



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

E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Product Description: SAW Filter 1583 MHz (BW 46.79MHz) SMD 1.4X1.1 mm

TST Part No.: TA1343D

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Michael Yang *Michael*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2021/06/02

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.



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

E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

SAW Filter 1583MHz

MODEL NO.:TA1343D

REV. NO.:5.0

A. MAXIMUM RATING:

1. Input Power Level: 13 dBm
2. DC Voltage : 5Vmax
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +105°C
5. Moisture Sensitivity Level: Level 3(MSL3)
6. ESD : 50V(MM) 100V(HBM)



Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

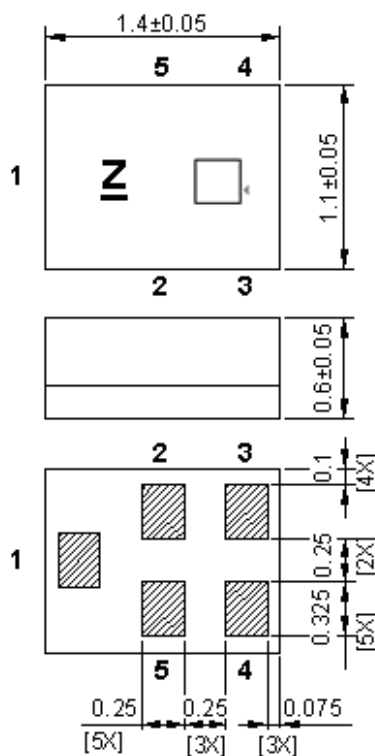
Terminating source impedance (single) : $Z_s = 50 \Omega$

Terminating load impedance(single) : $Z_L = 50 \Omega$

Item	Unit	Min	Type.	Max	Note
Center Frequency Fc	MHz	-	1583	-	
Insertion Loss (1559.1~1563.1 MHz) IL	dB		1.9	2.1	
Insertion Loss (1573.42~1577.42 MHz) IL	dB		1.3	1.5	
Insertion Loss (1597.55~1605.89 MHz) IL	dB		1.6	2.1	
VSWR (1559.1~1563.1 MHz)			1.5	1.8	
VSWR (1573.42~1577.42 MHz)			1.7	1.9	
VSWR (1597.55~1605.89 MHz)			1.7	1.9	
Group delay ripple (1559.1~1563.1 MHz)	dB		13	20	
(1573.42~1577.42 MHz)	dB		14	20	
(1597.55~1605.89 MHz)	dB		14	20	
Amplitude ripple (1559.1~1563.1 MHz)	dB		0.6	0.8	
(1573.42~1577.42 MHz)	dB		0.3	0.5	
(1597.55~1605.89 MHz)	dB		0.3	0.6	
Attenuation					
10 ~ 824 MHz	dB	23	26		
824 ~ 925 MHz	dB	23	26		
1427 ~ 1463 MHz	dB	26	31		

1710 ~ 1785 MHz	dB	25	30		
1850 ~ 1980 MHz	dB	26	30		
2400 ~ 2570 MHz	dB	30	33		
2570 ~ 3000 MHz	dB	30	35		
Package size	mm	SMD 1.4x1.1			

C.OUTLINE DRAWING:



All tolerances are ± 0.05 mm unless otherwise specified.
 Coplanarity : 0.1 mm max.
 1 to 5 : Pin No.
 Unit : mm

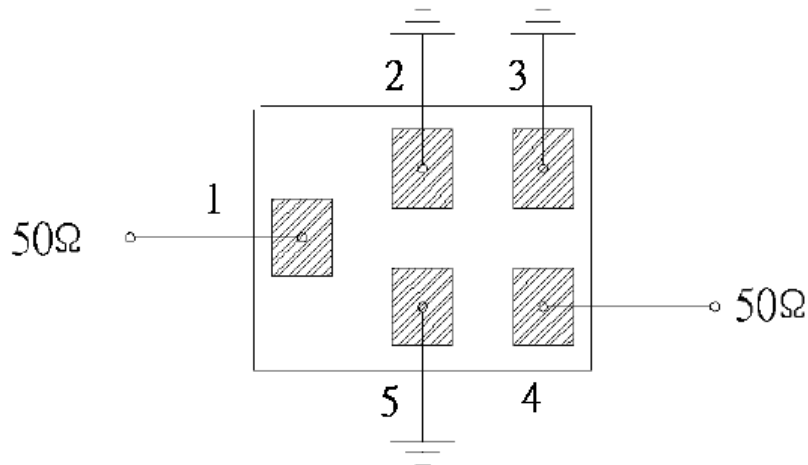
Pin No.↕	Symbol↕	Function↕
1↕	IN↕	Input↕
2↕	GND↕	Ground↕
3↕	GND↕	Ground↕
4↕	OUT↕	Output↕
5↕	GND↕	Ground↕

Marking : a small letter z

□ : Year/Month Code (Follow the table)

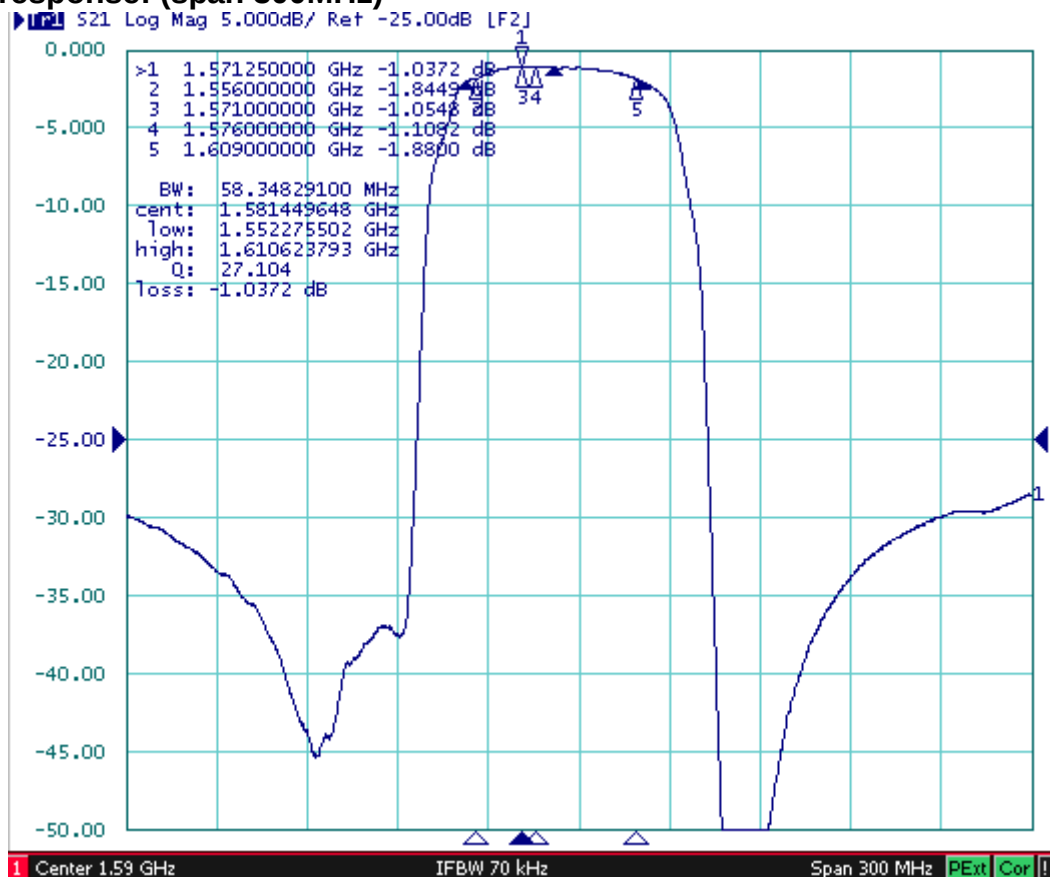
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2021	A	B	C	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m
2024	n	p	q	r	s	t	u	v	w	x	y	z
2025	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2026	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</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>
2027	<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>
2028	<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:

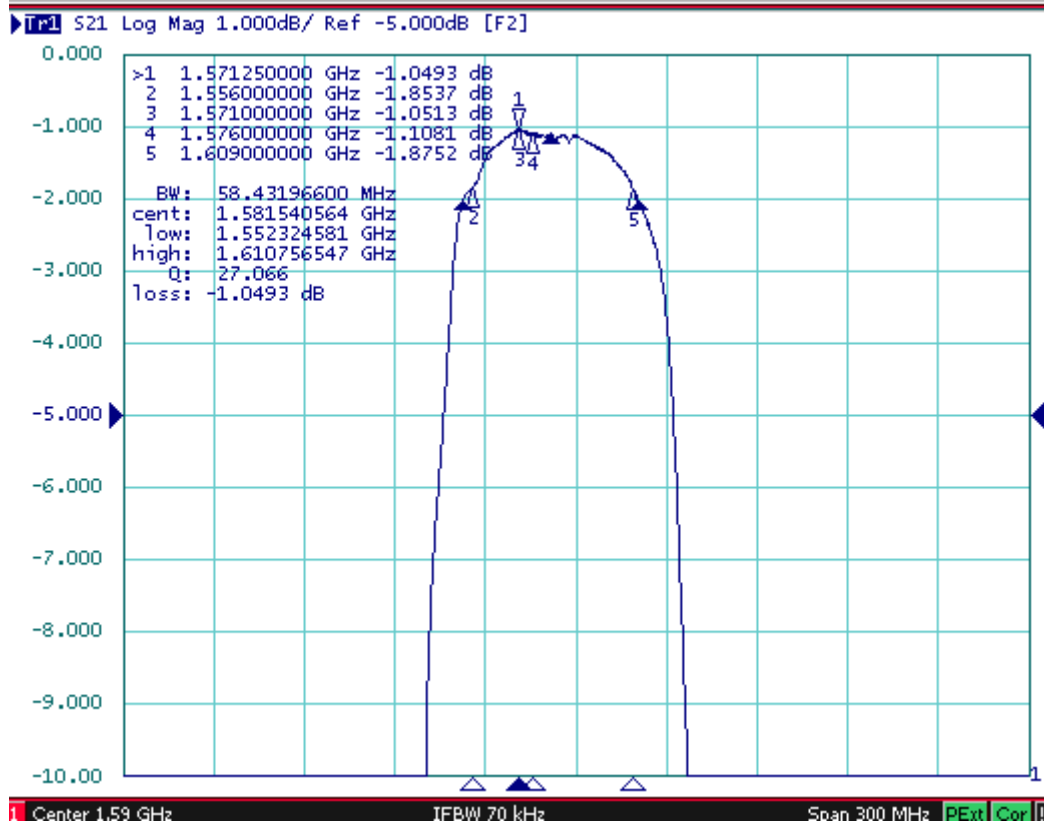


E. Frequency Characteristics:

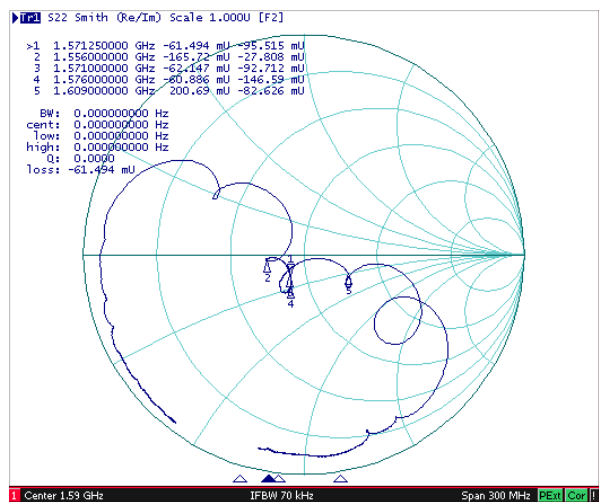
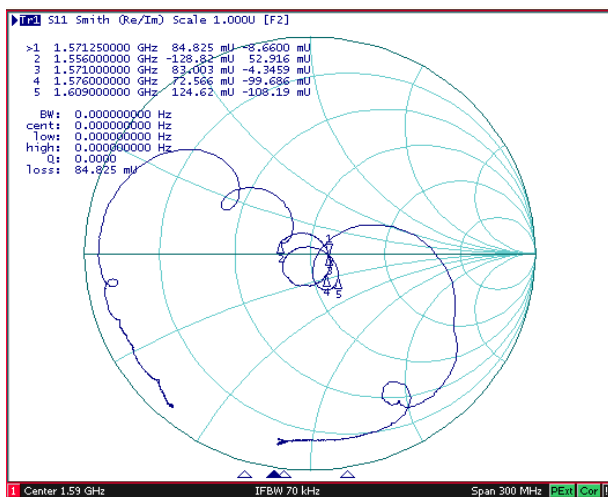
S21 response: (span 300MHz)



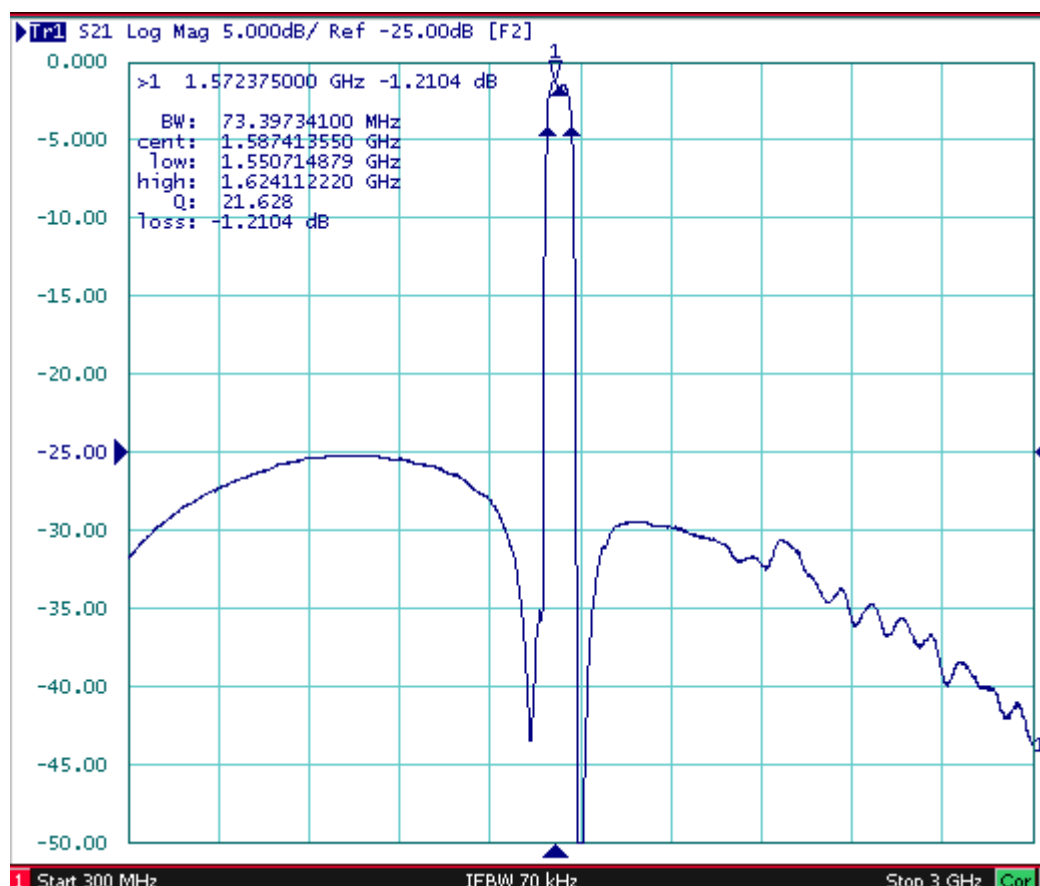
S21 response: (span 300MHz)



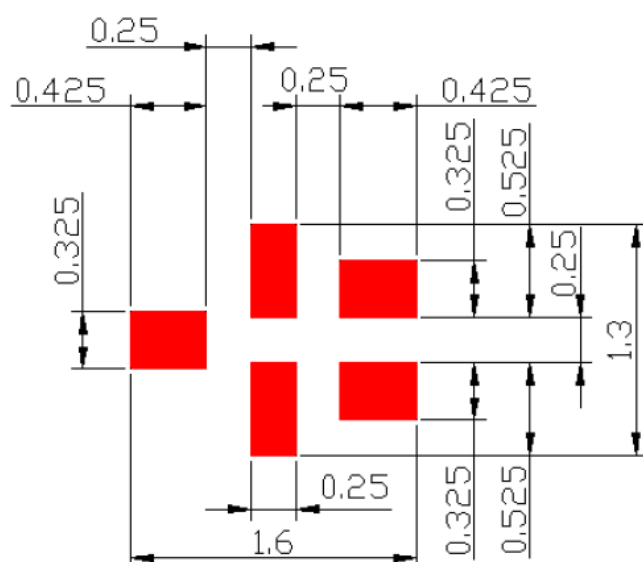
S11/S22 response :



S21 response: (span 3GHz)



F. PCB Footprint:

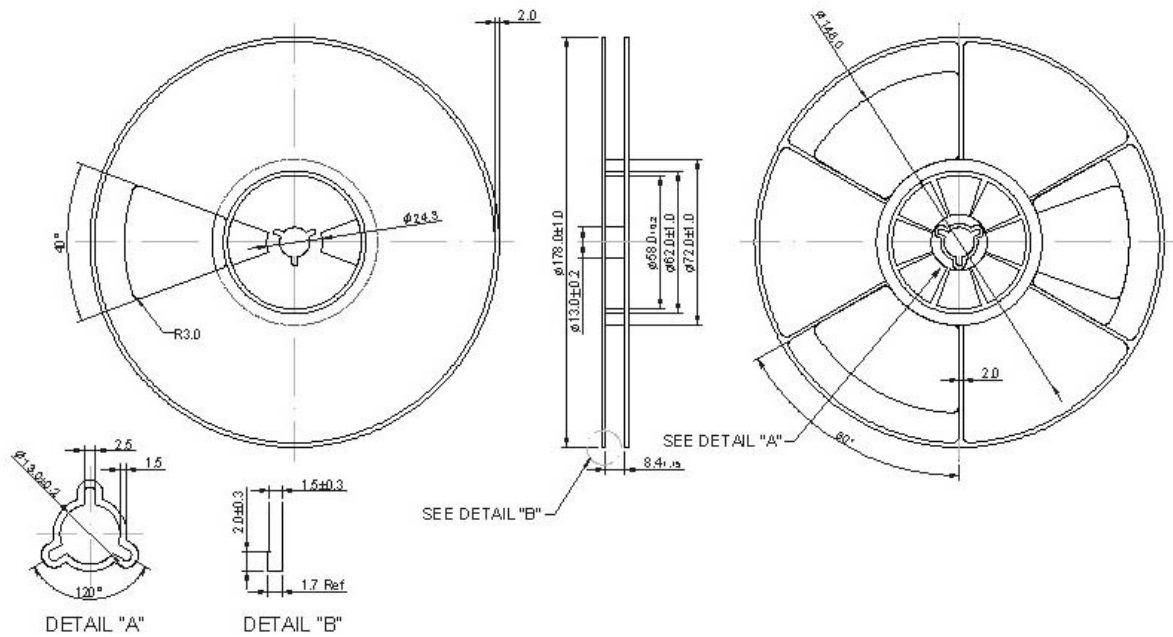


 : Land Pattern

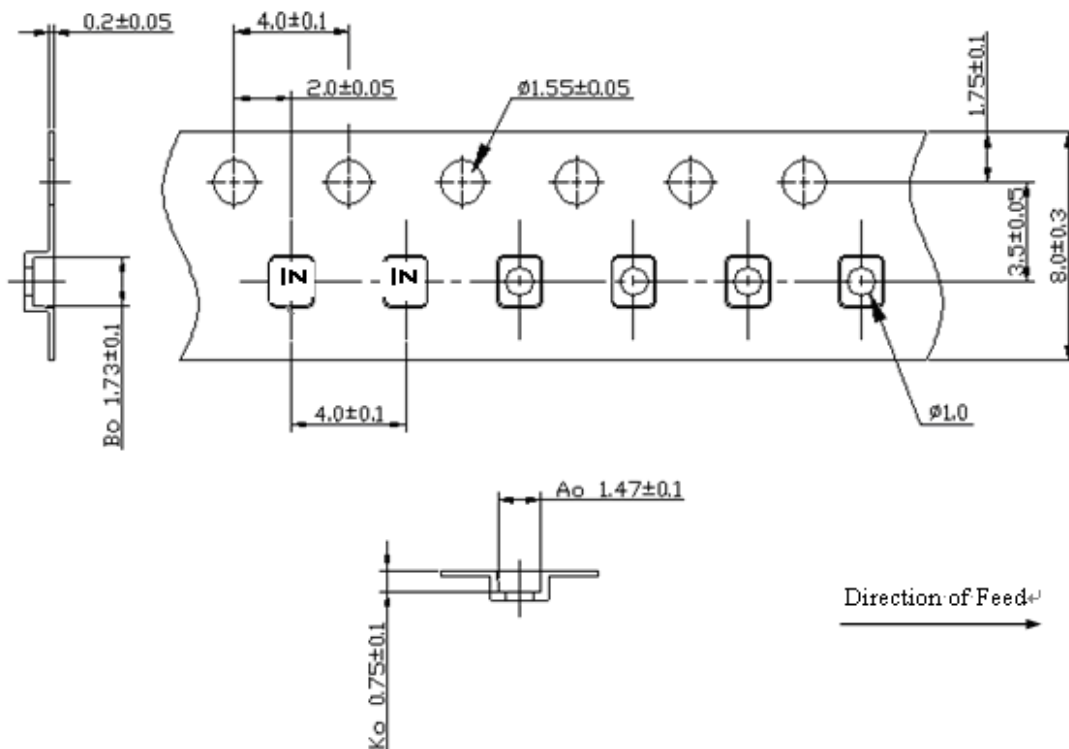
G. PACKING:

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

