



# 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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Approval Sheet For Product Specification

Issued Date:

Product Name: 171MHz 8MHz BW SMD5x5mm RF SAW Filter

TST Parts No.:TA0181A

Customer Parts No.:\_\_\_\_\_

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

Checked by: \_\_\_\_\_ V.J Fanchian *VJ Fanchian*

Approval by: \_\_\_\_\_ Andy Yu *Andy Yu*

Date: \_\_\_\_\_ 2019/3/15

## 171MHz 8MHz BW SMD5x5mm RF SAW Filter

MODEL NO.: TA0181A

REV. NO.:4.0

### A. MAXIMUM RATING:

1. Input Power Level: 0 dB<sub>m</sub>
2. DC voltage: 10 V
3. Operating Temperature: -10°C to +50°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitive Level (MSL): Level 1

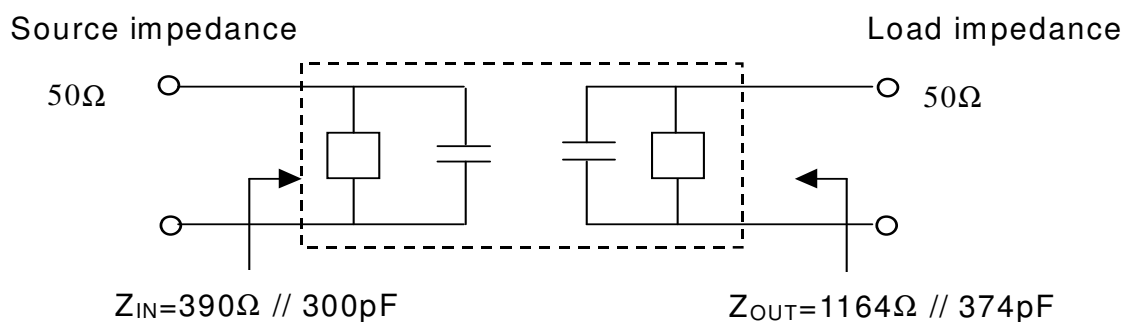
RoHS Compliant  
Lead free  
Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

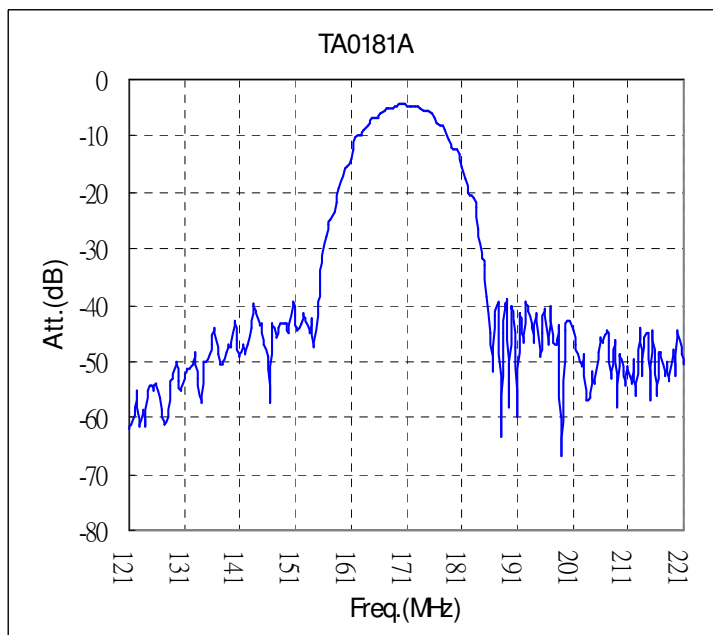
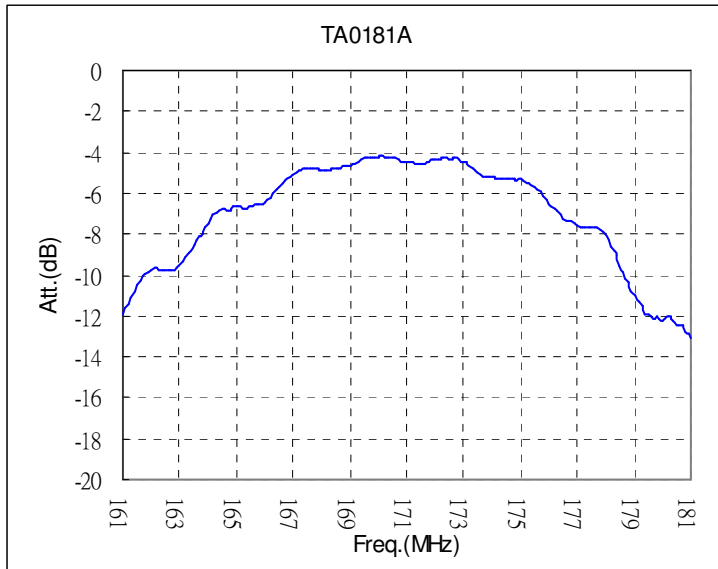
Characteristics	Specification	Note
Center frequency $F_c$ (MHz)	171	1
I.L. (Within $F_c \pm 4$ MHz)	6.5 Max.	
Amplitude Ripple, <b>A.R.</b> (Within $F_c \pm 4$ MHz) (dB)	2.1 Max.	
Attenuation:( Reference level from 0 dB) (dB )		
$F_c - 100$ MHz to $-38.8$ MHz (dB )	50 Min.	1
$F_c + 38.8$ MHz to $+ 100$ MHz (dB )	42 Min.	
Impedance at $F_c$ ; Input $Z_{IN} = R_{IN} // C_{IN}$	390 $\Omega$ // 300 pF	2
Output $Z_{OUT} = R_{OUT} // C_{OUT}$	1164 $\Omega$ // 374 pF	2

Note1. The standard definitions is in JIS C 6703

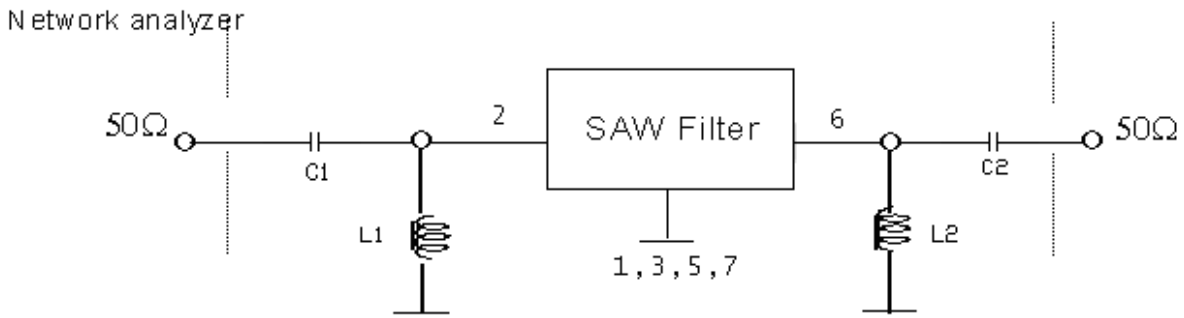
Note2.



### C. Frequency Characteristics :

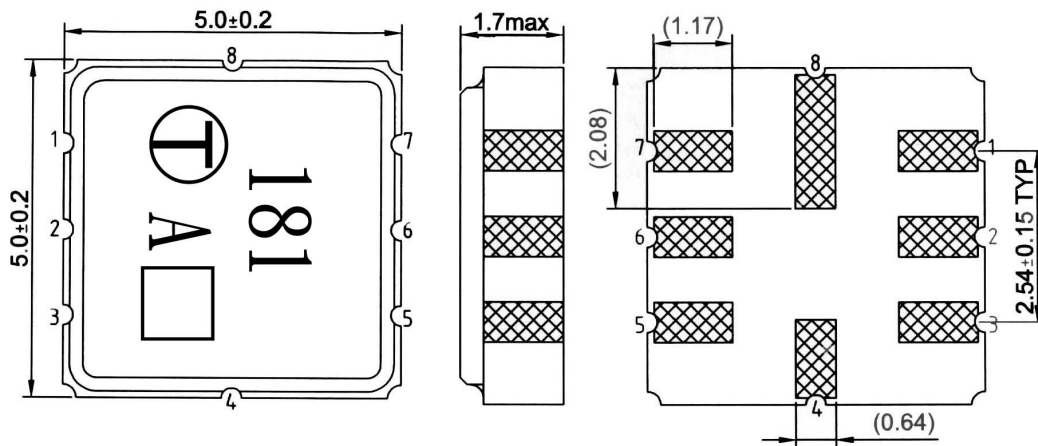


### D. MEASUREMENT CIRCUIT:



$C1 = 10 \text{ pF}$      $L1 = 37 \text{ nH}$   
 $C2 = 8 \text{ pF}$      $L2 = 40 \text{ nH}$

### E. OUTLINE DRAWING:



#2 : Input  
 #6 : Output  
 #4、8 : Case Ground  
 #1、3、5、7 : Ground  
 □ : Date code  
 Unit : mm

