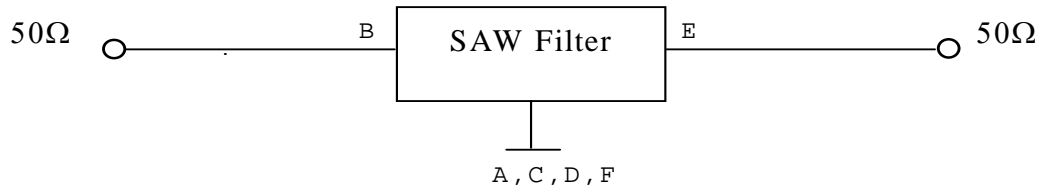
Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

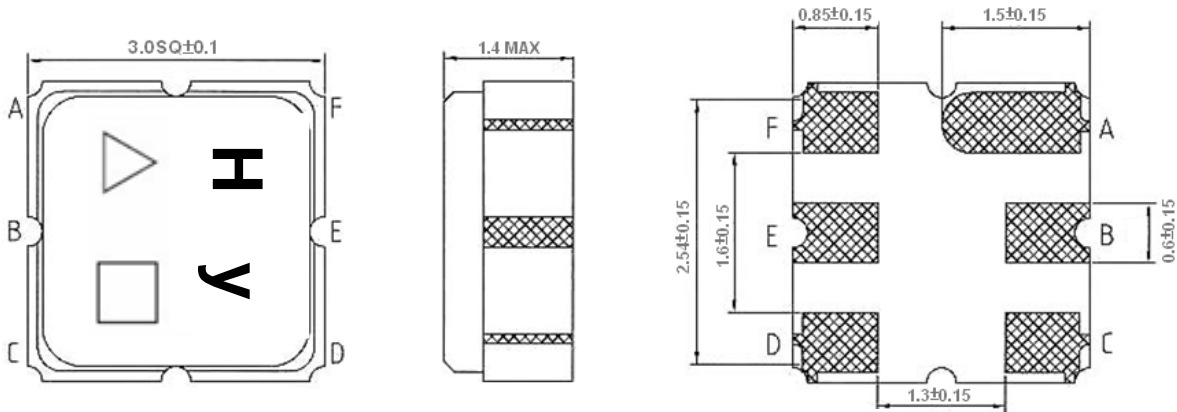
Item	Unit	Min.	Typ.	Max.
<b>Center frequency</b> <b>Fc</b>	MHz	-	3700	-
<b>Insertion Loss</b> (3600~3800 MHz) <b>IL</b>	dB	-	4.7	5.5
<b>Amplitude Ripple</b> (3600~3800 MHz)	dB <sub>p-p</sub>	-	0.7	3.5
<b>VSWR</b> (3600~3800 MHz)	-	-	1.8	3.0
<b>Group Delay Ripple</b> (3600~3800 MHz)	ns	-	1	15
<b>Group Delay at Fc</b>	ns	-	2	30
<b>Attenuation</b> (Reference level from 0 dB)				
10 ~ 2550 MHz	dB	20	27	-
2550 ~ 2690 MHz	dB	25	27	-
2690 ~ 3000 MHz	dB	20	27	-
3000 ~ 3400 MHz	dB	10	16	-
4000 ~ 4050 MHz	dB	10	42	-
4050 ~ 4400 MHz	dB	20	40	-
4400 ~ 5200 MHz	dB	5	31	-
5200 ~ 6000 MHz	dB	1	29	-
<b>Temperature Coefficient of Frequency</b>	Ppm/°C	-	-80	-

### C. MEASUREMENT CIRCUIT:

HP Network analyzer



### D. OUTLINE DRAWING:



**B:** Input

**E:** Output

**A, C, D, F:** Ground

**Unit:** mm

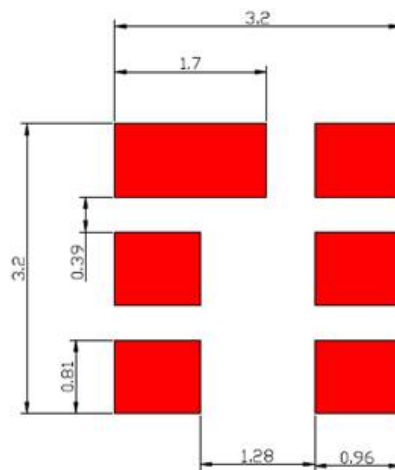
$\triangle$  : Year Code (2011->1, 2012->2, ..., 2019->9, 2020->0)

$\square$  : 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

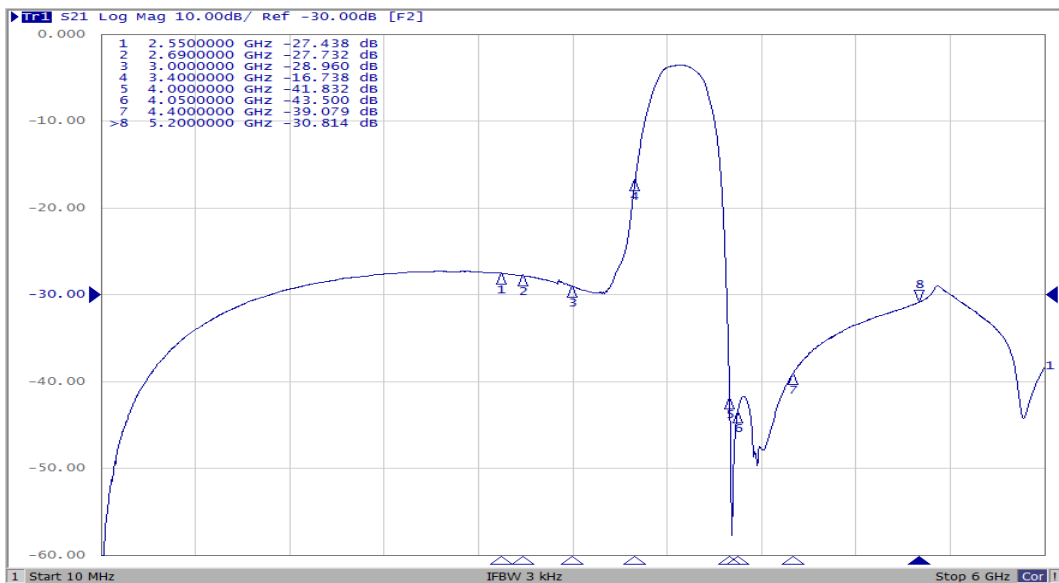
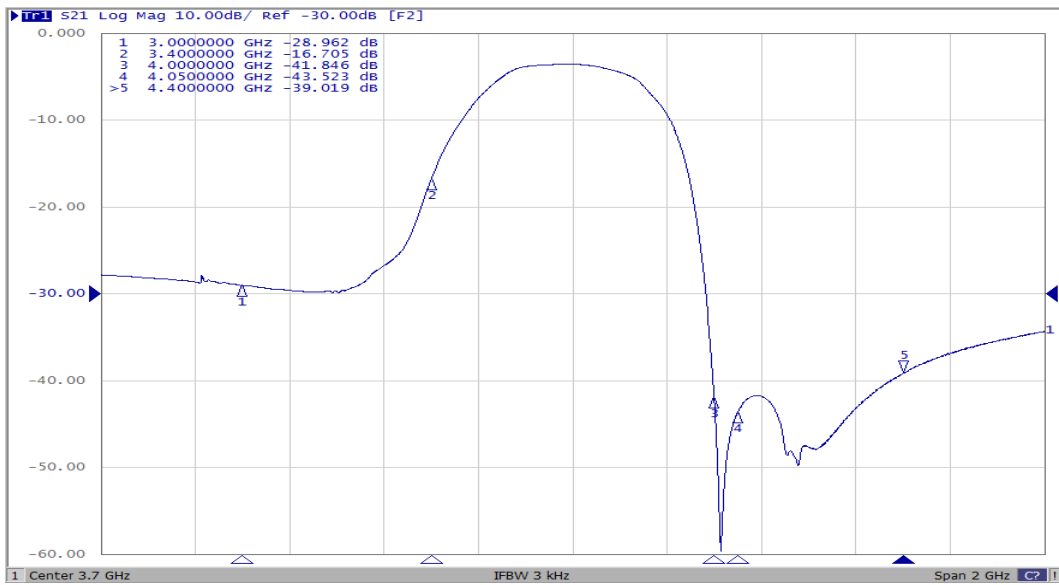
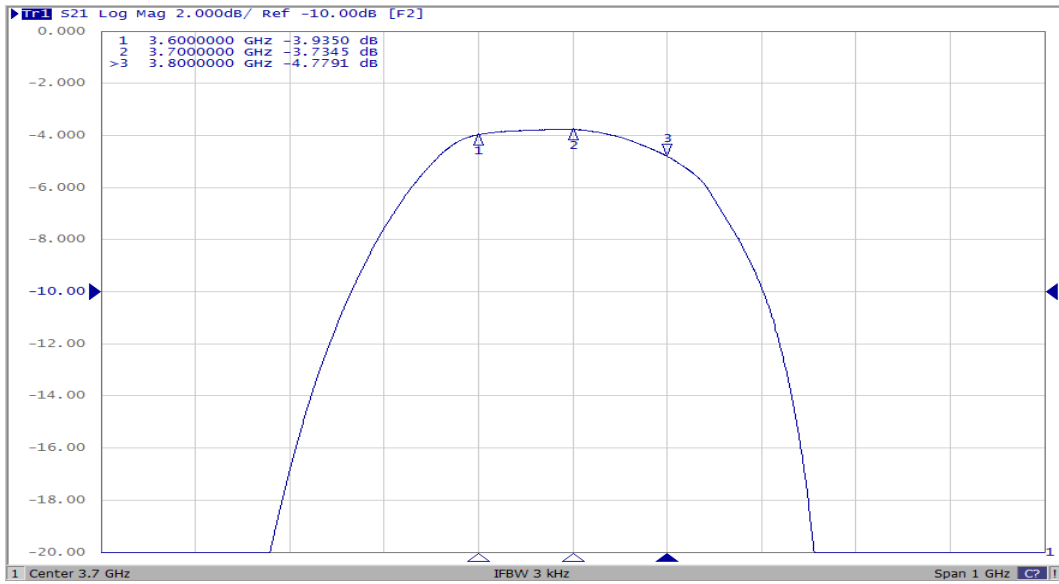
### E. PCB Footprint:



TAI-SAW TECHNOLOGY CO., LTD.

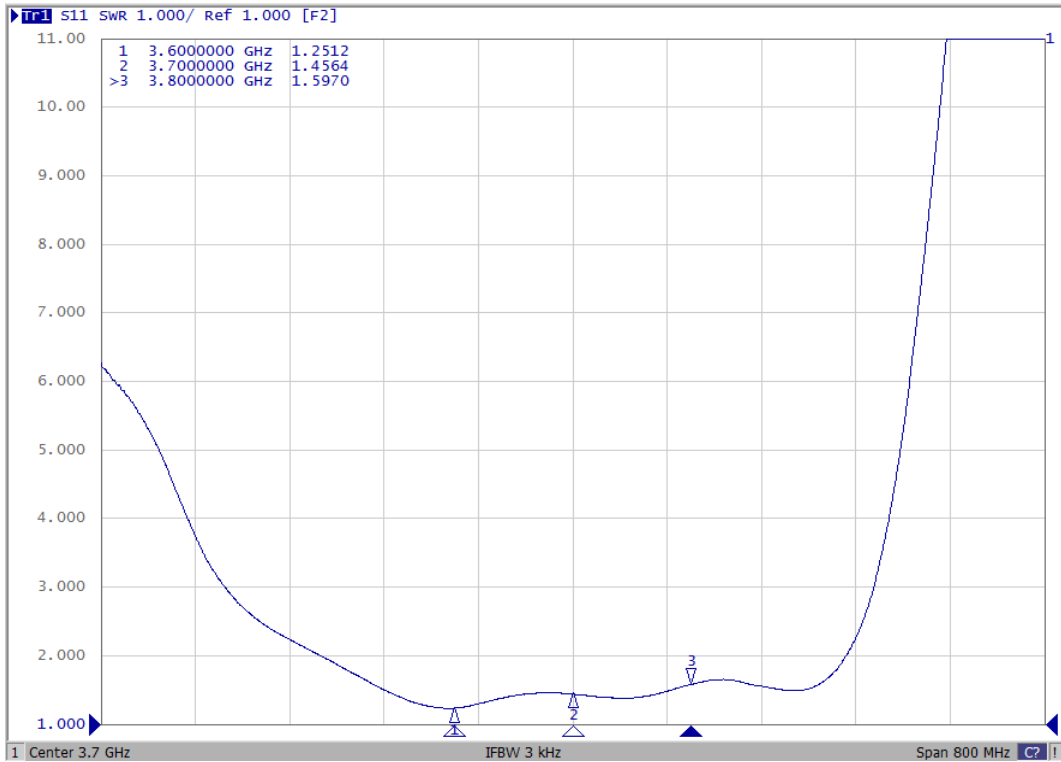
**TST DCC**  
Release document

## F. Frequency Characteristics:

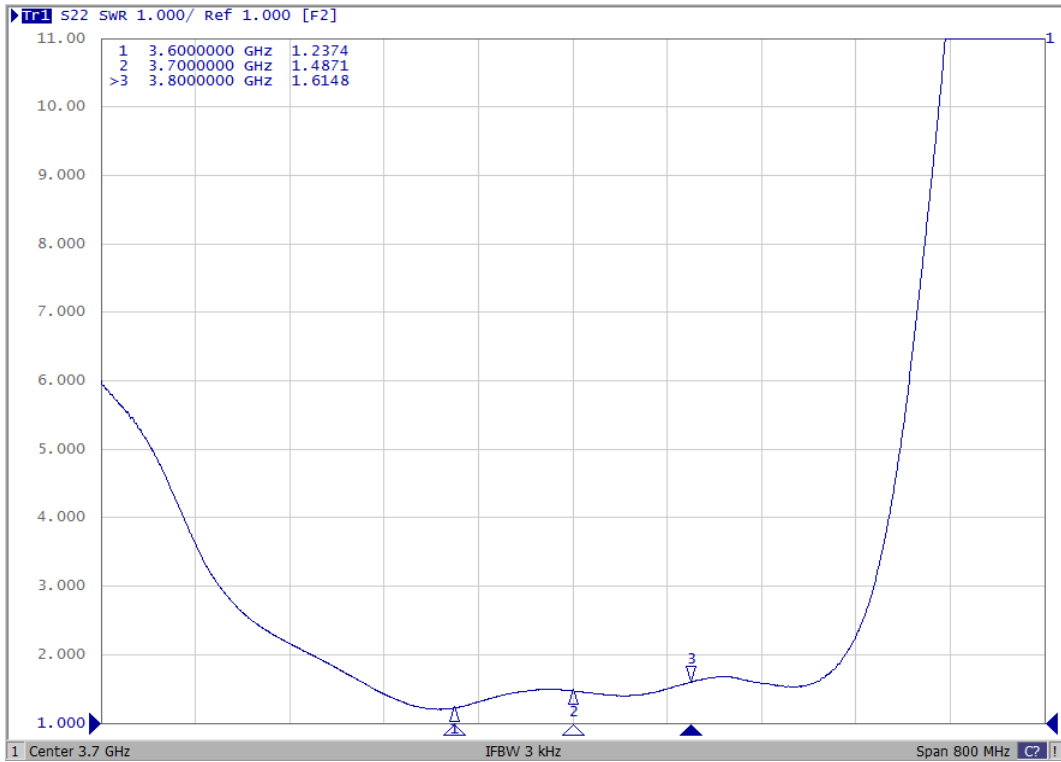


# Reflection Functions:

## S11



## S22





### 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.

