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 521MHz SMD 3.8x3.8 mm (BW=30MHz)

TST Parts No.: TA2505A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____Hong Pu Lin Hong Pu Lin_____

Approval by:_____Andy Yu Andy Yu_____

Date:_____2019/04/26_____

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 521 MHz

MODEL NO.: TA2505A REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 10 dB_m
2. DC voltage: 5 V
3. Operating Temperature: -30°C to +60°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 1(**MSL1**)

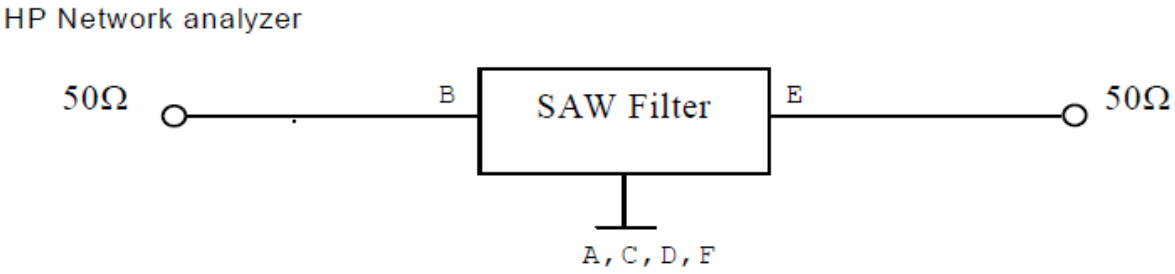
RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (**ESD**)

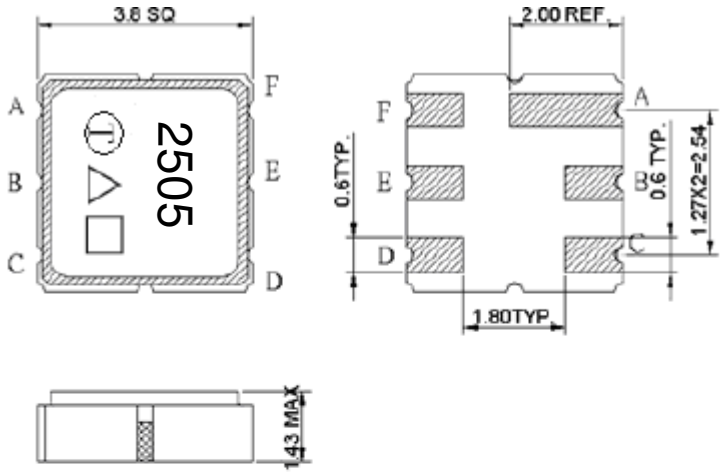
B. ELECTRICAL CHARACTERISTICS:

Item	Unit	min	type	Max
Center Frequency **Fc**	MHz		521	
Insertion Loss506~536MHz **IL(25°C)**	dB		3	4.5
Insertion Loss506~536MHz **IL(-30°C to +60°C)**	dB		4.2	6
Amplitude Ripple 506~536MHz	dB		1.3	4
Absolute Delay 506~536MHz	ns		45	**85**
Bandwidth -4.5dB	MHz	30	36	
Attenuation (Reference level from 0dB)				
10~480 MHz	dB	30	34	
480~486 MHz	dB	15	21	
552~605 MHz	dB	10	18	
605~830 MHz	dB	30	43	
830~1000 MHz	dB	25	38	
Temperature Coefficient of Frequency	ppm/℃	-75 typ		

C. MEASUREMENT CIRCUIT:



D. OUTLINE DRAWING:

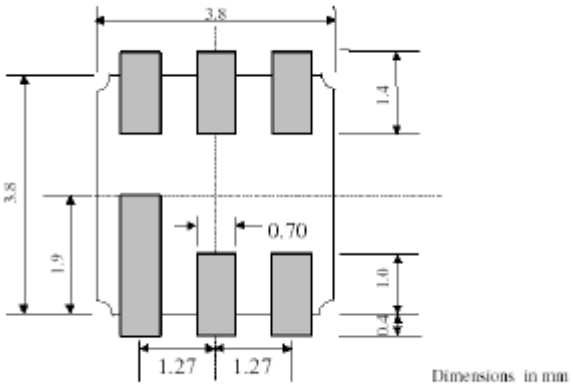


B : Input
E: Output
A,C,D,F Ground
△:Year Code
□: Date Code(Follow the table provided by planner each year.)
Unit: mm

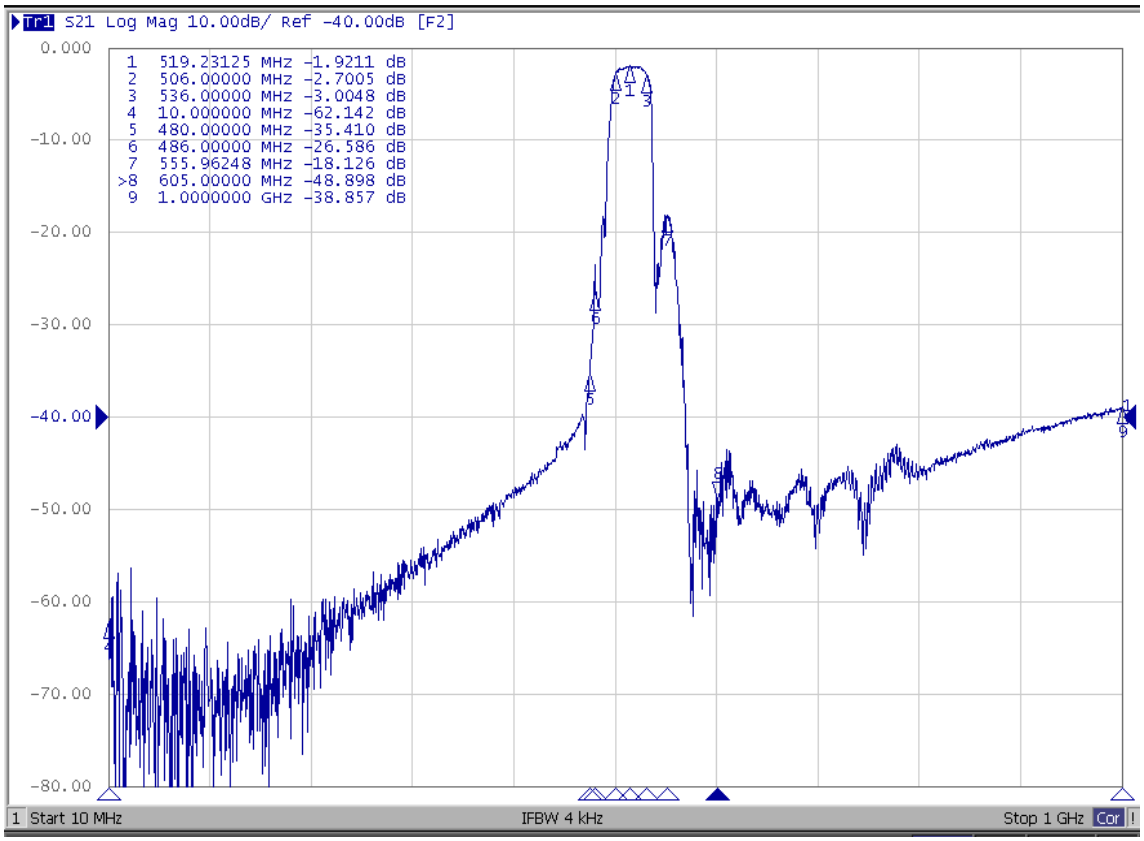
△ Product Year Code

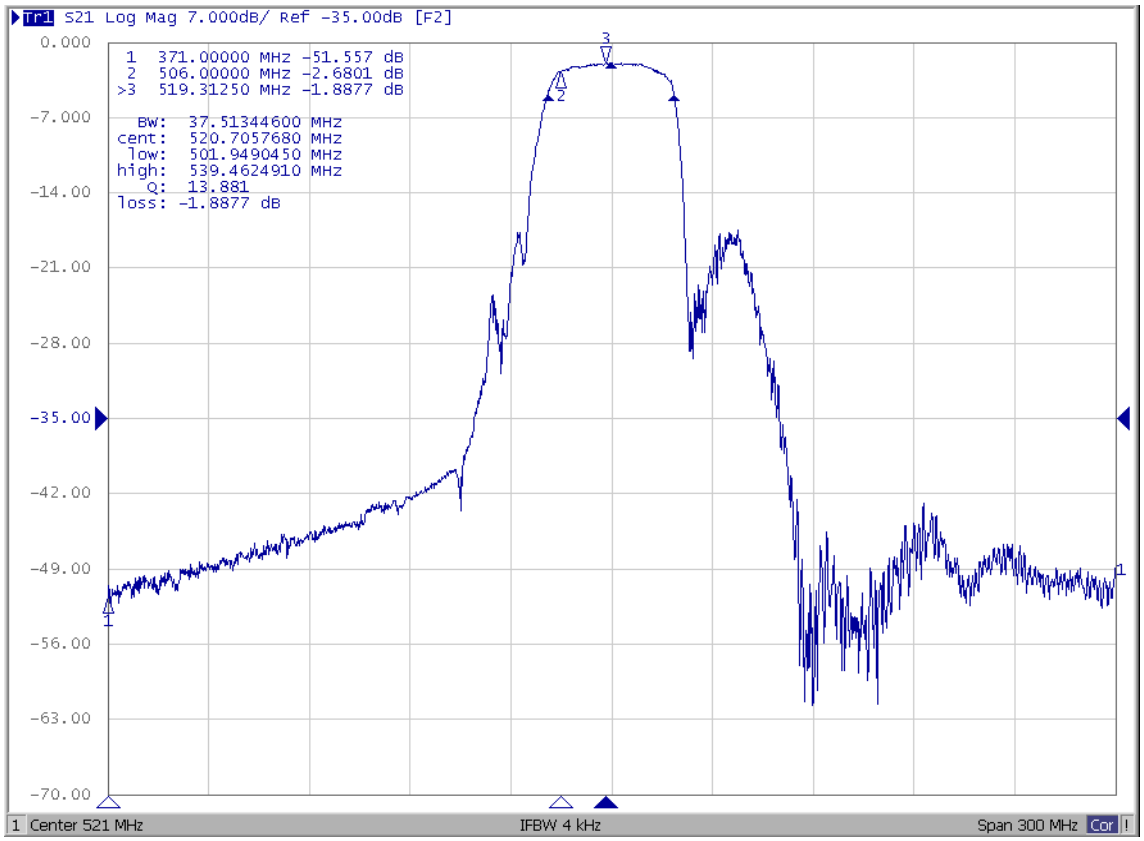
Year	2017 2019 2021 2023	2018 2020 2022 2024
Product Code	A	a

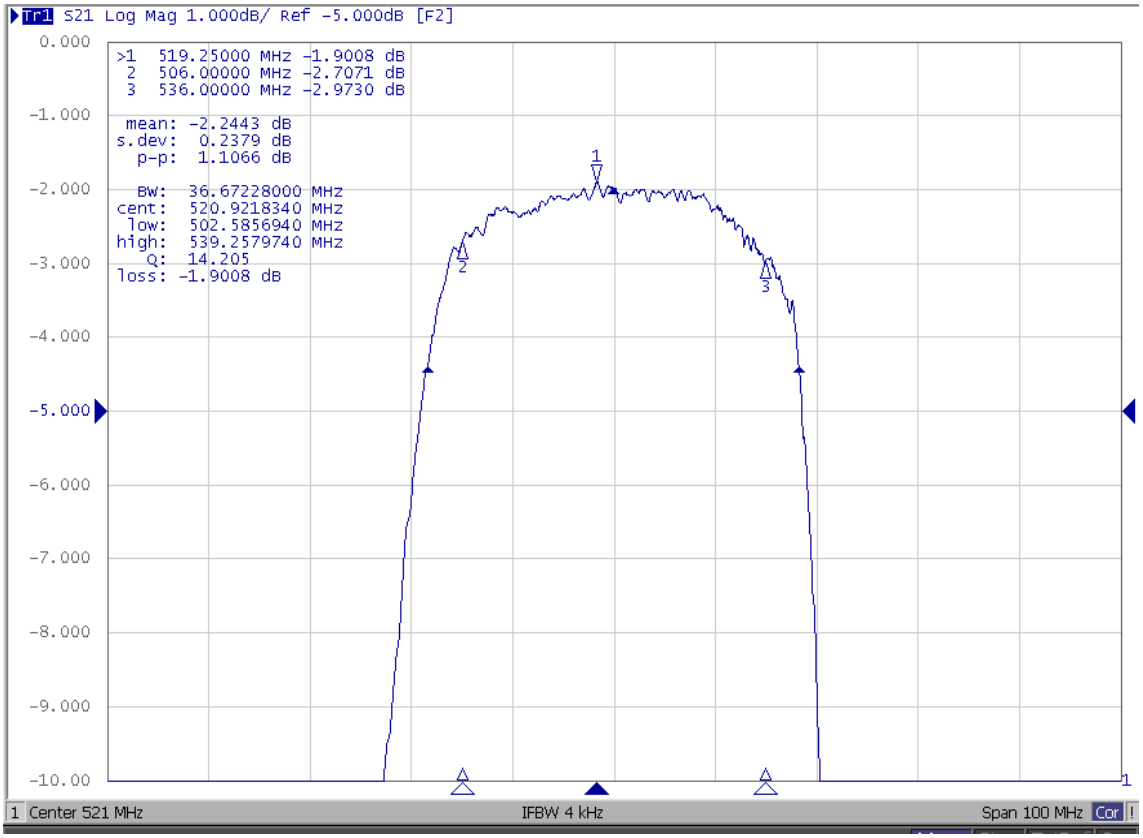
E. PCB Footprint:

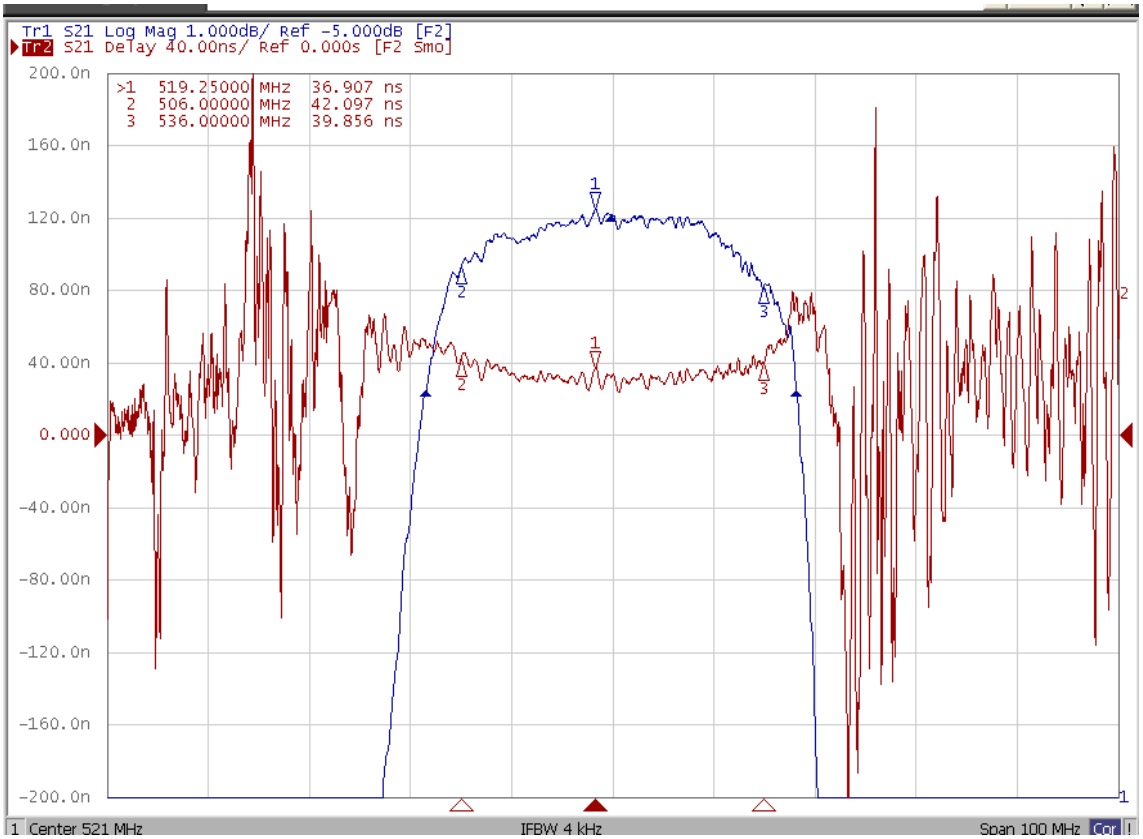


F. Frequency Characteristics:





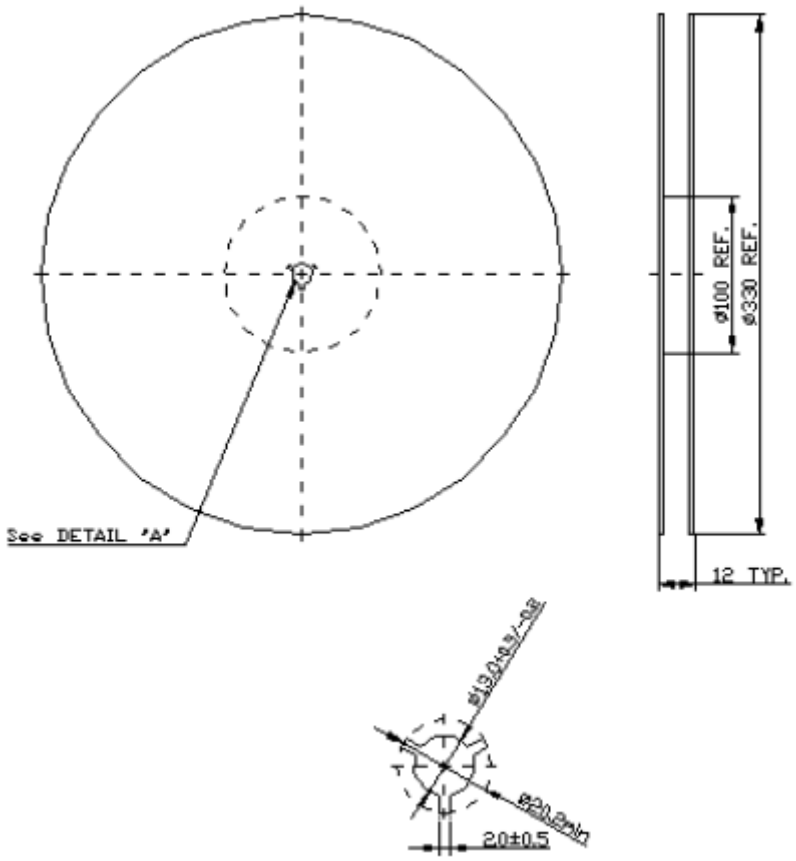

Tr1 S21 Log Mag 1.000dB/ Ref -5.000dB [F2]
>1 519.25000 MHz -1.9008 dB
2 506.00000 MHz -2.7071 dB
3 536.00000 MHz -2.9730 dB
mean: -2.2443 dB
s.dev: 0.2379 dB
p-p: 1.1066 dB
Bw: 36.67228000 MHz
cent: 520.9218340 MHz
low: 502.5856940 MHz
high: 539.2579740 MHz
Q: 14.205
loss: -1.9008 dB
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
-6.000
-7.000
-8.000
-9.000
-10.00
1 Center 521 MHz
IFBW 4 kHz
Span 100 MHz
Cor


Tr1 S21 Log Mag 1.000dB/ Ref -5.000dB [F2]
Tr2 S21 Delay 40.00ns/ Ref 0.000s [F2 Smo]
>1 519.25000 MHz 36.907 ns
2 506.00000 MHz 42.097 ns
3 536.00000 MHz 39.856 ns
200.0n
160.0n
120.0n
80.00n
40.00n
0.000
-40.00n
-80.00n
-120.0n
-160.0n
-200.0n
1 Center 521 MHz
IFBW 4 kHz
Span 100 MHz
Cor

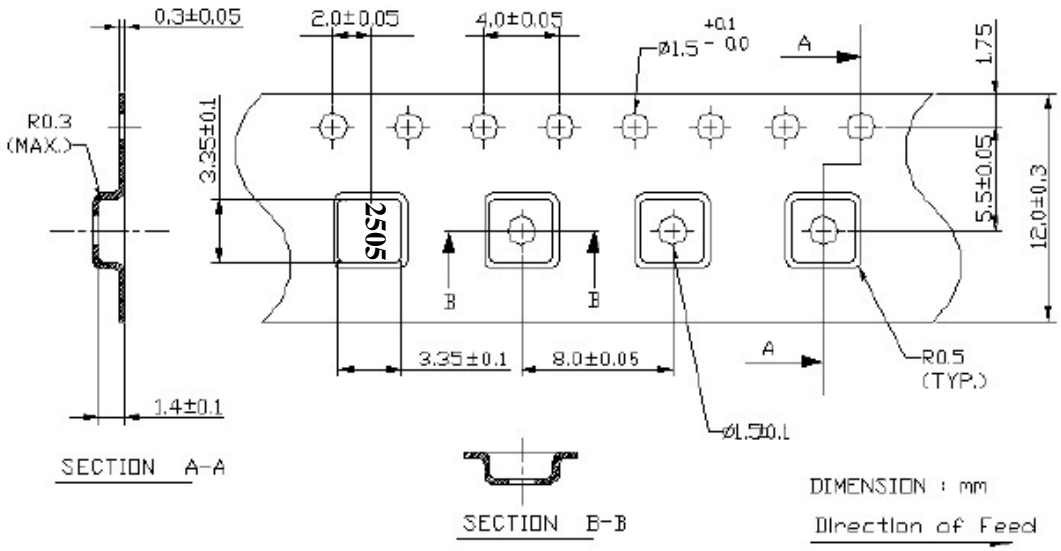
G. PACKING: (**Ref. WI-75M03**)

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℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 260℃+0/-5℃ peak (20~40sec).
4. Time: 2 times.

