



# 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 1600.25 MHz (BW 52.5MHz) SMD 1.1X0.9mm

TST Parts No.: TA2054A

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

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ Michael Yang *Michael*

Approval by: \_\_\_\_\_ Bob Chau *Bob Chau*

Date: \_\_\_\_\_ 2017/02/07

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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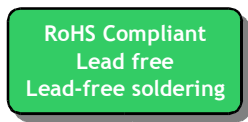
## SAW Filter 1600.25 MHz BW 52.5MHz SMD 1.1x0.9x0.5mm

MODEL NO.:TA2054A

REV. NO.:1.0

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +95°C

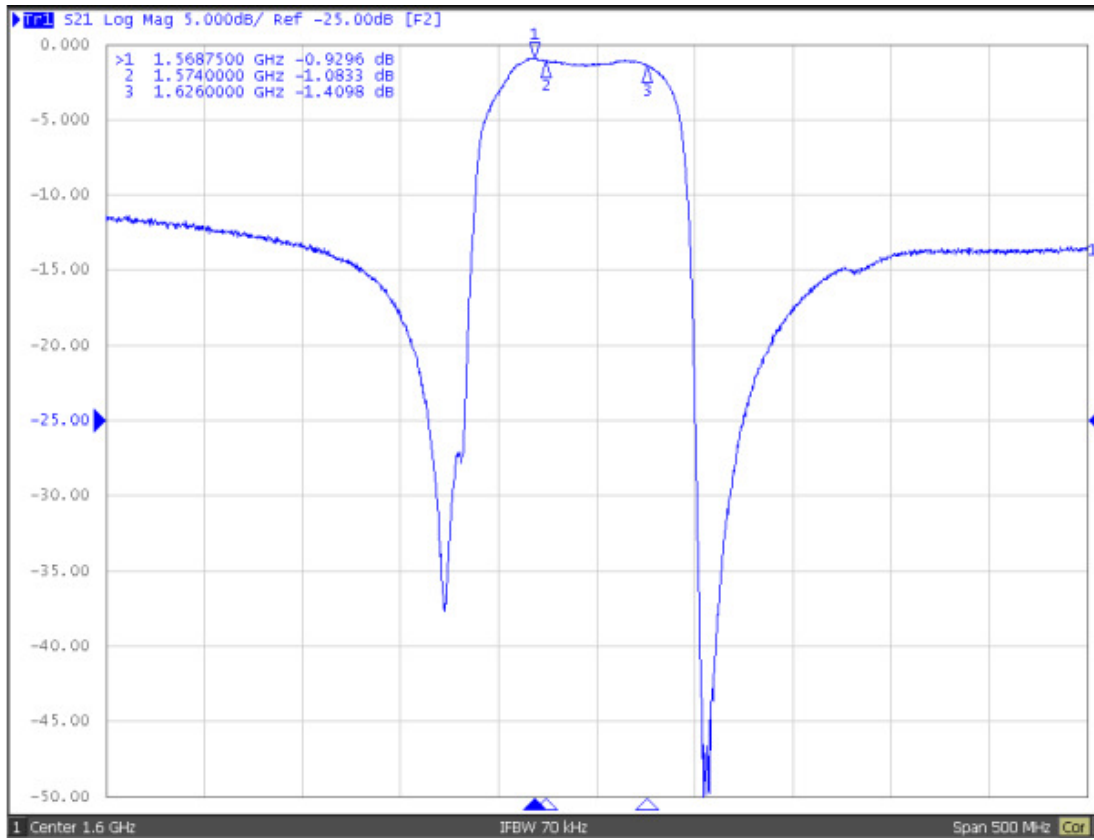


Electrostatic Sensitive Device (ESD)

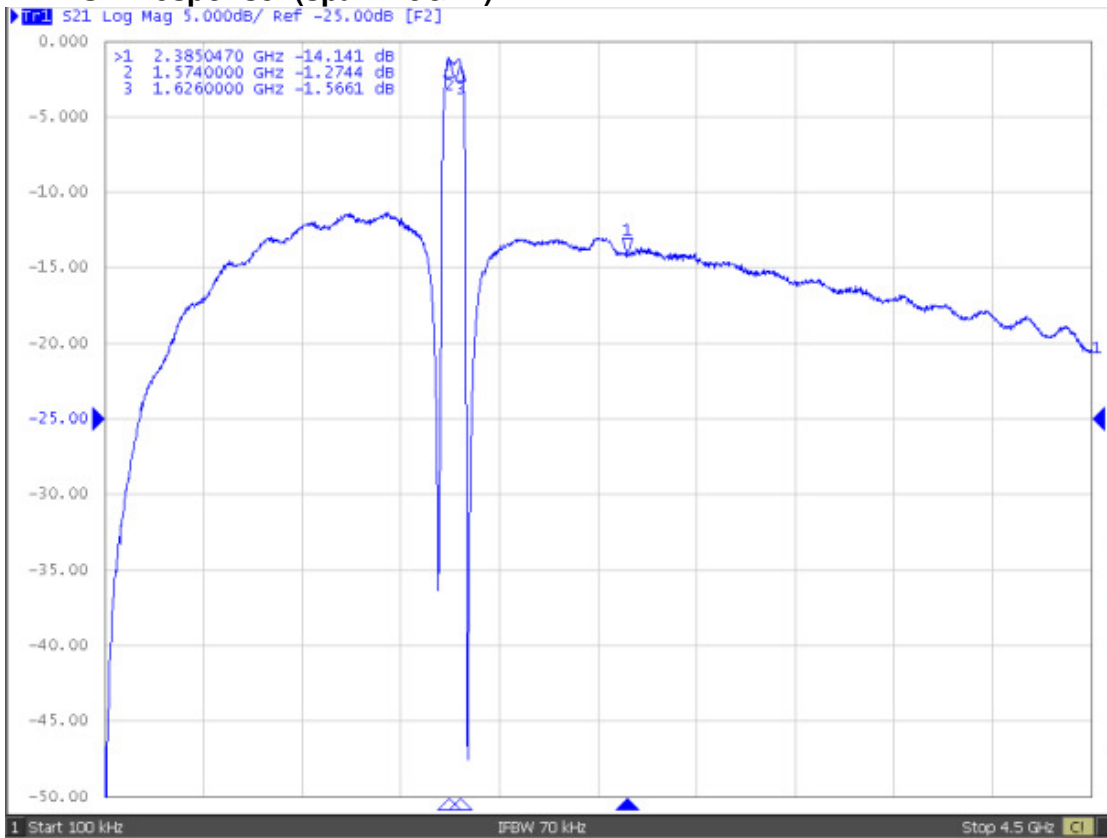
### B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min	Type.	Max
<b>Center Frequency</b> Fc	MHz	-	1600.25	-
<b>Insertion Loss</b> (1574~1577 MHz) IL	dB		1.4	1.7
<b>Insertion Loss</b> (1598~1606 MHz) IL	dB		1.4	1.7
<b>Insertion Loss</b> (1616~1626.5 MHz) IL	dB		1.4	1.7
<b>VSWR</b> (1574~1577 MHz)			1.6	2.2
<b>VSWR</b> (1598~1606 MHz)			2.0	2.2
<b>VSWR</b> (1616~1626.5 MHz)			1.7	2.2
<b>Group Delay</b> (1574~1626.5 MHz)	nS			12
<b>Amplitude ripple</b>				
(1574~1577 MHz)	dB		0.5	0.8
(1598~1606 MHz)	dB		0.4	0.7
(1616~1626.5 MHz)	dB		0.3	0.6
<b>Attenuation</b>				
100 ~ 824 MHz	dB	10	15	
824 ~ 925 MHz	dB	10	15	
1427 ~ 1540 MHz	dB	10	15	
1660 ~ 1850 MHz	dB	10	15	
1850 ~ 1980 MHz	dB	12	15	
2400 ~ 2570 MHz	dB	13	17	
2570 ~ 3000 MHz	dB	14	18	
<b>Package size</b>	mm	1109		

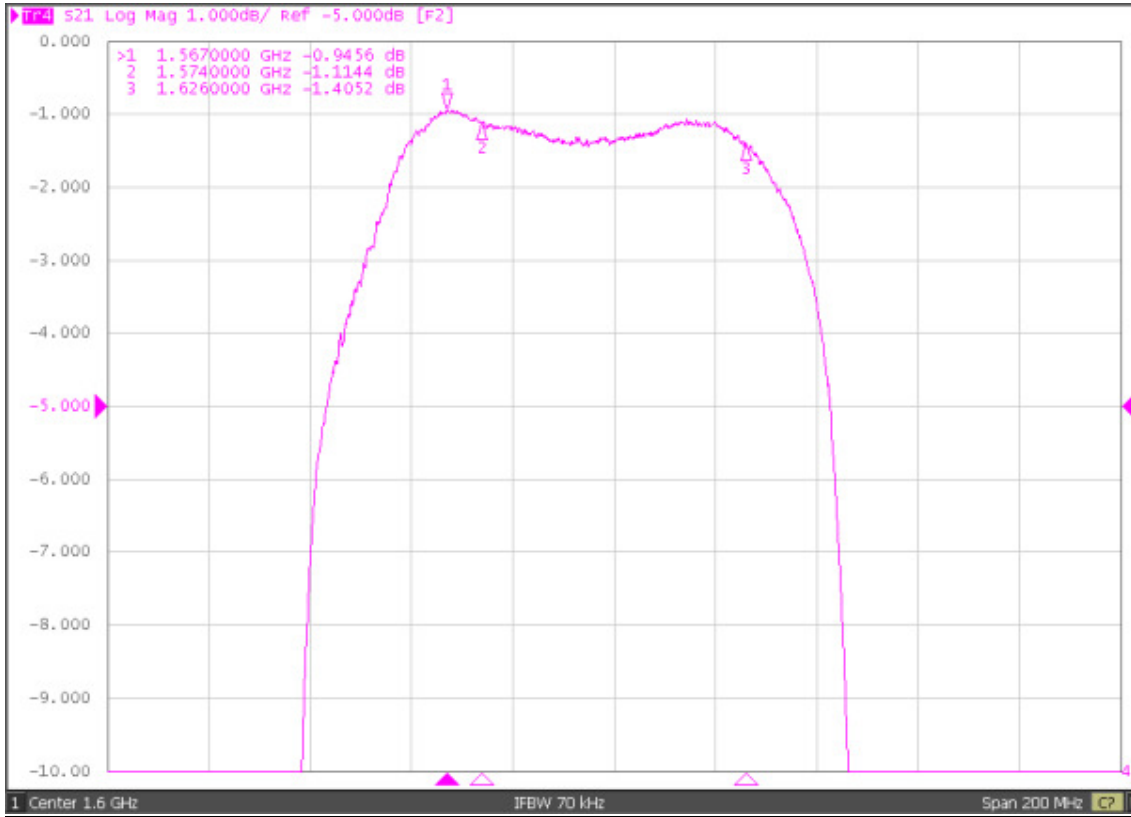
**C.FREQUENCY CHARACTERISTICS:**  
**S21 response: (span 500MHz)**



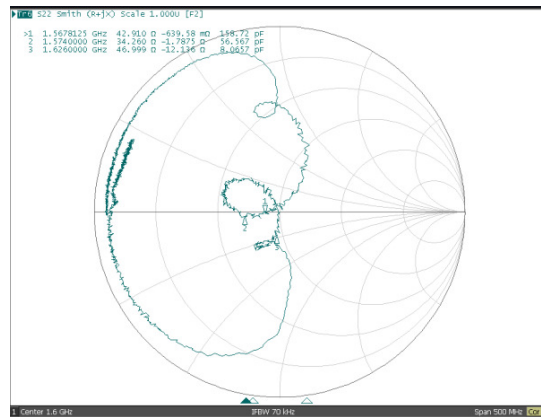
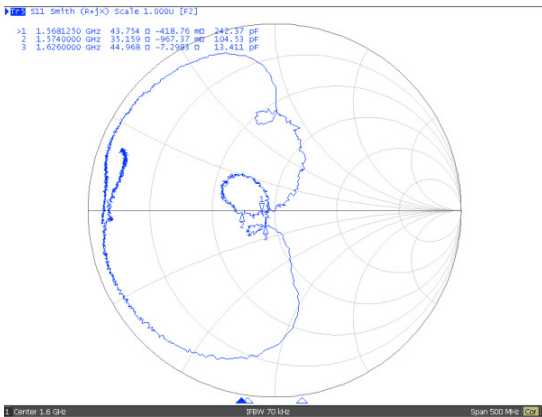
**S21 response: (span 4.5GHz)**



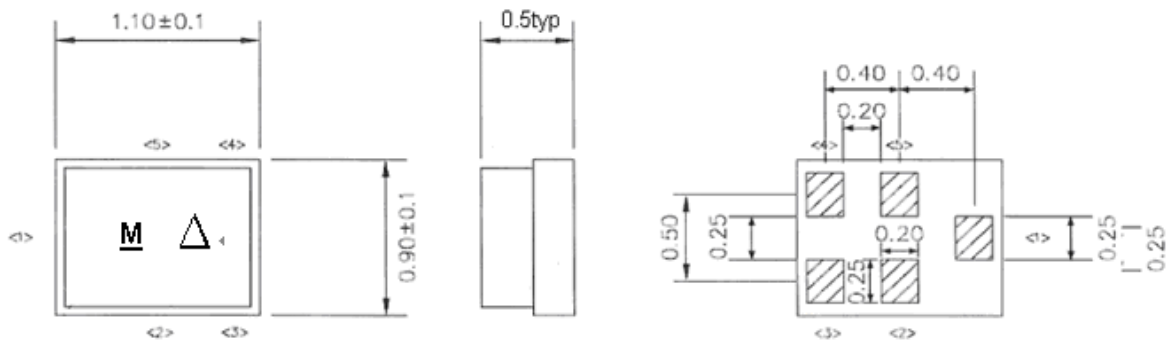
## S21 response: (span 200MHz)



## S11/S22



**D. OUTLINE DRAWING:**



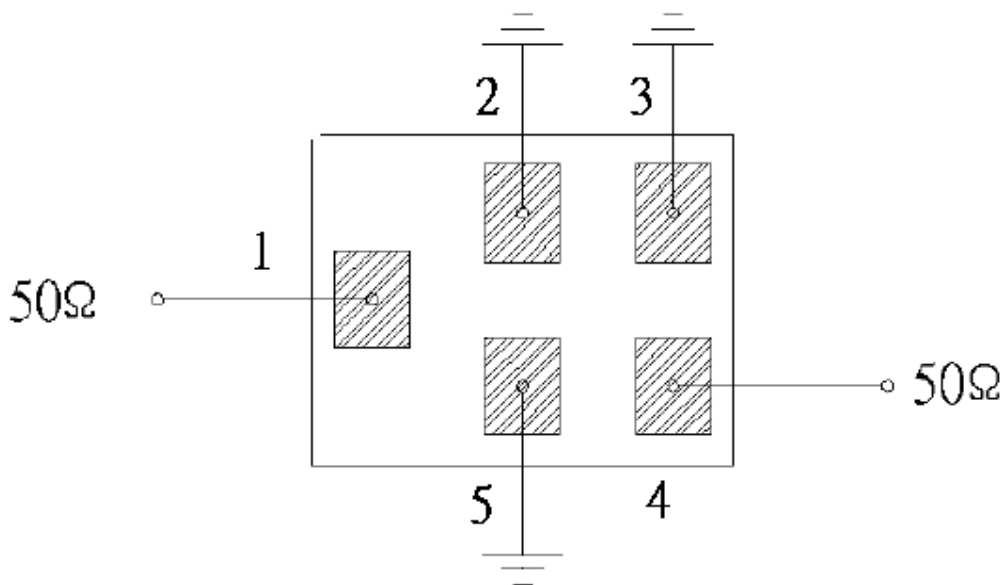
Unit: mm

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

**Δ : Year/Month Code (Follow the table)**

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>i</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

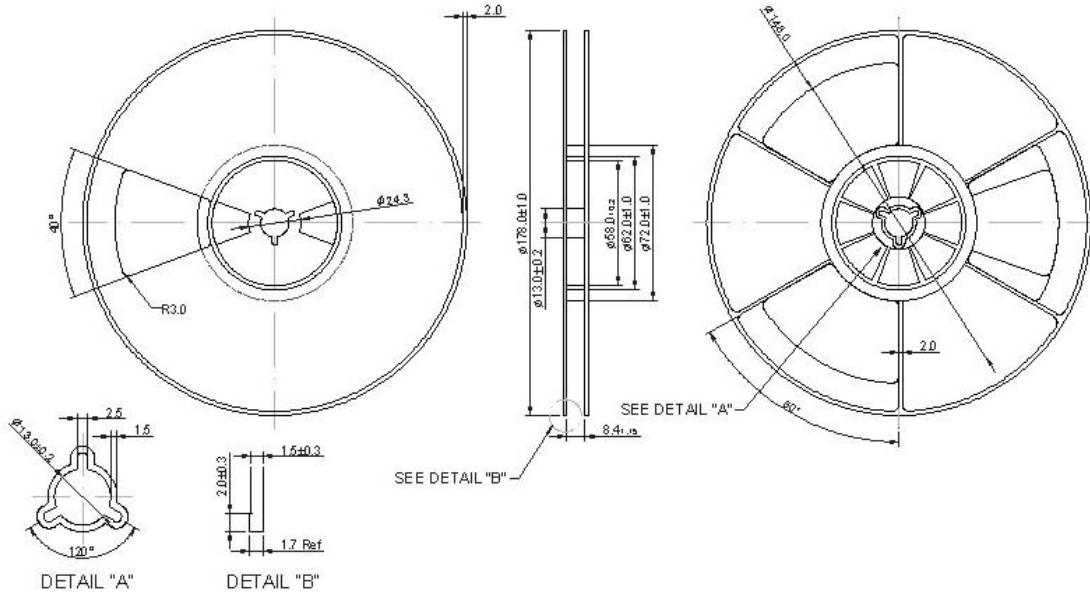
**E. MEASUREMENT CIRCUIT:**



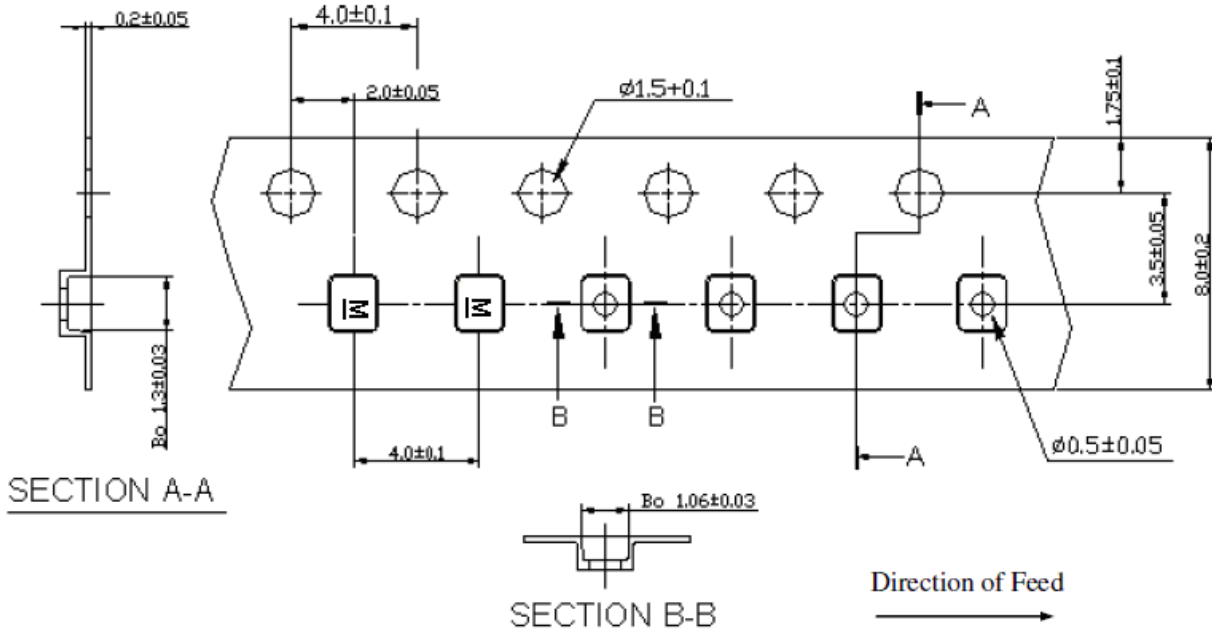
**F. PACKING:**

**1. REEL DIMENSION**

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



**2. TAPE DIMENSION**



### G. 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.

