



# 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

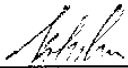
Product Description: SAW Filter 1591.5 MHz SMD 1.4x1.1 mm (BW=35 MHz)

TST Part No.: TA1175A

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

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

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

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

Date: \_\_\_\_\_ 2013/03/25

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 1591.5 MHz SMD 1.4x1.1 mm (BW=35 MHz)

MODEL NO.:TA1175A

REV. NO.3.0

### 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 +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

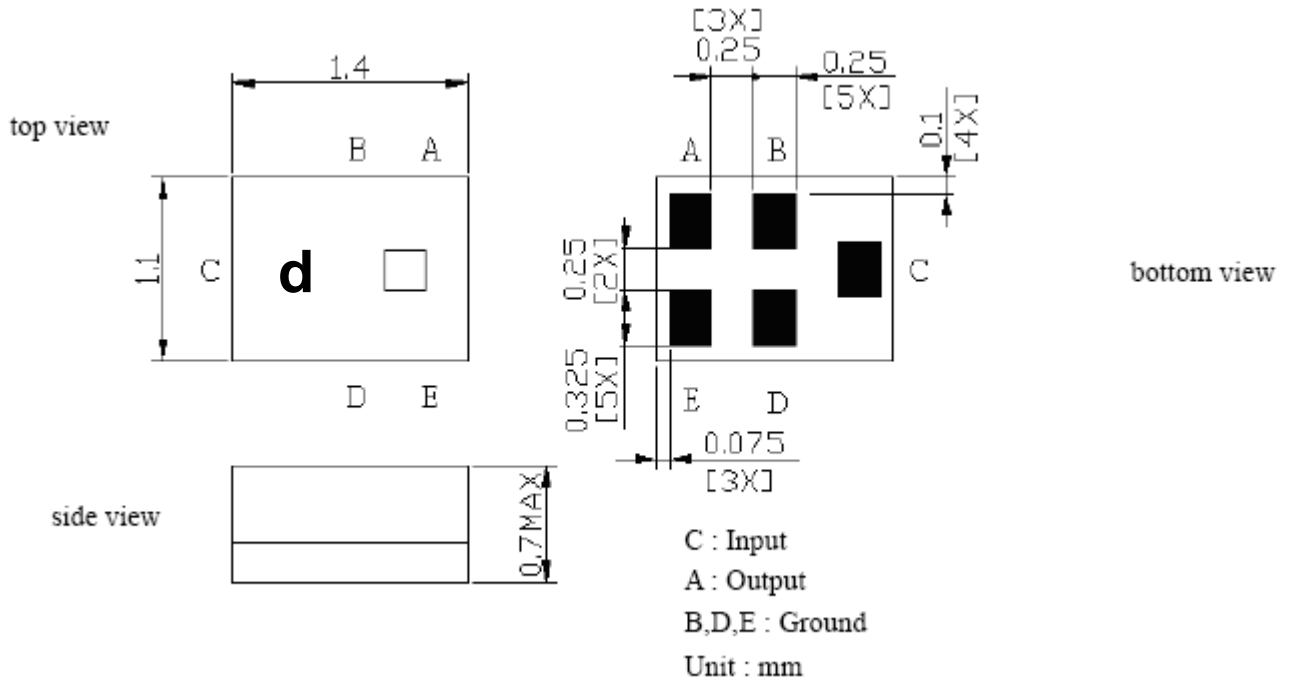
### B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance :  $Z_s = 50$

Terminating load impedance :  $Z_L = 50$

Item	Unit	Min.	Type.	Max.
<b>Center Frequency</b> $F_c$	MHz	-	1591.5	-
<b>Insertion Loss</b> (1574~1609 MHz)	dB	-	2.4	3.7
<b>Amplitude ripple</b> (1574~1609 MHz)	dB	-	1.3	2.6
<b>VSWR</b> (1574~1609 MHz)	-	-	2.0	2.4
<b>Group Delay Variation</b> (1574~1609 MHz)	ns	-	17	50
<b>Attenuation</b> (Reference level from 0 dB)				
10~1200 MHz	dB	28	34	-
1200~1450 MHz	dB	28	34	-
1450~1540 MHz	dB	20	37	-
1626~1710 MHz	dB	9	31	-
1710~2000 MHz	dB	30	37	-
2000~2500 MHz	dB	30	37	-
<b>Temperature Coefficient of Frequency</b>	Ppm/	-	-36	-

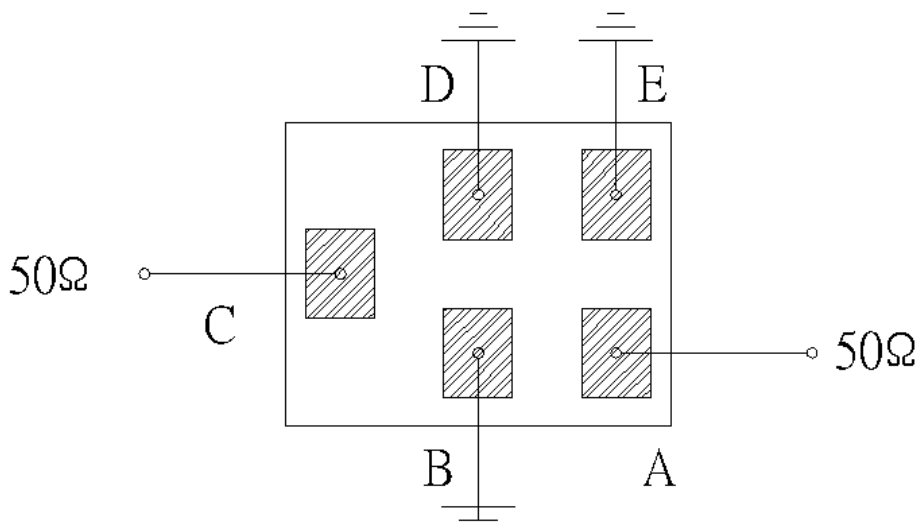
**C. OUTLINE DRAWING:**



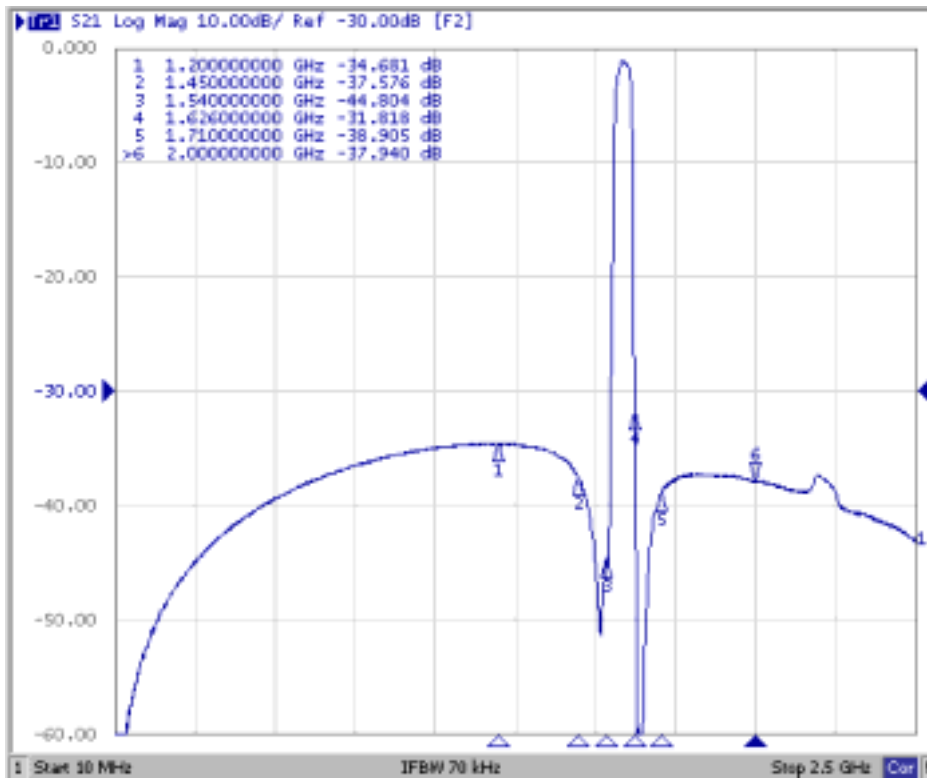
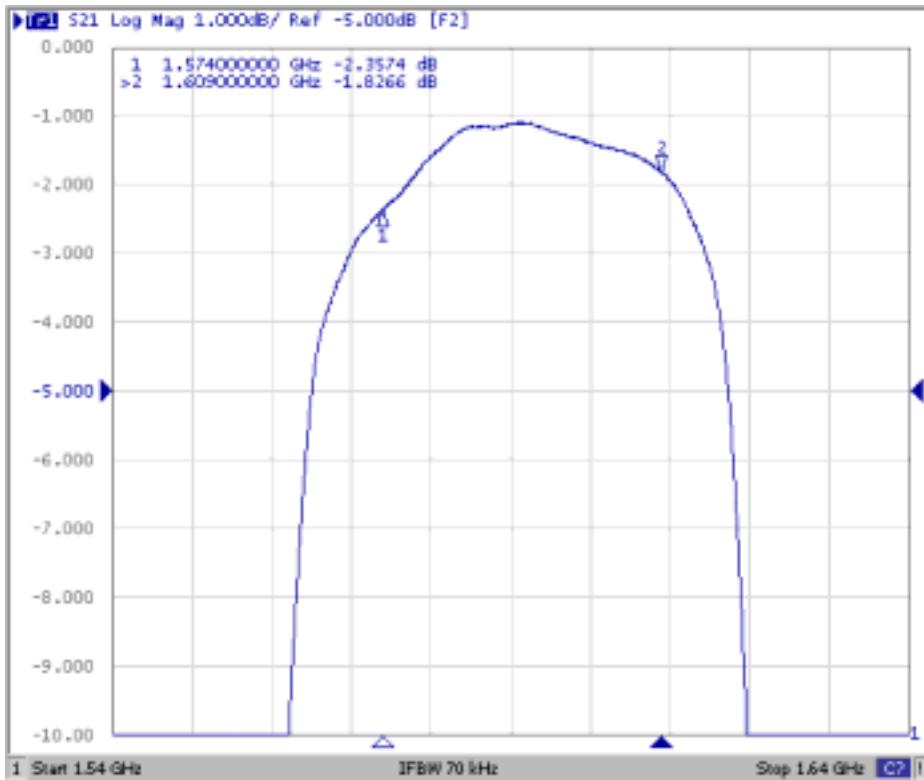
**: Year/Month Code (Follow the table)**

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>j</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>

**D. MEASUREMENT CIRCUIT:**

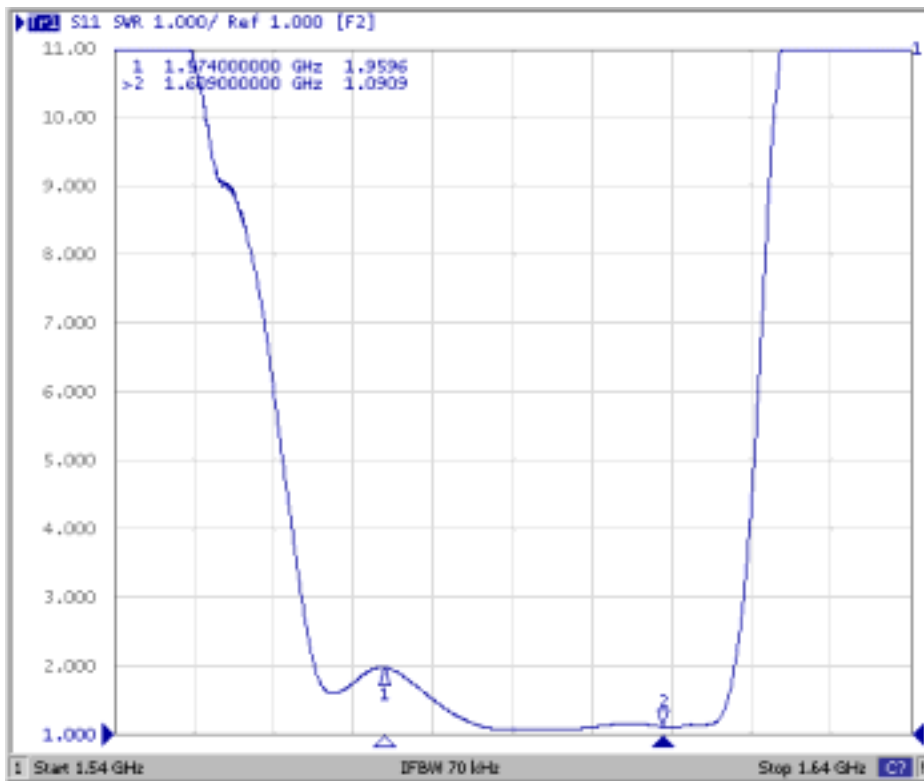


### E. Frequency Characteristics:

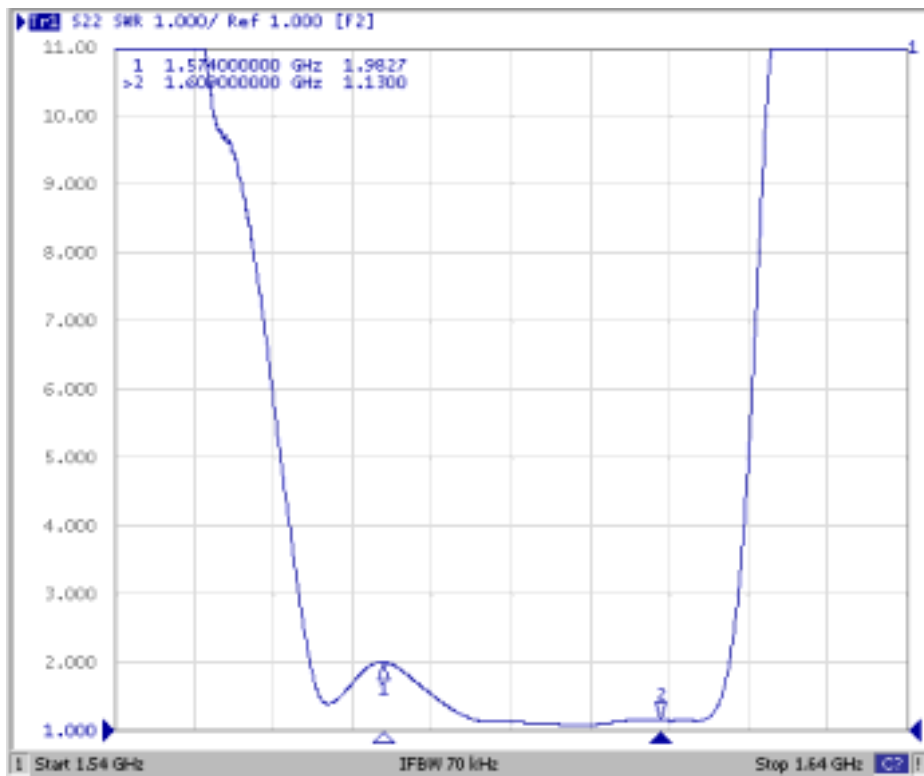


Reflection Functions:

S11



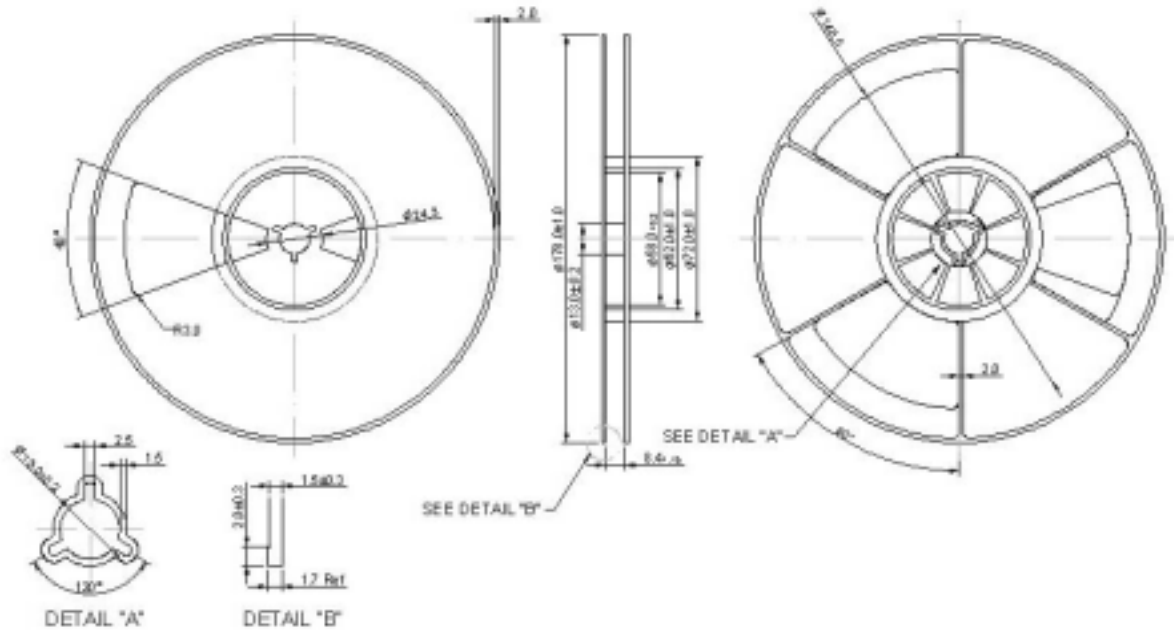
S22



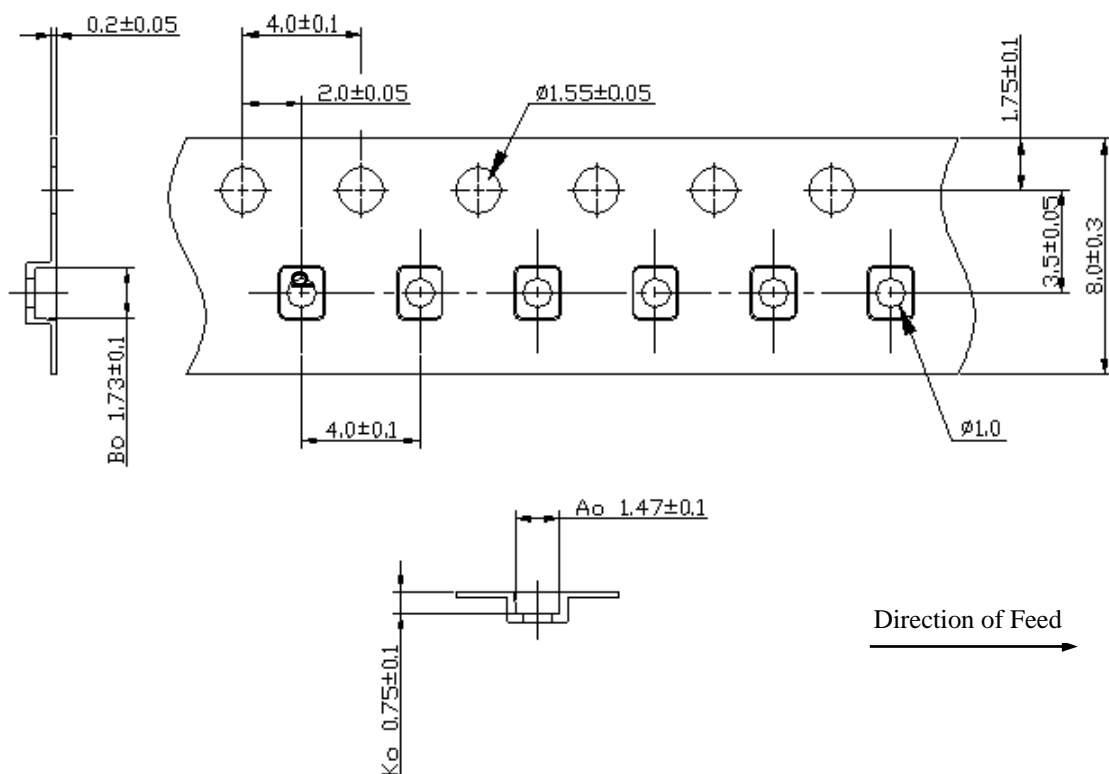
**F. PACKING:**

**1. REEL DIMENSION**

(Reel Count : 7"=3000 )



**2.TAPE DIMENSION**



## G. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180 for 60~90 seconds.
2. Ascending time to preheating temperature 150 shall be 30 seconds min.
3. Heating shall be fixed at 220 for 50~80 seconds and at 245~260 peak (min. 10sec).
4. Time : 2 times.

