



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 869 MHz SMD 1.4x1.1 mm (BW=6 MHz)

TST Part No.: TA2381A

Customer Part No.: _____

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

Checked by: _____ David Chang *David*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2018/04/18

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 869 MHz

MODEL NO.:TA2381A

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3 V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 3(MSL3)
6. ESD voltage: 100V(MM), 200V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

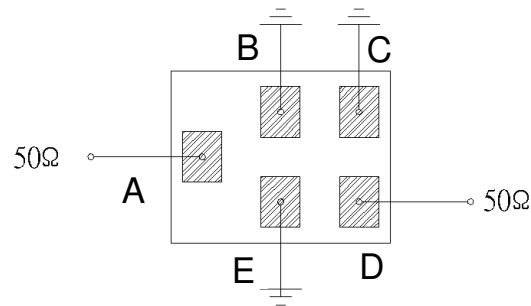
Terminating source impedance : $Z_s = 50 \Omega$

Terminating load impedance : $Z_L = 50 \Omega$

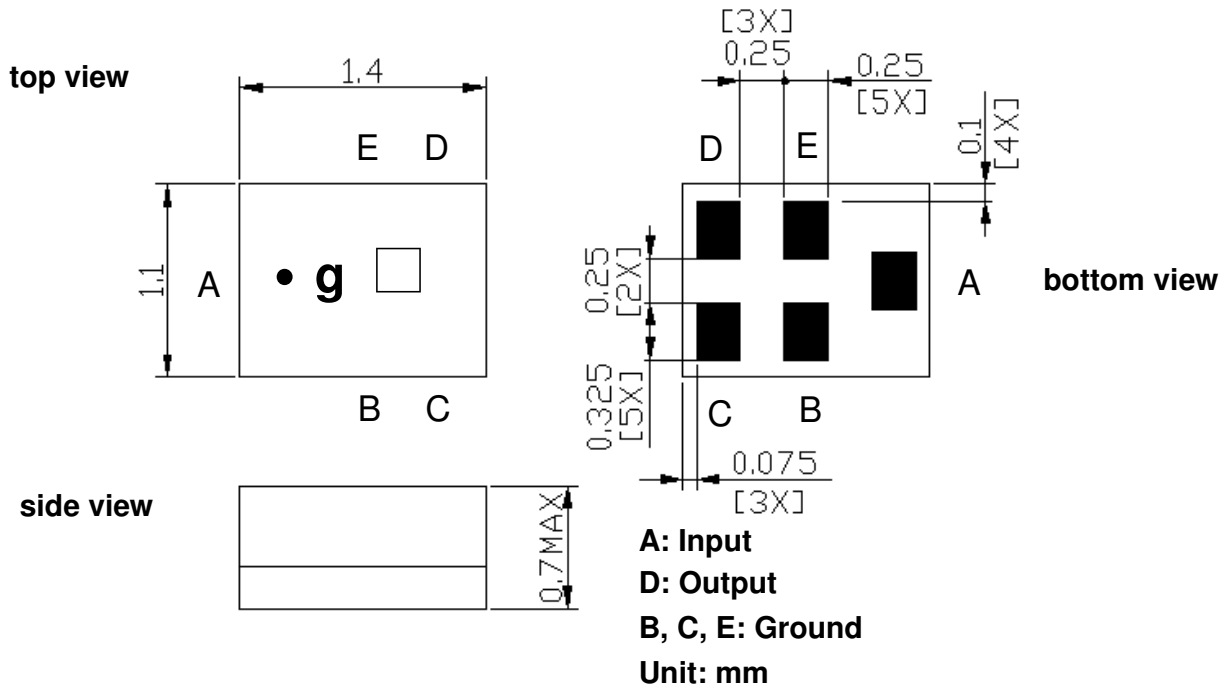
Item	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	869	-
Insertion Loss (866~872 MHz) IL	dB	-	2.5	3.5
Amplitude ripple (866~872 MHz)	dB	-	0.4	1.5
VSWR (866~872 MHz)	-	-	1.6	2.2
Attenuation (Reference level from 0 dB)				
0.3 ~ 750 MHz	dB	55	65	-
750 ~ 815 MHz	dB	52	59	-
815 ~ 824 MHz	dB	45	58	-
824 ~ 830 MHz	dB	45	55	-
830 ~ 835 MHz	dB	40	54	-
835 ~ 840 MHz	dB	40	53	-
898 ~ 925 MHz	dB	32	35	-
925 ~ 1920 MHz	dB	40	44	-
1920 ~ 1940 MHz	dB	40	44	-
1940 ~ 1980 MHz	dB	40	44	-
1980 ~ 3000 MHz	dB	32	37	-
3000 ~ 4000 MHz	dB	28	33	-
Temperature coefficient of frequency	ppm/k	-	-36	-

Item	Unit	Min.	Typ.	Max.
Attenuation (Reference level from 0 dB)				
2nd Harmonic (1736~1738MHZ)	dB	44	47	-
3rd Harmonic (2604~2607MHZ)	dB	35	38	-
4th Harmonic (3472~3476MHZ)	dB	32	34	-

C. MEASUREMENT CIRCUIT:



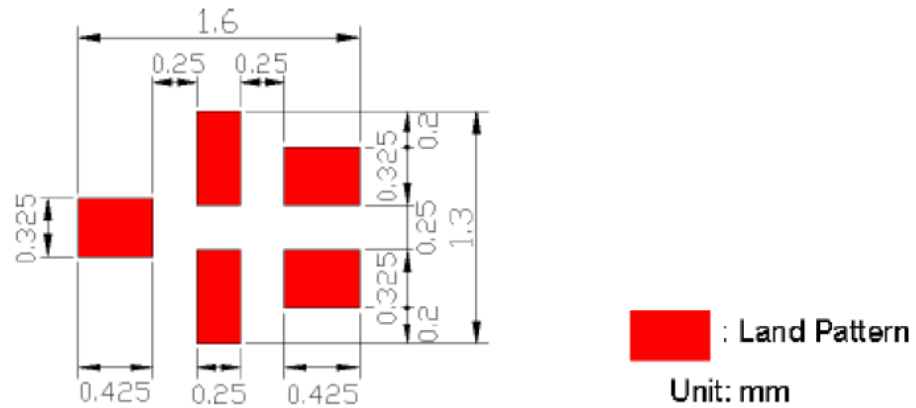
D. OUTLINE DRAWING:



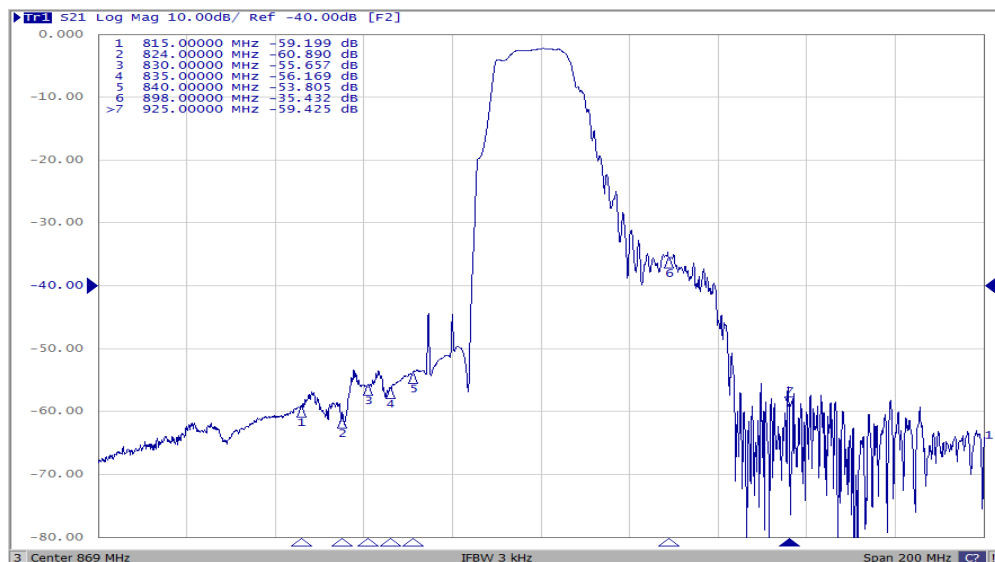
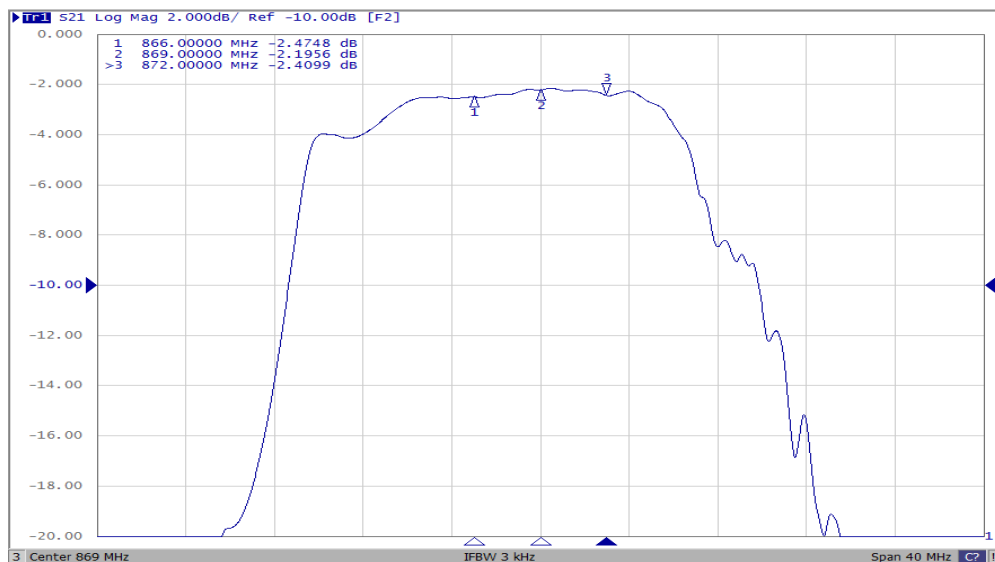
□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	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>

E. PCB Footprint:



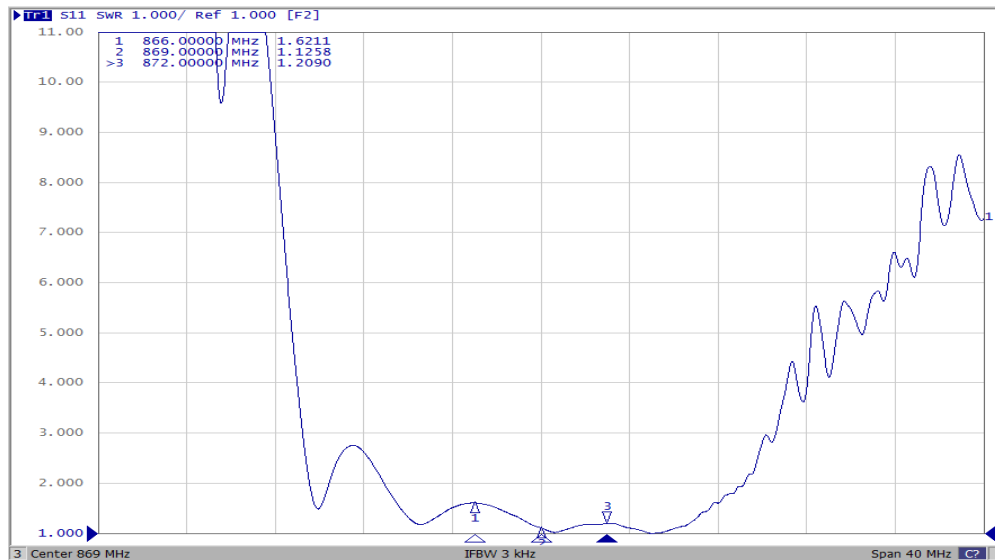
F. Frequency Characteristics:



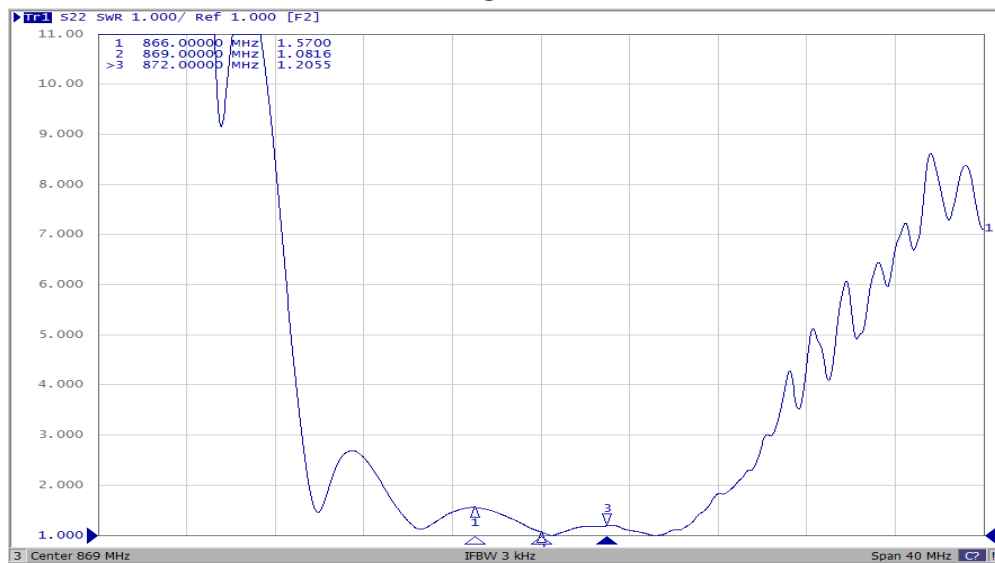


Reflection Functions:

S11



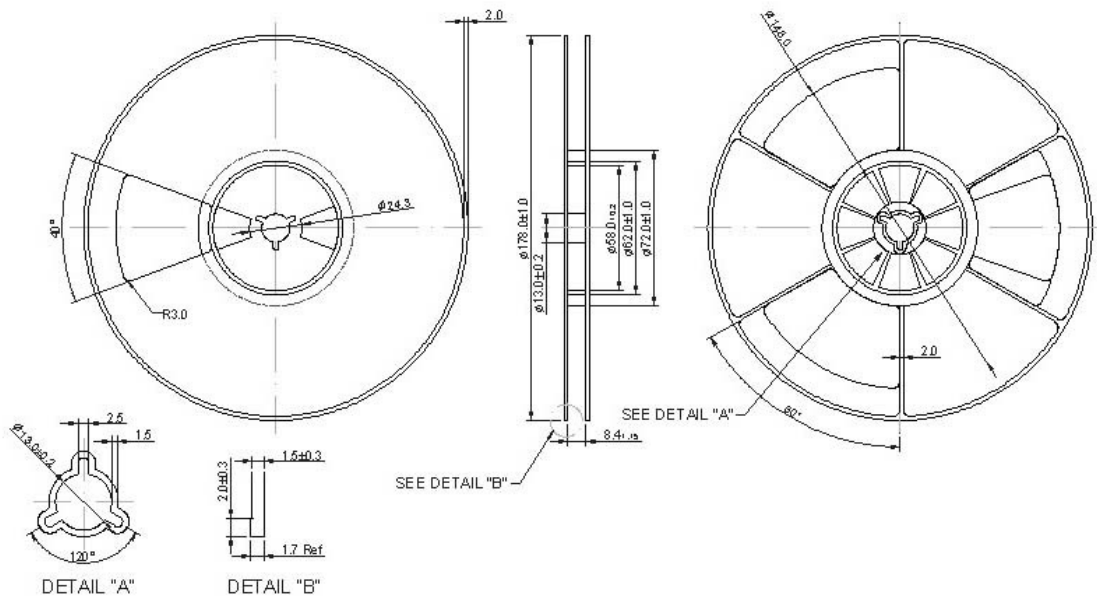
S22



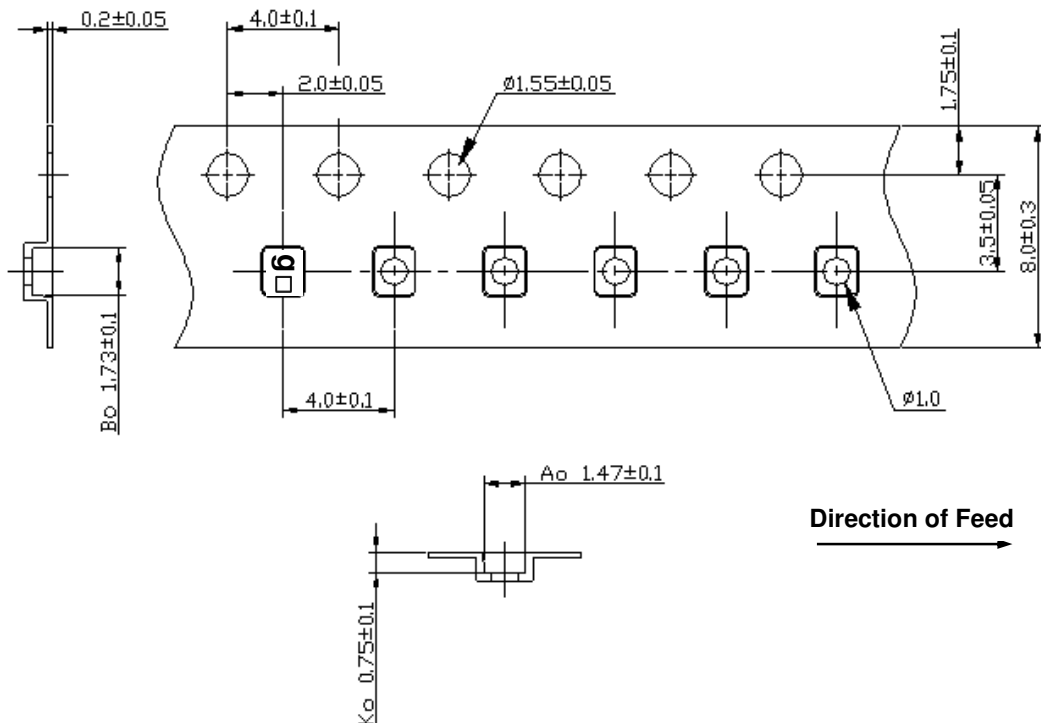
G. PACKING: (Ref. WI-75M03)

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.

