



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Approval Sheet For Product Specification

Issued Date: Oct, 22, 2004

Product Name: SAW Filter 1747.5 MHz SMD 3X3 mm

TST Parts No.:TA0391A

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

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

Checked by: \_\_\_\_\_ Bob Chau

Approval by: \_\_\_\_\_ Francis Chen

Date: \_\_\_\_\_ 10, 22, 2004



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## SAW Filter 1747.5 MHz for PCN

MODEL NO.: TA0391A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 5 dB<sub>m</sub>
2. DC voltage: 0 V
3. Operating Temperature: -20°C to +70°C
4. Storage Temperature: -40°C to +85°C

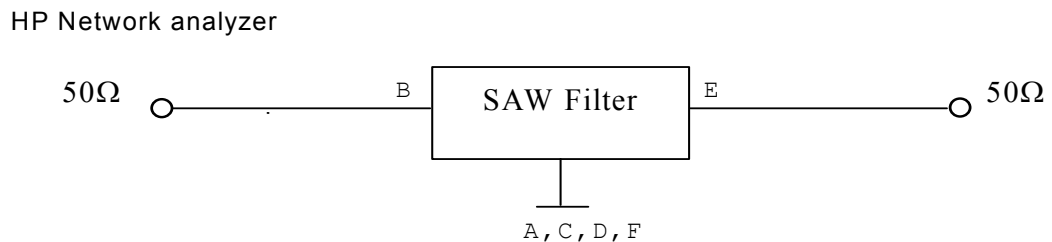
RoHS Compliant  
Lead free  
Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

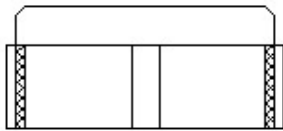
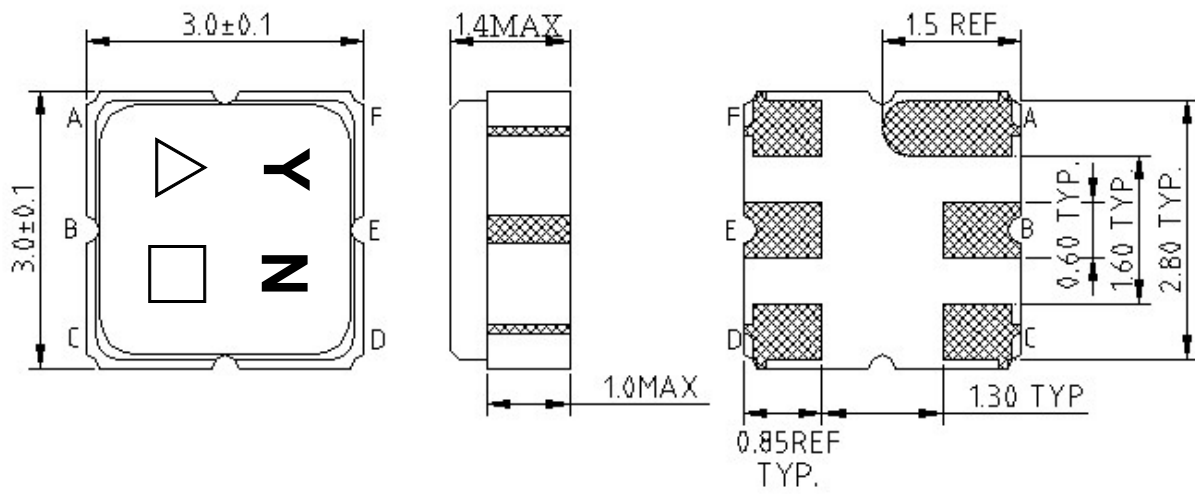
Item		Min.	Typ.	Max.
<b>Center frequency</b>	<b>F<sub>c</sub></b> (MHz)	-	1747.5	-
<b>Insertion loss</b> (1710~1785 MHz)	<b>IL</b> (dB)	-	2.6	4.0
<b>Amplitude ripple</b> (1710~1785 MHz)	(dB)	-	1.6	2.5
<b>Attenuation</b> (Reference level from 0 dB)				
10 ~ 1670	MHz (dB)	15	23	-
1670 ~ 1690	MHz (dB)	6	23.9	-
1805 ~ 1880	MHz (dB)	6	24	-
1880 ~ 4500	MHz (dB)	15	25	-
4500 ~ 5000	MHz (dB)	10	14	-
<b>Input/Output VSWR</b> (1710~1785 MHz)		-	1.8	2.5
<b>Source impedance</b>	Z <sub>s</sub> (Ω)	-	50	-
<b>Load impedance</b>	Z <sub>L</sub> (Ω)	-	50	-

Note1. The standard definitions is in JIS C 6703

### C. MEASUREMENT CIRCUIT:



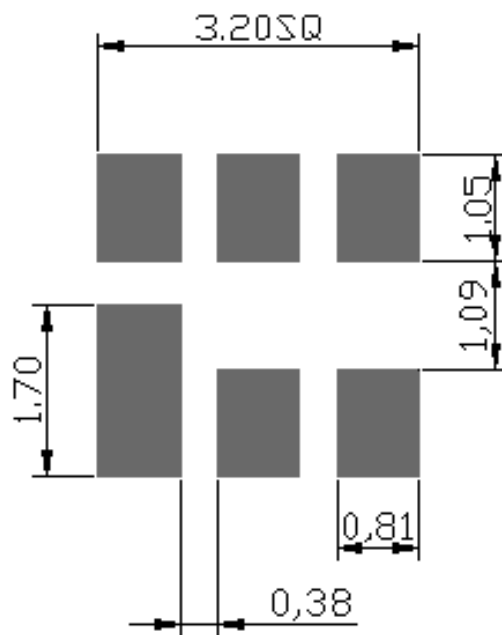
**D. OUTLINE DRAWING:**



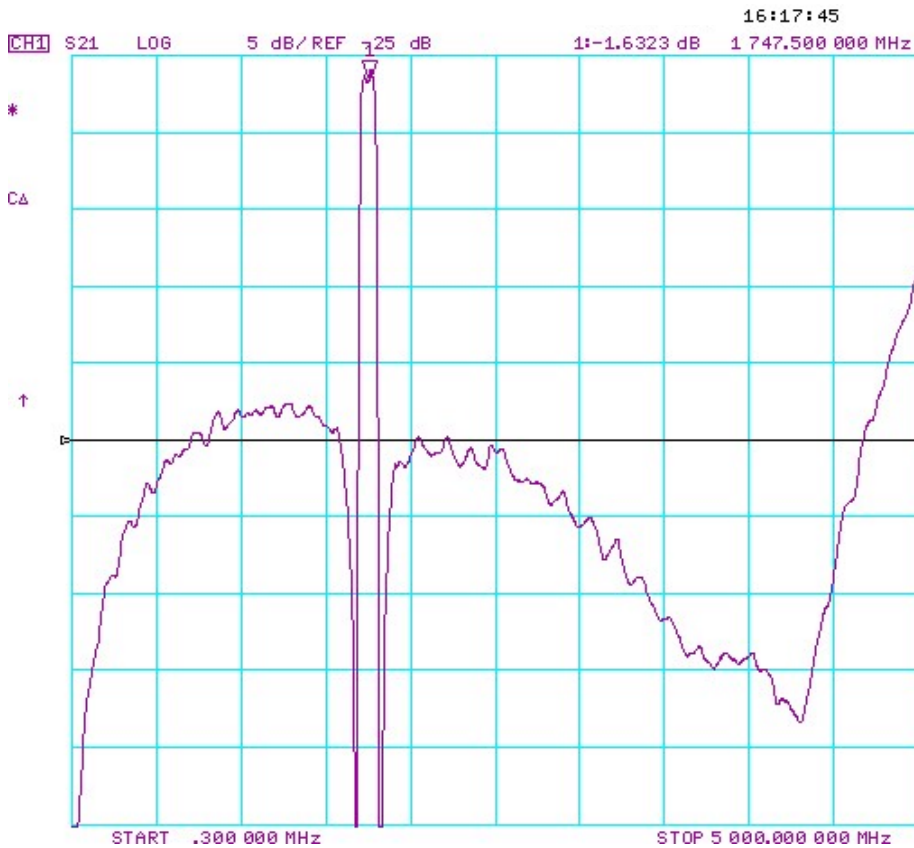
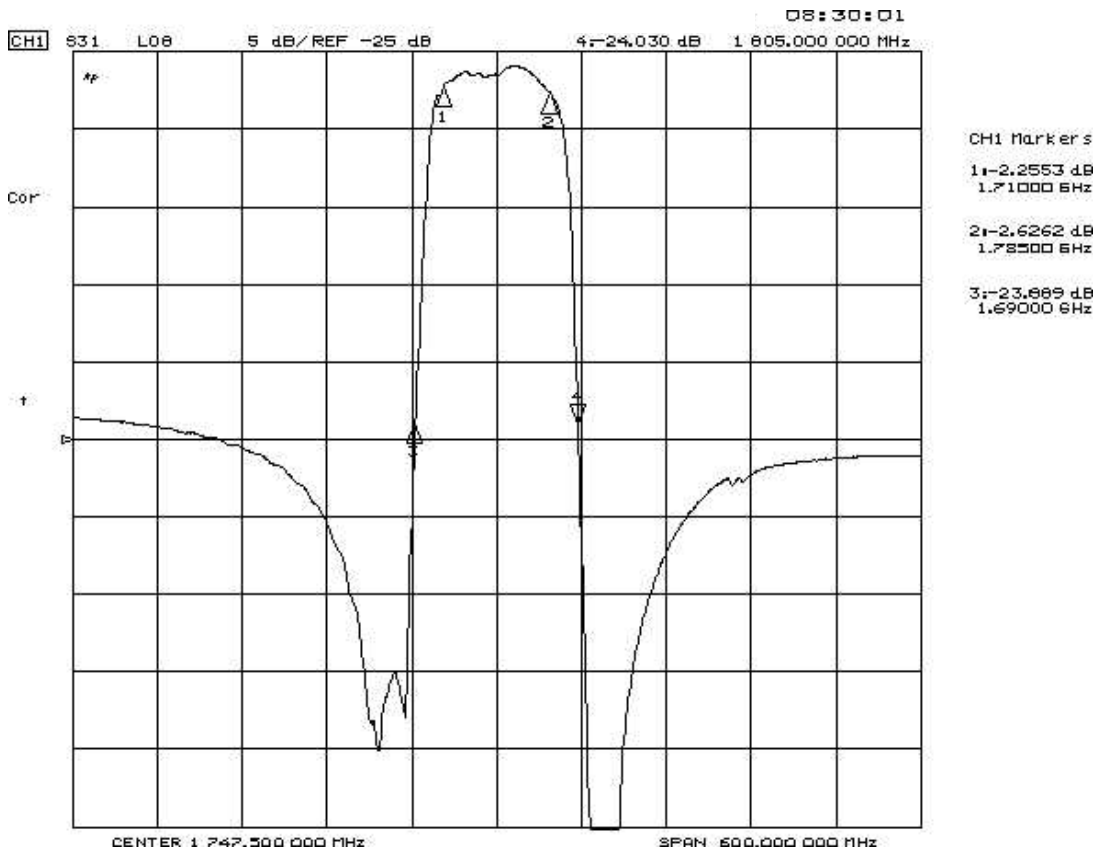
B INPUT  
 E OUTPUT  
 A,C,D,F GROUND  
 DIMENSION : mm

△ : Year Code  
 □ : Date Code

**E. PCB Footprint:**

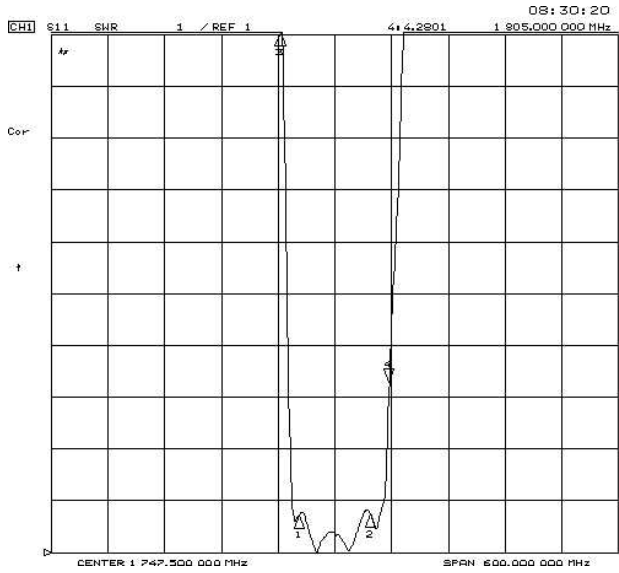


## F. Frequency Characteristics : Transfer function



# Reflections Functions :

## S11

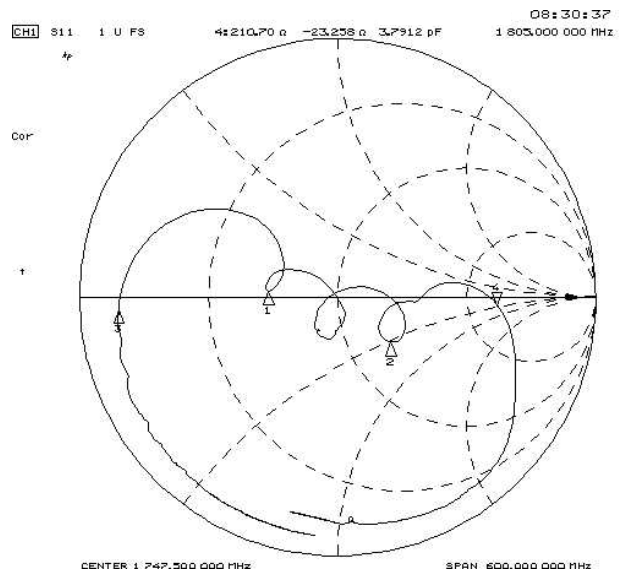


CHI Markers

1: 1.7314  
1.71000 GHz

2: 1.7427  
1.70500 GHz

3: 1.2317  
1.69000 GHz



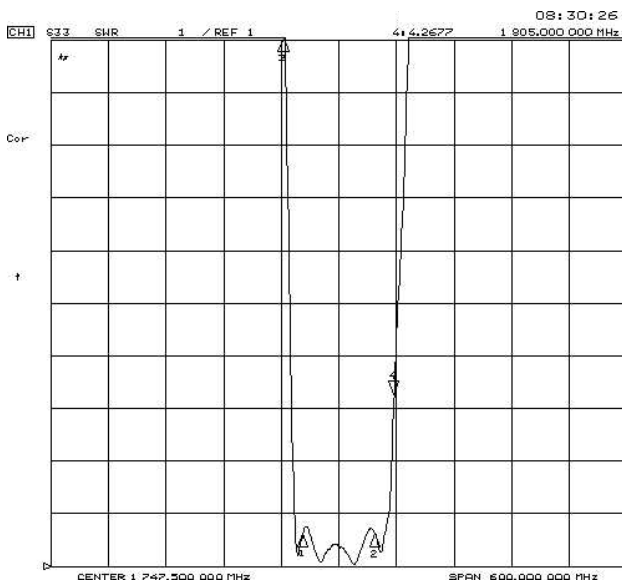
CHI Markers

1: 20.925 a  
1.55113 a  
1.71000 GHz

2: 70.387 a  
-26.469 a  
1.70500 GHz

3: 4.0852 a  
-1.354 a  
1.69000 GHz

## S22

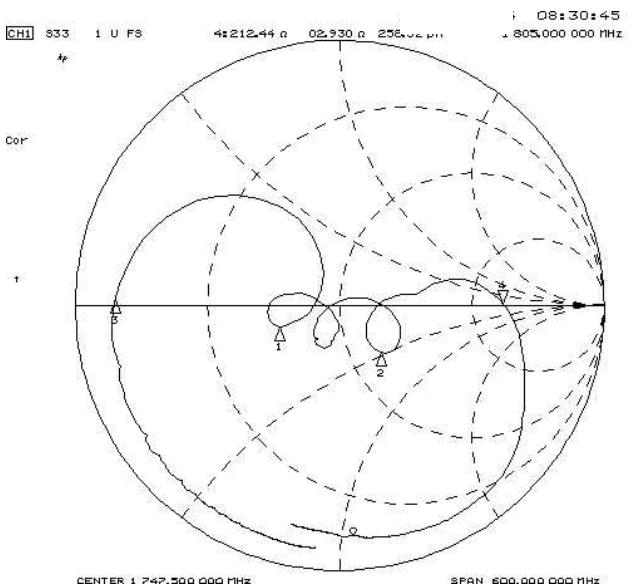


CHI Markers

1: 1.630P  
1.71000 GHz

2: 1.6255  
1.70500 GHz

3: 1.2279  
1.69000 GHz



CHI Markers

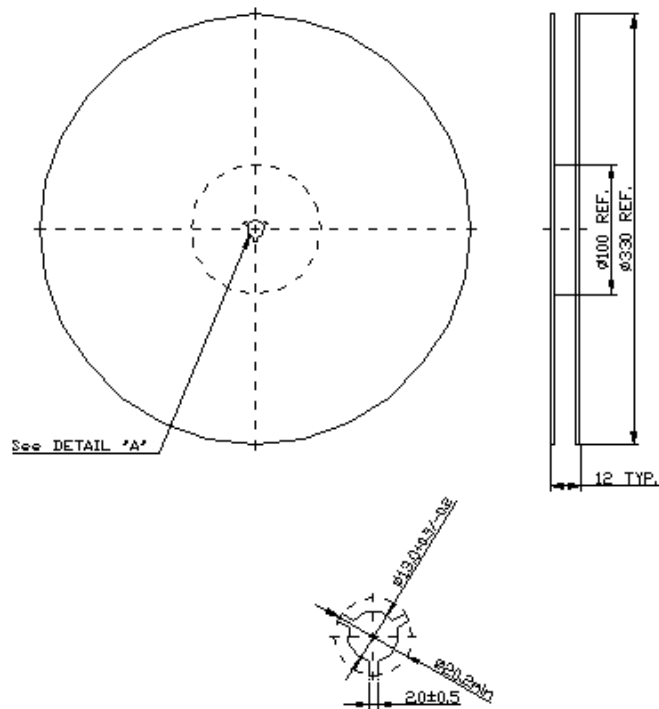
1: 31.264 a  
-5.2490 a  
1.71000 GHz

2: 63.759 a  
-24.029 a  
1.70500 GHz

3: 4.0713 a  
679.93 mΩ  
1.69000 GHz

## G. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION

