

# 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 1176.45 MHz SMD 1.4×1.1 mm (BW=5 MHz
,	TST Part No.: TA2304A
	Customer Part No.:
	Customer signature required
	Company:
	Division:
	Approved by :
	Date:
	Checked by: <u>David Chang</u>
	Checked by: David Chang Daw  Approved by: Andy Yu Andy Mn
	Date: 11/22/2017

- 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 1176.45 MHz

MODEL NO.:TA2304A REV. NO.:1

#### A. MAXIMUM RATING:

1. Input Power Level: 15 dBm

2. DC Voltage: 3 V

3. Operating Temperature: -40 °C to +85 °C

4. Storage Temperature: -40 °C to +85 °C

5. Moisture Sensitivity Level: Level 3(MSL3)

RoHS Compliant Lead free Lead-free soldering

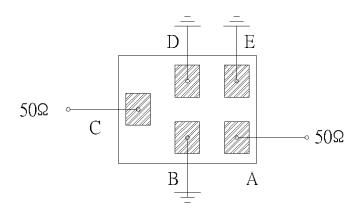
Electrostatic Sensitive Device (ESD)

### **B. ELECTRICAL CHARACTERISTICS:**

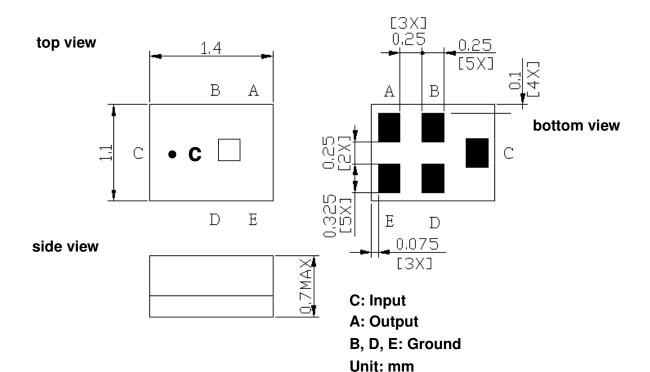
Terminating source impedance :  $Zs = 50 \Omega$ Terminating load impedance :  $ZL = 50 \Omega$ 

Item	Unit	Min.	Тур.	Max.						
Center Frequency	Fc	MHz	-	1176.45	-					
Insertion Loss (1173.95~1178.95 MHz)	IL	dB	-	2.1	2.6					
<b>Amplitude ripple</b> (1173.95~1178.95 MHz)		dB	-	0.3	1.2					
<b>VSWR</b> (1173.95~1178.95 MHz)		-	-	1.6	2.2					
Attenuation (Reference level from 0 dB)										
10 ~ 1120 MHz		dB	32	41	-					
1220 ~ 3000 MHz		dB	30	35	-					
Temperature coefficient of frequency	ppm/k	-	-36	-						

### **C. MEASUREMENT CIRCUIT:**



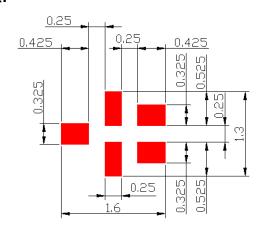
### **D. OUTLINE DRAWING:**



☐ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	Α	В	С	D	Е	F	G	Н	J	K	L	M
2014	N	Р	Q	R	S	Т	U	V	W	Х	Υ	Z
2015	а	b	С	d	е	f	g	h	j	k	ı	m
2016	n	р	q	r	S	t	u	V	W	Х	У	Z
2017	<u>A</u>	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	ᆈ	M
2018	N	<u>P</u>	Q	<u>R</u>	<u>S</u>	<u>T</u>	U	<u>V</u>	W	<u>X</u>	Y	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	g	<u>h</u>	į	<u>k</u>	<u> </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>	Y	<u>z</u>

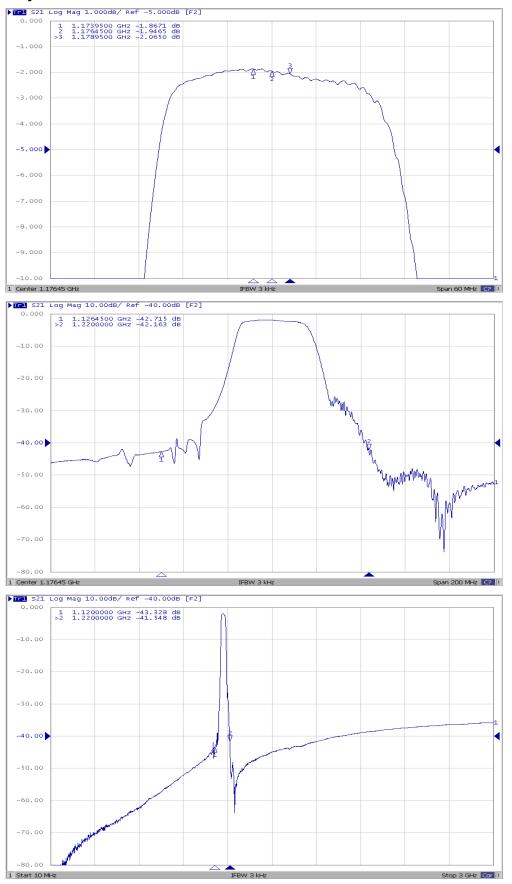
# **E. PCB Footprint:**



: Land Pattern Unit : mm

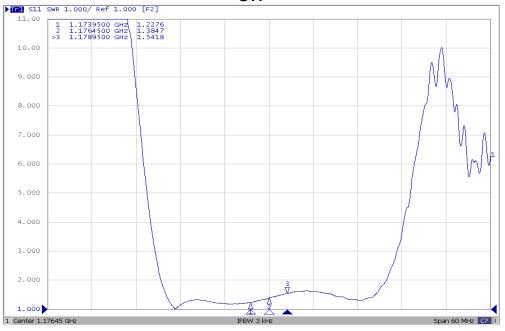
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# F. Frequency Characteristics:

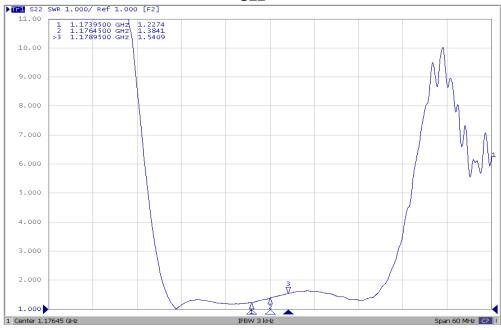


# **Reflection Functions:**





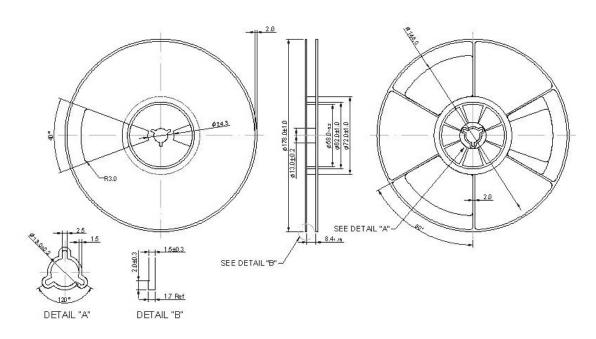
## **S22**



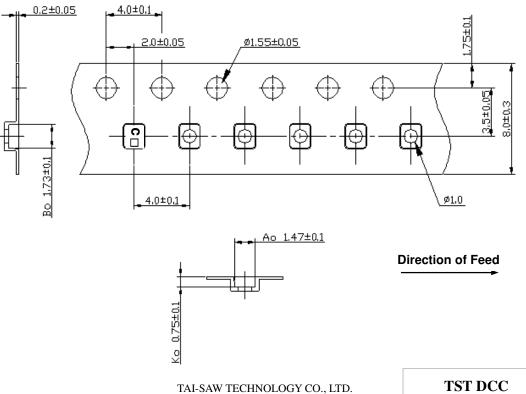
# G. PACKING: (Ref. WI-75M03)

## 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.

