



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 Name: SAW Filter 458.8875 MHz (BW 0.775MHz) SMD 3.8X3.8 mm

TST Parts No.: TA1959A

Customer Parts No.: _____

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Sam Lin *Sam Lin*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2018/11/30

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

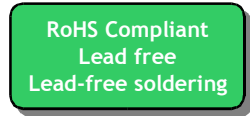
SAW Filter 458.8875MHz

MODEL NO.:TA1959A

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 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 1(MSL1)



Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

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

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

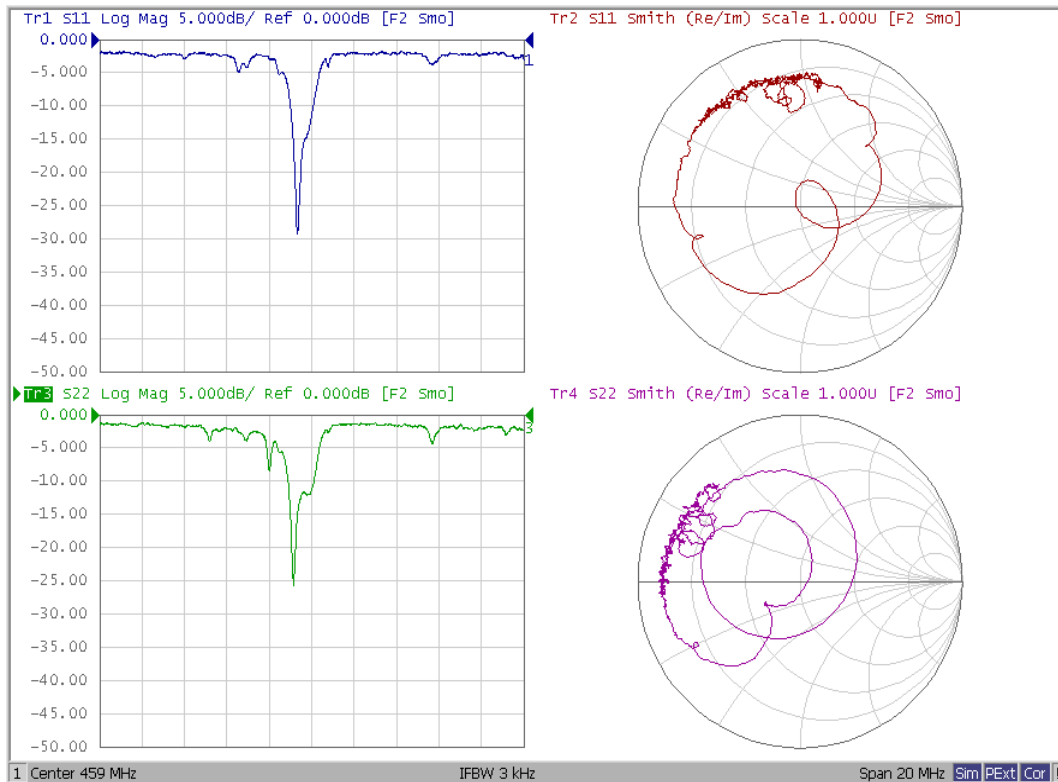
Item	Unit	Min	Type.	Max
Center Frequency	MHz	-	458.8875	-
Maximum Insertion Loss (458.5 ~ 459.275 MHz)	dB		3.0	4.0
Amplitude Ripple (458.5 ~ 459.275 MHz)	dB		1.2	2.0
2dB Bandwidth	MHz	0.775	1.500	
Attenuation (Reference level from IL min)				
10 ~ 135.9 MHz	dB	40	65	
135.9 ~ 446.5 MHz	dB	30	40	
446.5 ~ 457 MHz	dB	10	13	
460.5 ~ 469.8 MHz	dB	10	15	
469.8 ~ 515 MHz	dB	22	30	
515~1000 MHz	dB	40	44	
Temperature	ppm/k ²		-0.036	
Impedance (By NA simulation)				
Input: $Z_{IN} = L_{s1}/C_{p1}$	nH/pF		90/5	
Output: $Z_{OUT} = L_{s2}/C_{p2}$	nH/pF		88/5	

C. Frequency Characteristics:

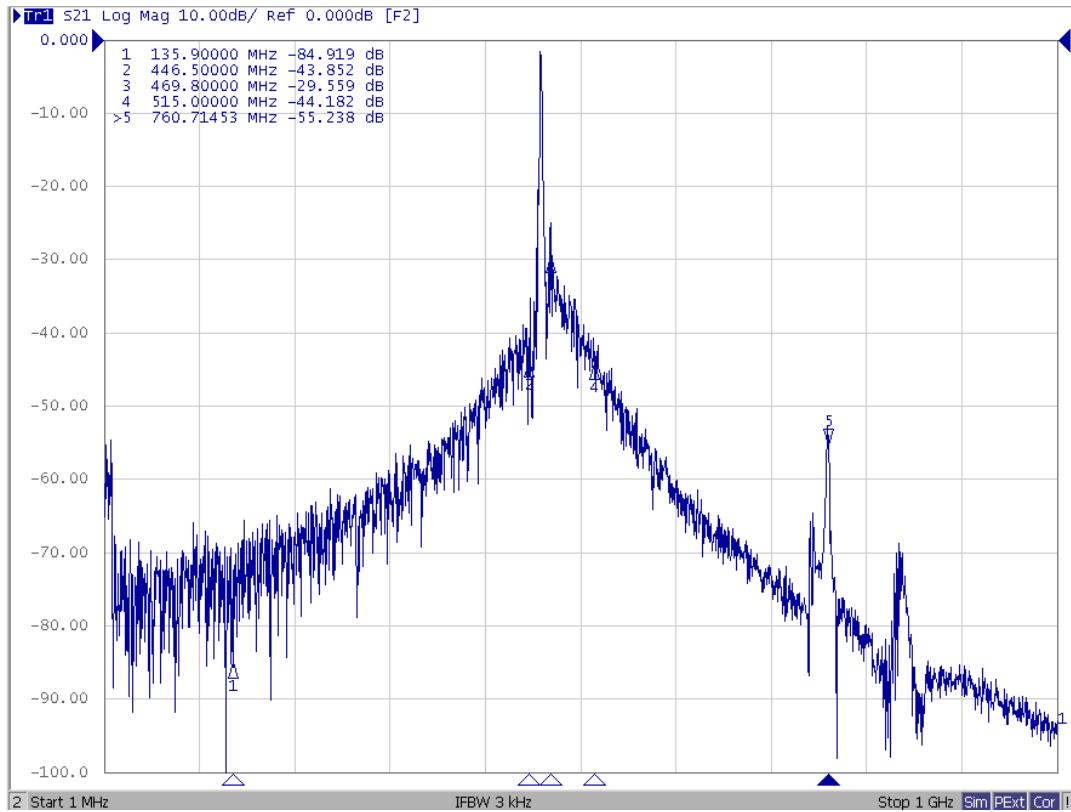
Center 460MHz, span 20 MHz



Reflective Characteristics

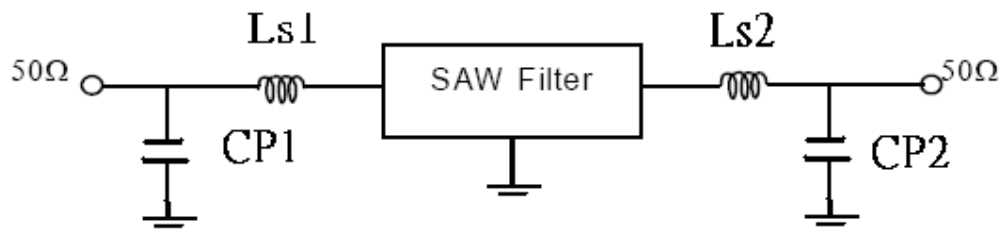


1MHz ~ 2000MHz



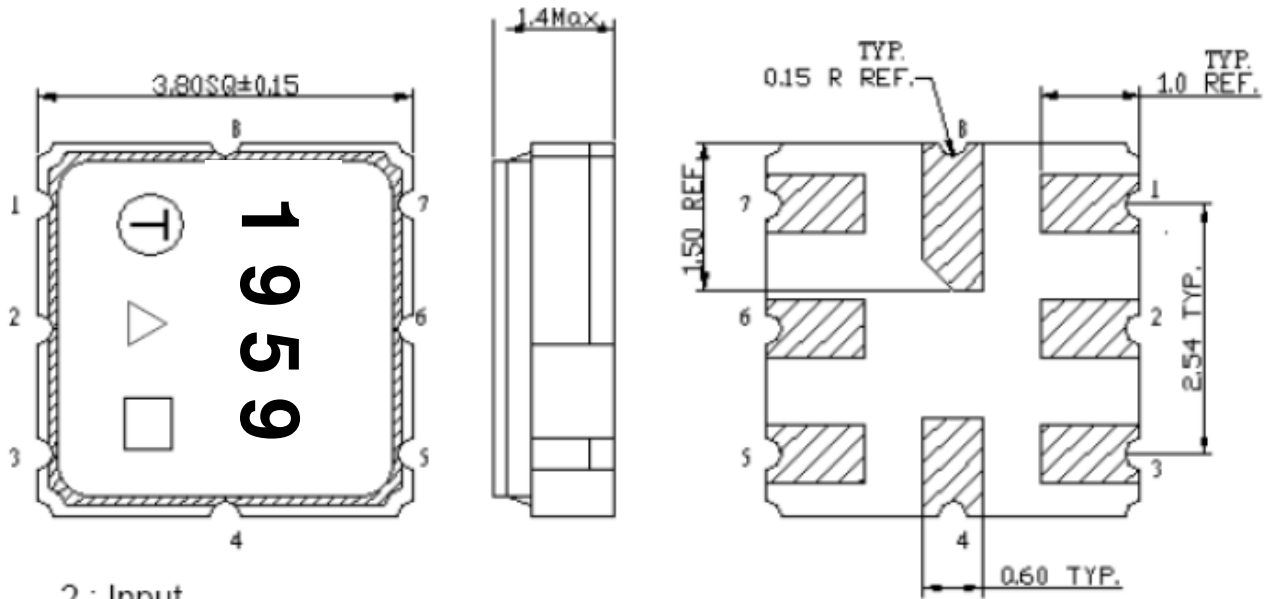
D.. TEST CIRCUIT:

The matching circuit is



$Ls1 = 90\text{nH}$, $Ls2 = 88\text{nH}$, $Cp1 = 5\text{pF}$, $Cp2 = 5\text{pF}$

E.OUTLINE DRAWING:



2 : Input

6: Output

1,3,4,5,7,8: Ground

△ : Year Code

□ : Date Code (W01->A, W02->B,...,W52->z)

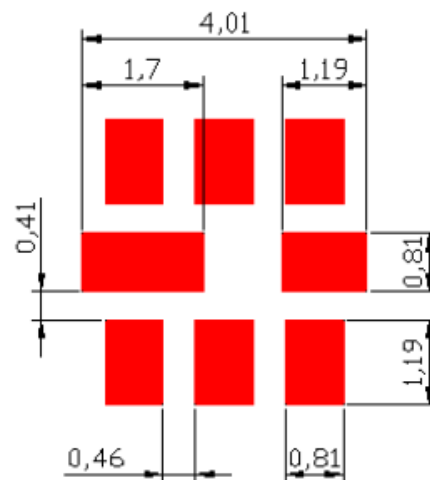
Product Year Code

Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	A	a	A	a

Date Code Table:

WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

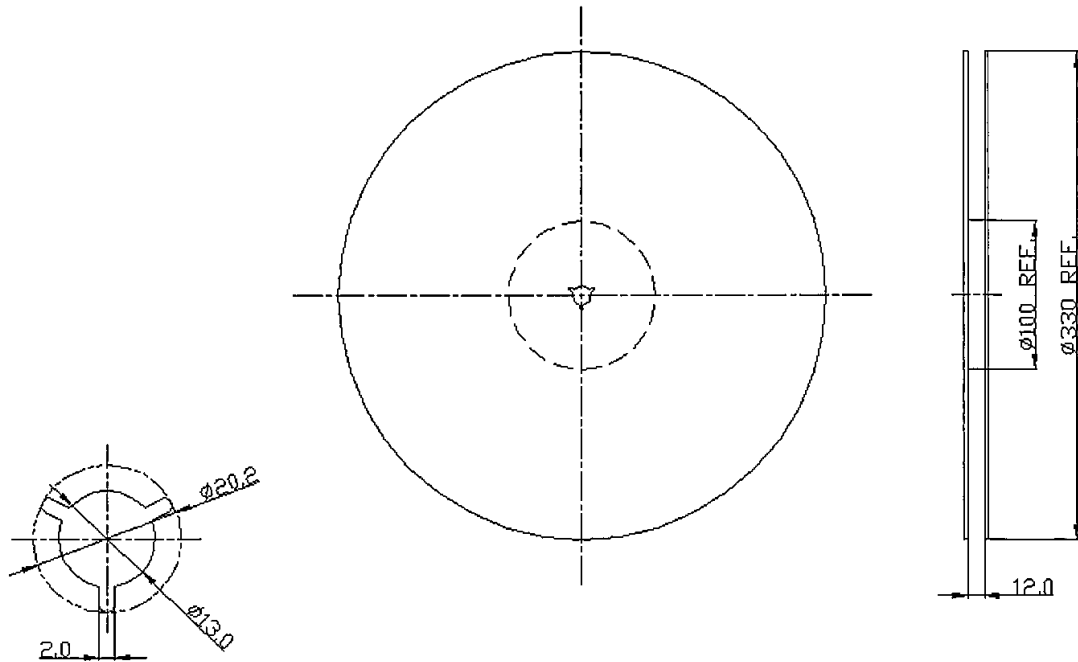
F. PCB FOOTPRINT:



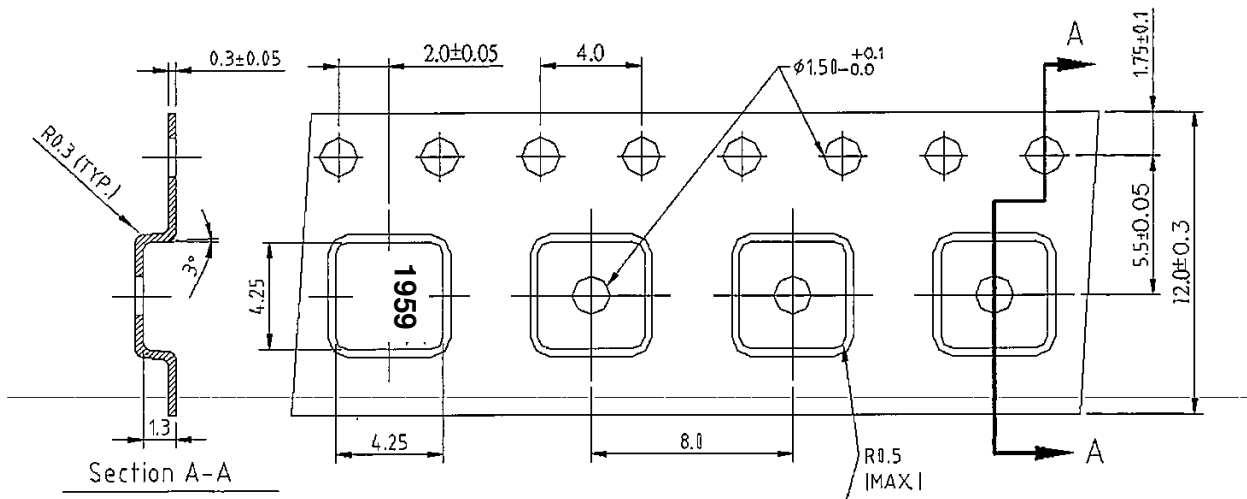
G. PACKING:

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.

