



# 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 421.9 MHz SMD 3.0x3.0 mm (BW=2 MHz)

TST Part No.: TA1638A

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

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

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

Approved by: \_\_\_\_\_ Bob Chau 

Date: \_\_\_\_\_ 2014/09/22

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 421.9 MHz

MODEL NO.:TA1638A

REV. NO.:2

### A. MAXIMUM RATING:

1. Input Power Level: 20 dBm
2. DC Voltage : 7.5 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

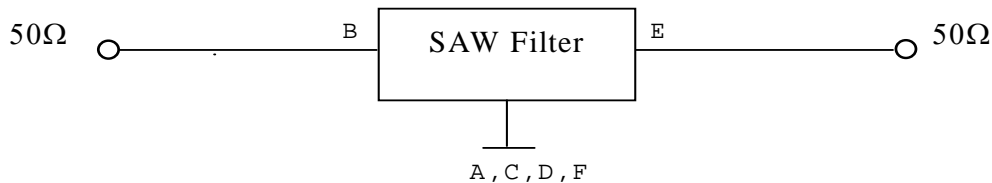
Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

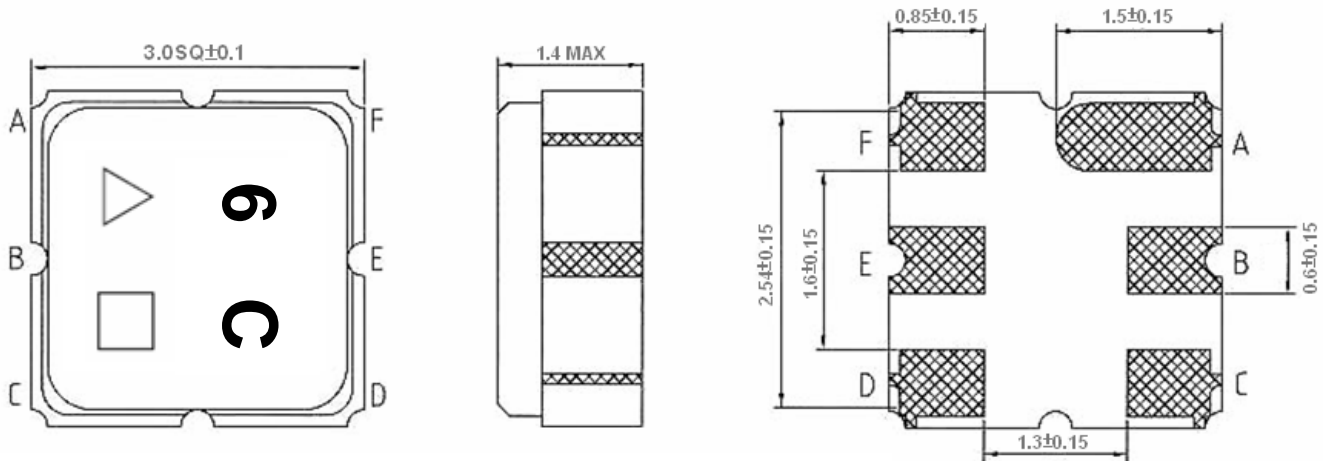
Item	Unit	Min.	Type.	Max.
<b>Center frequency</b> <b>Fc</b>	MHz	-	421.9	-
<b>Insertion Loss</b> (420.9~422.9 MHz) <b>IL</b>	dB	-	1.7	3.0
<b>Amplitude Ripple</b> (420.9~422.9 MHz)	dB	-	0.3	1.2
<b>VSWR</b> (420.9~422.9 MHz)	-	-	1.4	2.2
<b>Attenuation</b> (Reference level from 0 dB)				
10 ~ 380 MHz	dB	55	67	-
380 ~ 405 MHz	dB	45	55	-
440 ~ 450 MHz	dB	30	41	-
450 ~ 700 MHz	dB	50	56	-
700 ~ 1000 MHz	dB	42	55	-
<b>Temperature coefficient of frequency</b>	ppm/k	-	-36	-

### C. MEASUREMENT CIRCUIT:

HP Network analyzer



## D. OUTLINE DRAWING:



**B: Input**

**E: Output**

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

**Unit: mm**

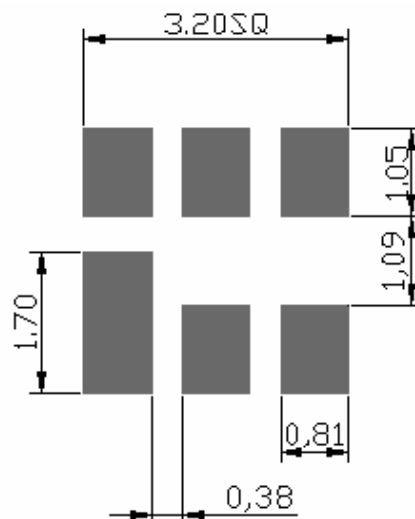
**△ : Year Code (2011->1, 2012->2, ..., 2019->9, 2020->0)**

**□ : Date Code**

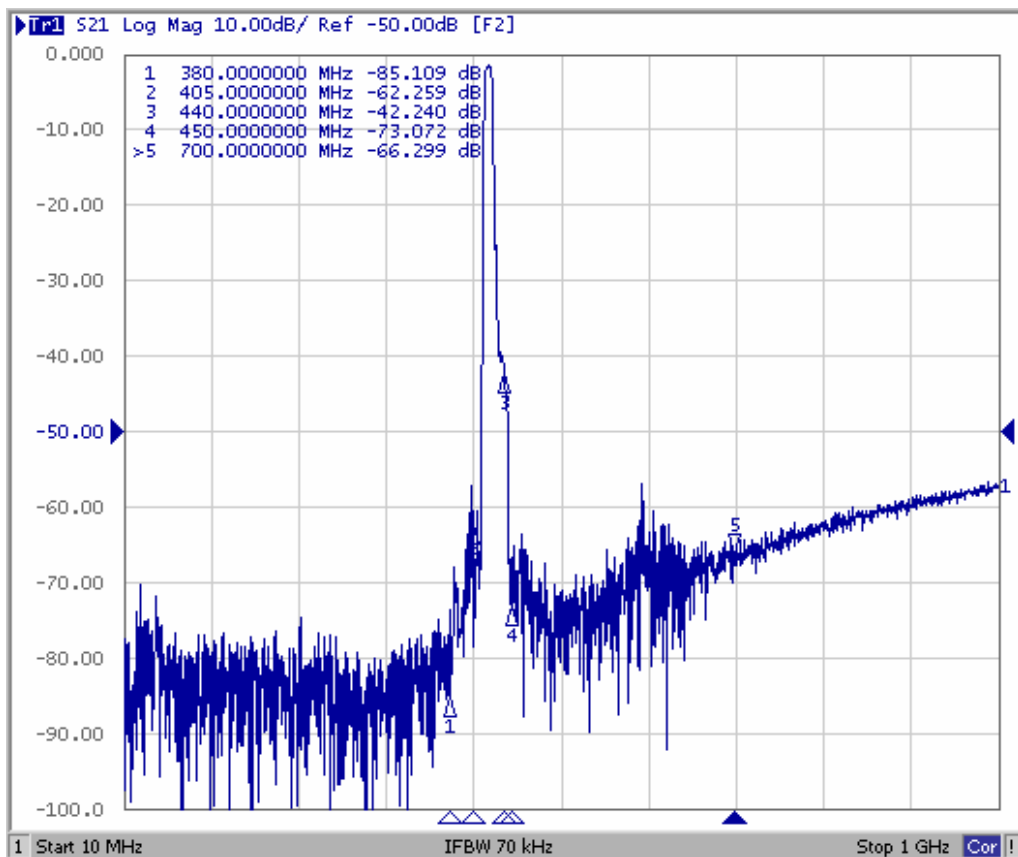
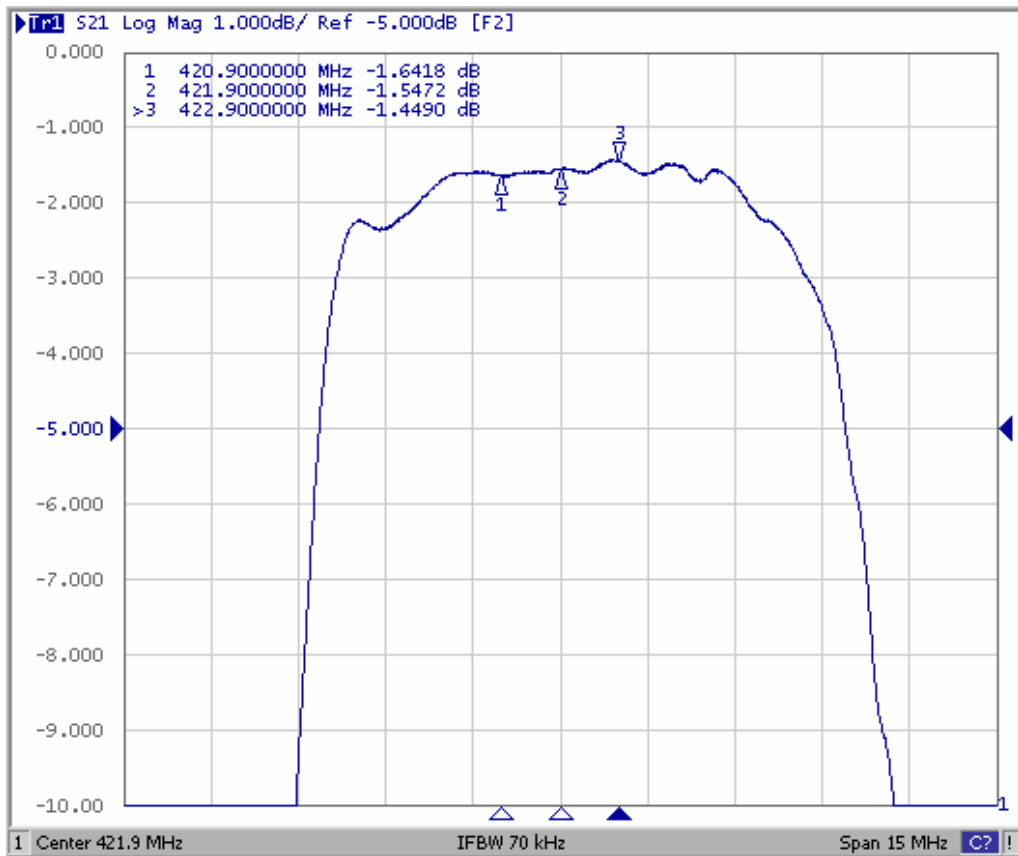
### Date Code Table:

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

## F. PCB Footprint:

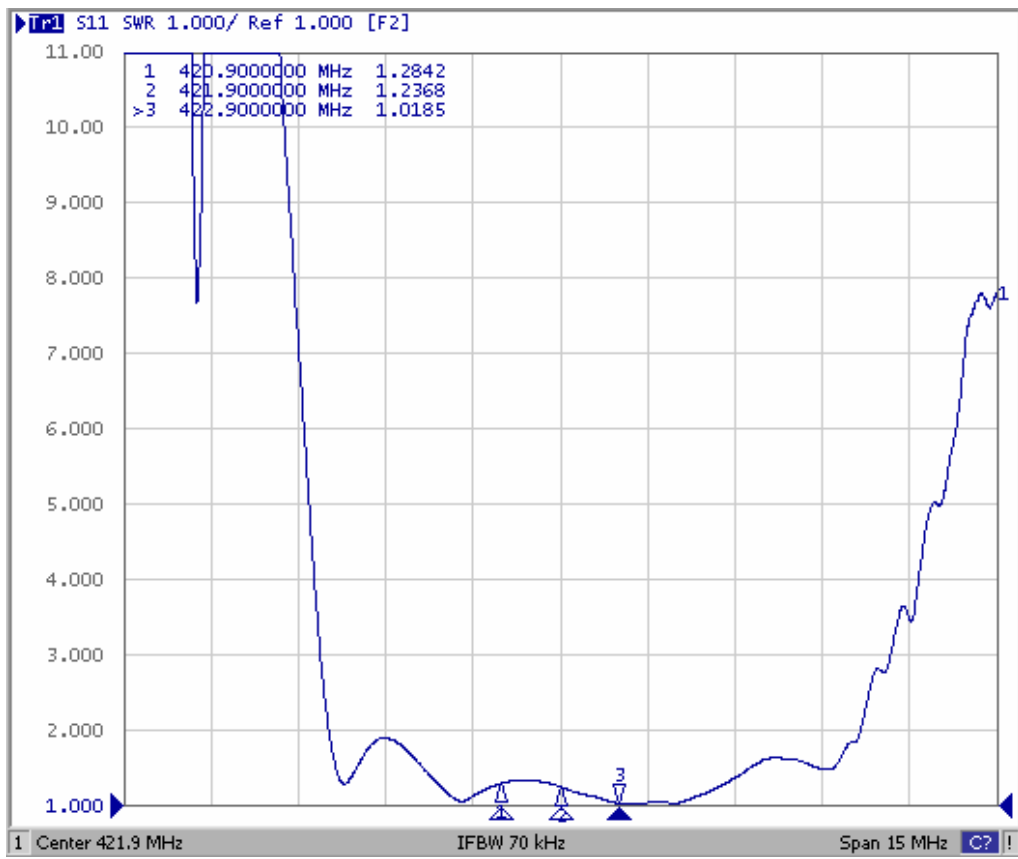


## F. Frequency Characteristics:

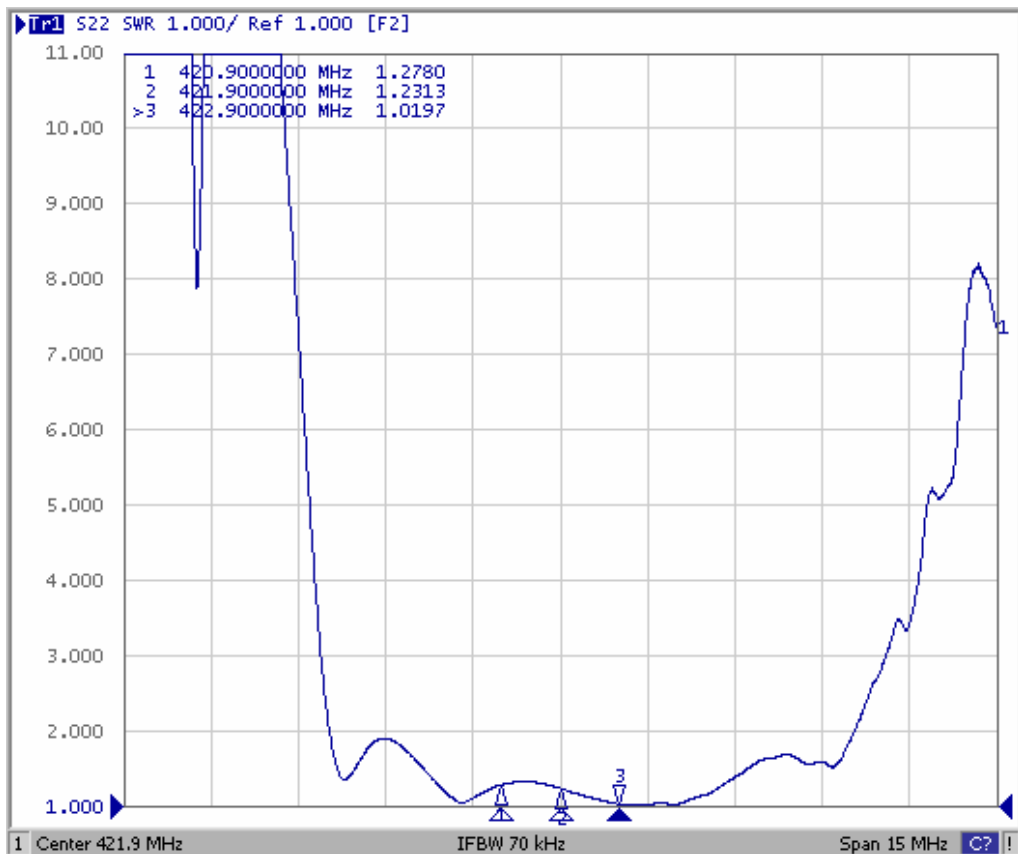


# Reflection Functions:

## S11



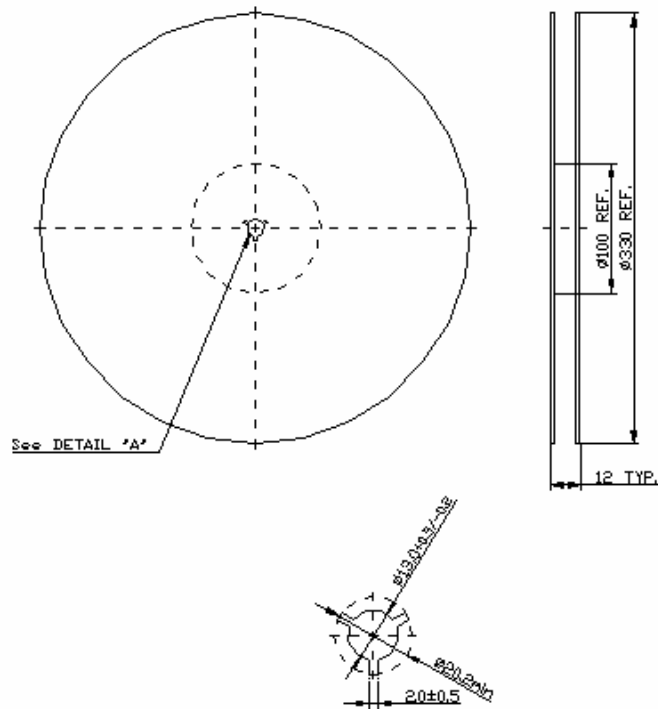
## S22



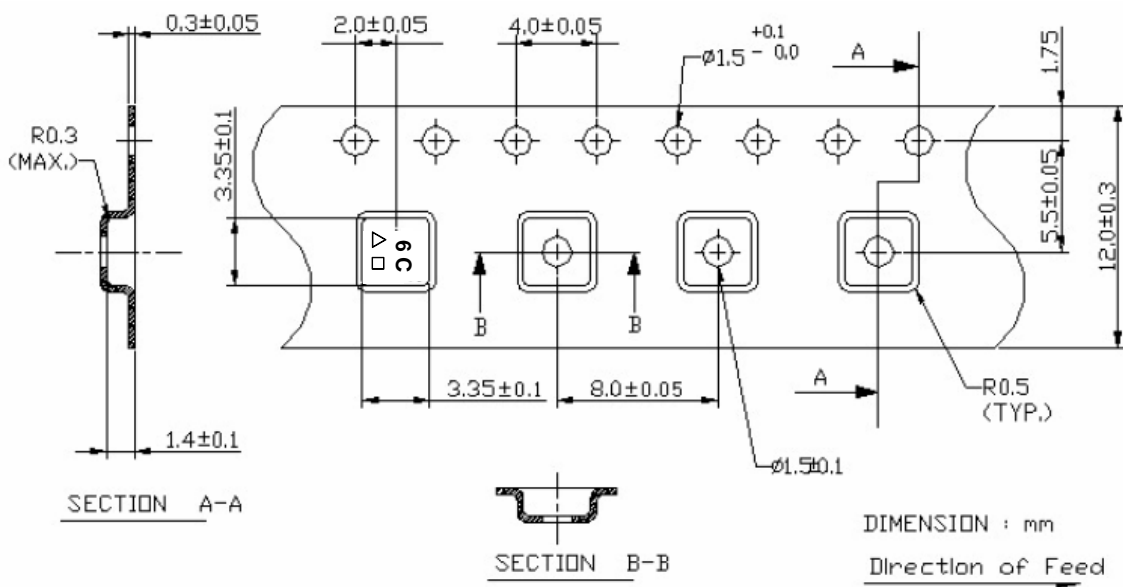
## G. PACKING:

### 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 250±10°C peak (max. 10sec).
4. Time: 2 times.

