



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Description: SAW Filter 2436 MHz SMD 1.4X1.1 mm (BW=72MHz)

TST Part No.: TA1218E (This part is compliant with AEC-Q200)

Customer Part No.: _____

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

Checked by: _____ Anne Chen *Anne Chen*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2018.12.22

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 2436MHz SMD 1.4X1.1 mm (BW=72MHz)

MODEL NO.:TA1218E

REV. NO.:2

A. MAXIMUM RATING:

1. Input Power Level: 21 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40°C to +95°C
4. Storage Temperature: -40°C to +125°C
5. Moisture Sensitivity Level: Level 3 (MSL 3)
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

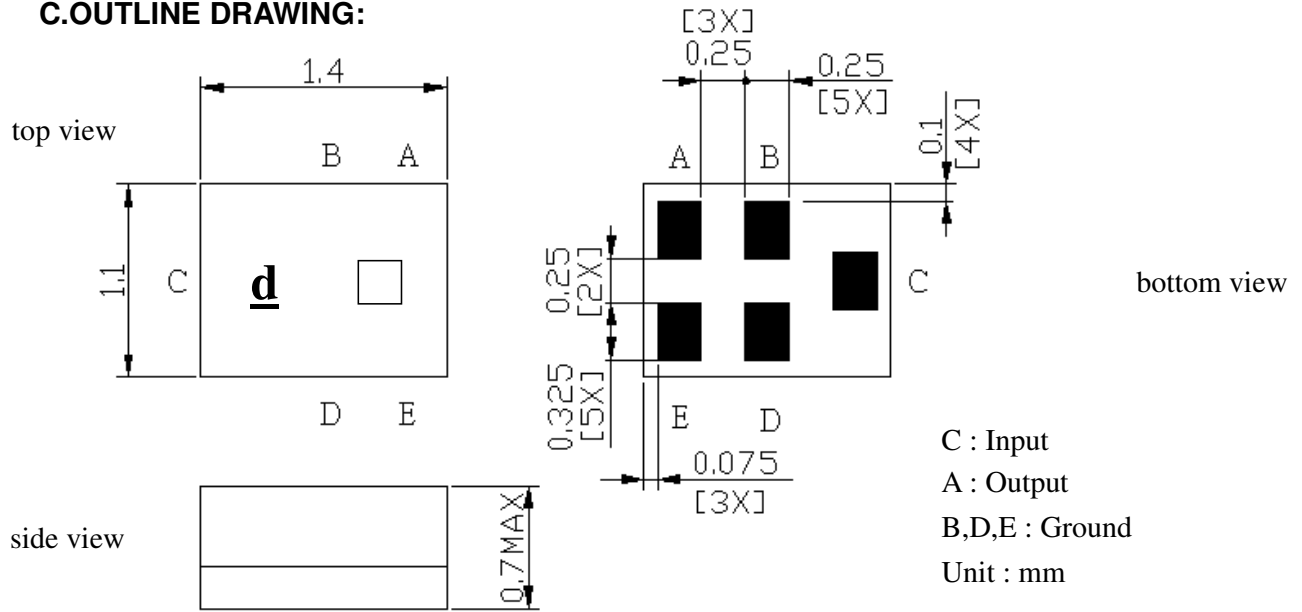
Terminating source impedance : $Z_s = 50 \Omega$

Terminating load impedance : $Z_L = 50 \Omega$

Item	Unit	Min.	Type.	Max.	Remarks
Center Frequency Fc	MHz	-	2436	-	-
Insertion Loss (2400~2472 MHz) at 25°C IL	dB	-	3	3.5	at 25°C
Insertion Loss (2400~2472 MHz)	dB	-	3.5	4.4	-40°C to +85°C
Insertion Loss (2400~2472 MHz)			5.0	5.2	-40°C to +95°C
Amplitude ripple (2400~2472 MHz) at 25°C	dB	-	1.5	2.1	at 25°C
Amplitude ripple (2400~2472 MHz)	dB	-	2	3.3	-40°C to +85°C
Amplitude ripple (2400~2472 MHz)			2.4	3.8	-40°C to +95°C
VSWR (2400~2472 MHz)		-	2.1	2.5	-40°C to +85°C
VSWR (2400~2472 MHz)			2.1	2.5	-40°C to +95°C
Attenuation (Reference level from 0 dB)					
DC~960 MHz	dB	25	35	-	-
960~1580 MHz	dB	25	33	-	-
1710~1990 MHz	dB	25	34	-	-
2110~2170 MHz	dB	26	37	-	-
2496~2690 MHz at 25°C	dB	30	40	-	-
2496~2690 MHz	dB	10	20	-	-40°C to +85°C
2496~2690 MHz	dB	8	17	-	-40°C to +95°C
2690~4800 MHz	dB	25	44	-	-
4800~5000 MHz	dB	20	36	-	-
5000~6000 MHz	dB	15	31	-	-

Temperature Coefficient of Frequency	ppm/ °C	-	-36	-	-
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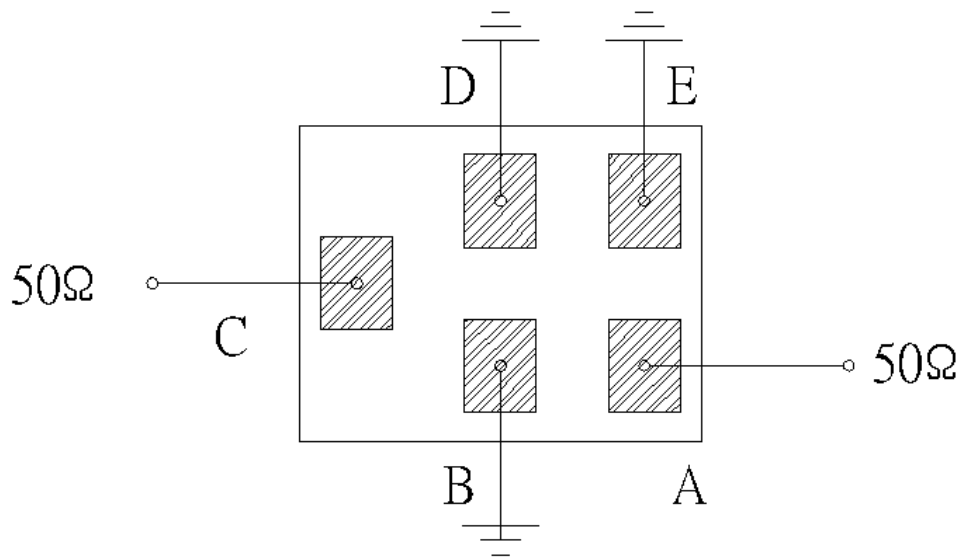
C.OUTLINE DRAWING:



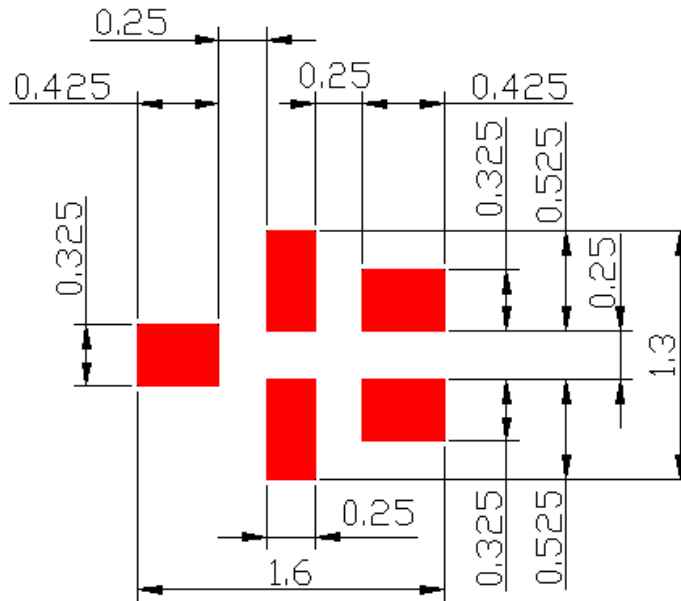
□ : Year/Month Code (Follow the table)


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>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>

D. MEASUREMENT CIRCUIT:

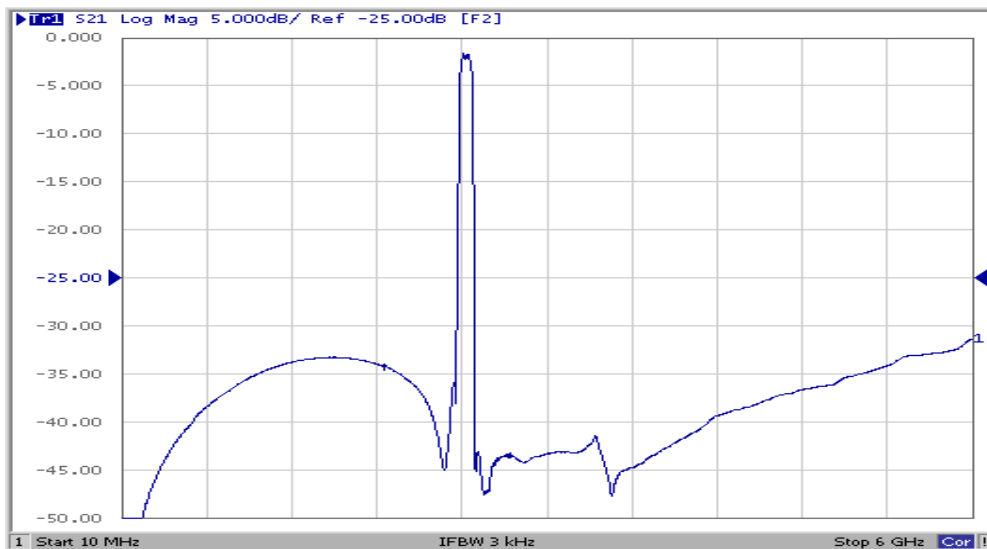
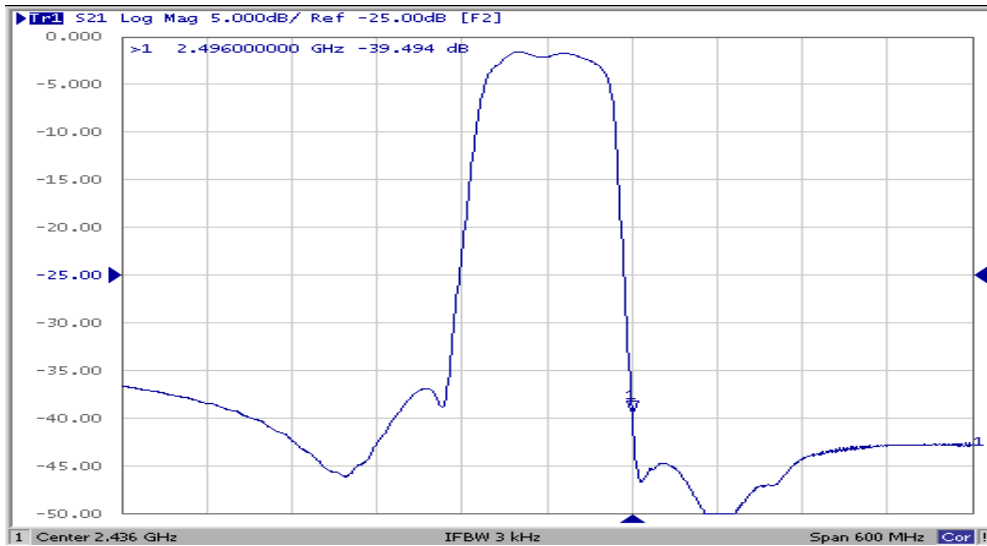
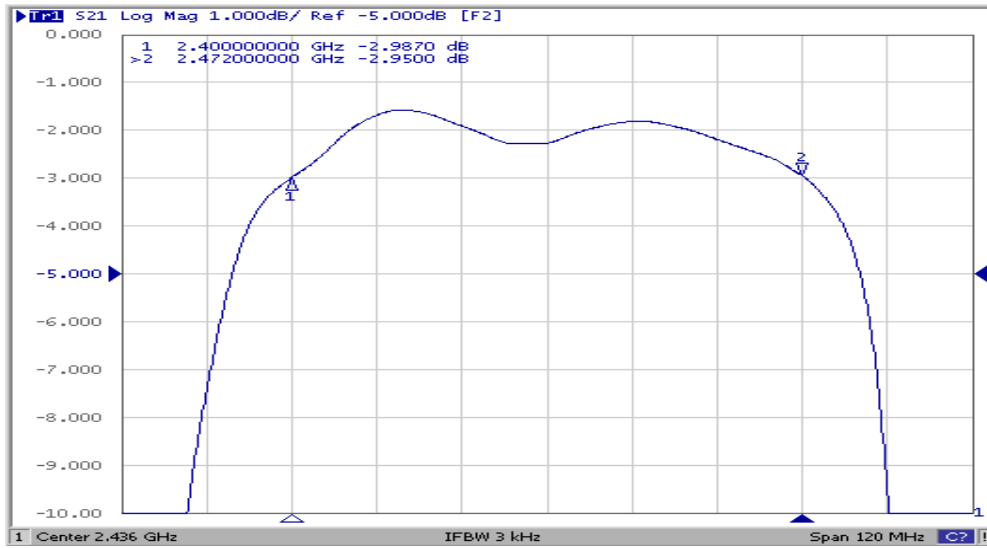


E. PCB Footprint:



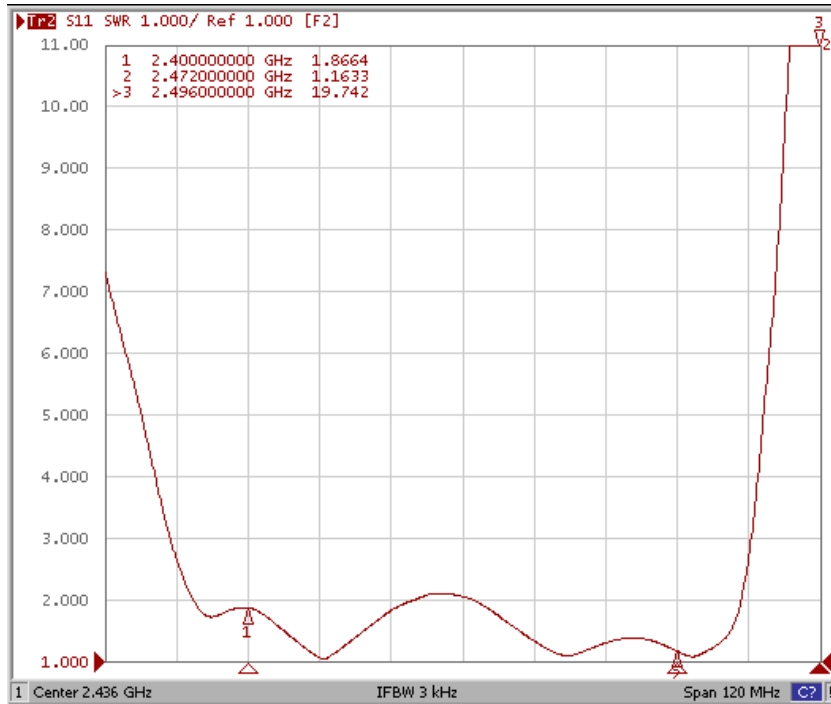
 : Land Pattern
 Unit : mm

F. Frequency Characteristics :

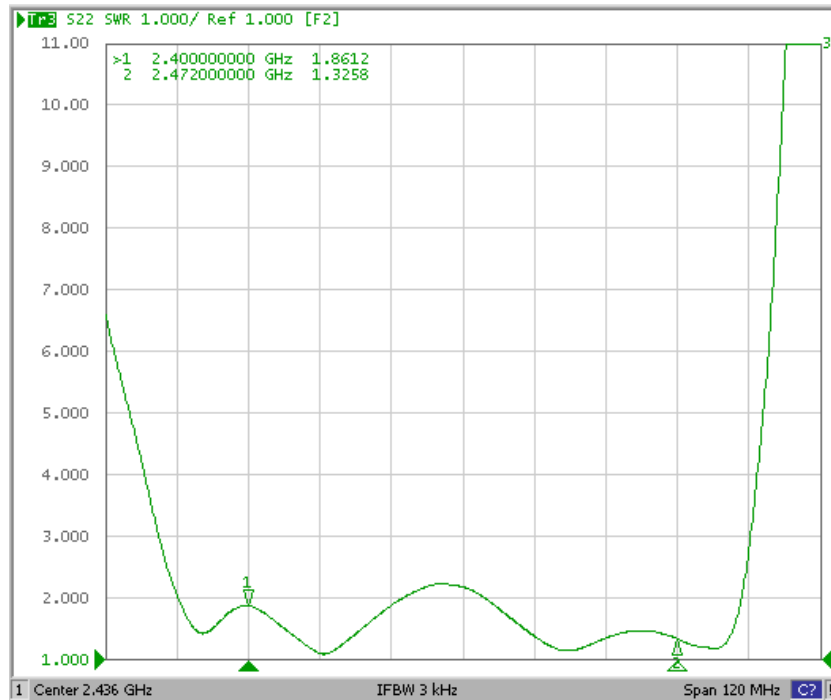


Reflection Functions :

S11



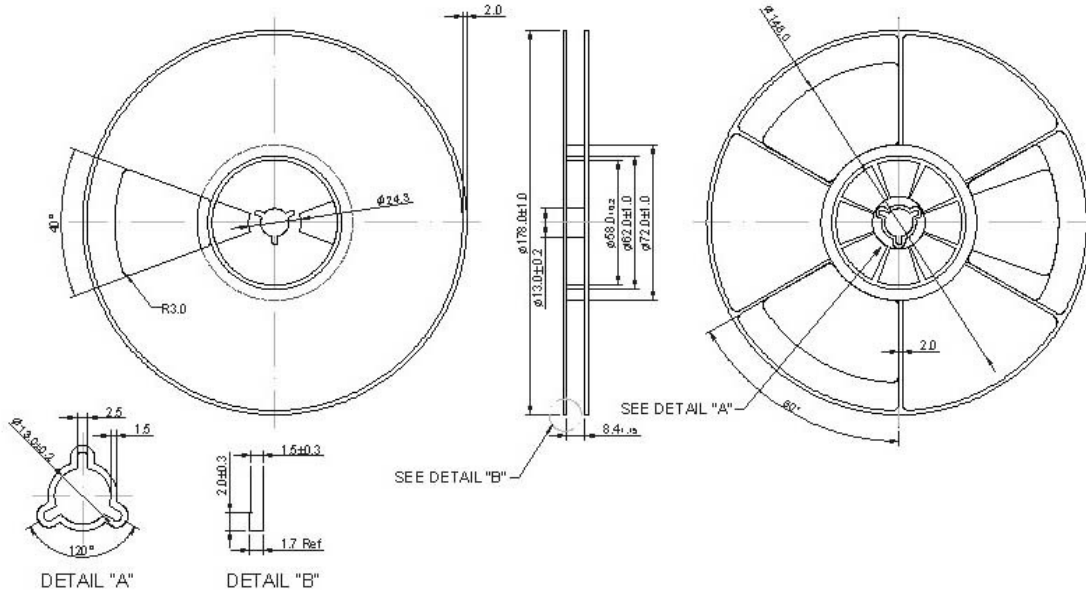
S22



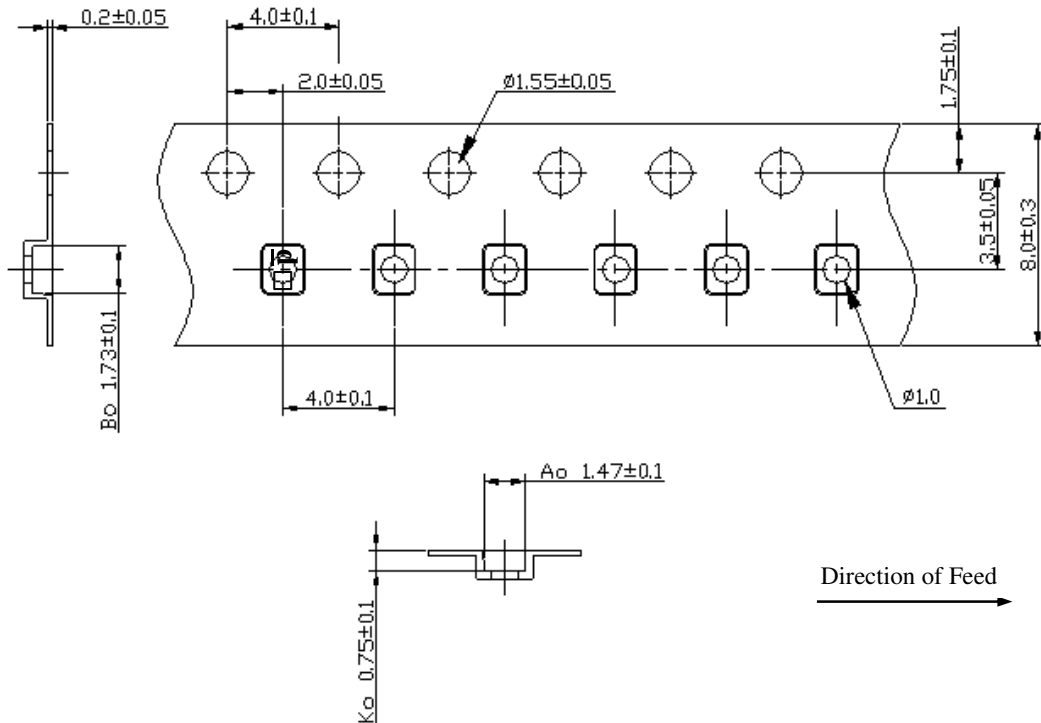
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at $150\sim 180^{\circ}\text{C}$ for $60\sim 90$ seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for $50\sim 80$ seconds and at $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ peak ($20\sim 40$ sec).
4. Time: 2 times.

