



# 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: Nov, 22, 2007

Product Name: SAW Filter 1642.5MHz SMD 2.5X2.0 mm

TST Parts No.: TA0788A

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

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

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

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

Date: \_\_\_\_\_ 11,22,2007



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## SAW Filter 1642.5 MHz

MODEL NO.: TA0788A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 5 dB<sub>m</sub>
2. DC voltage: 5 V
3. Operating Temperature: -40°C to +90°C
4. Storage Temperature: -40°C to +95°C

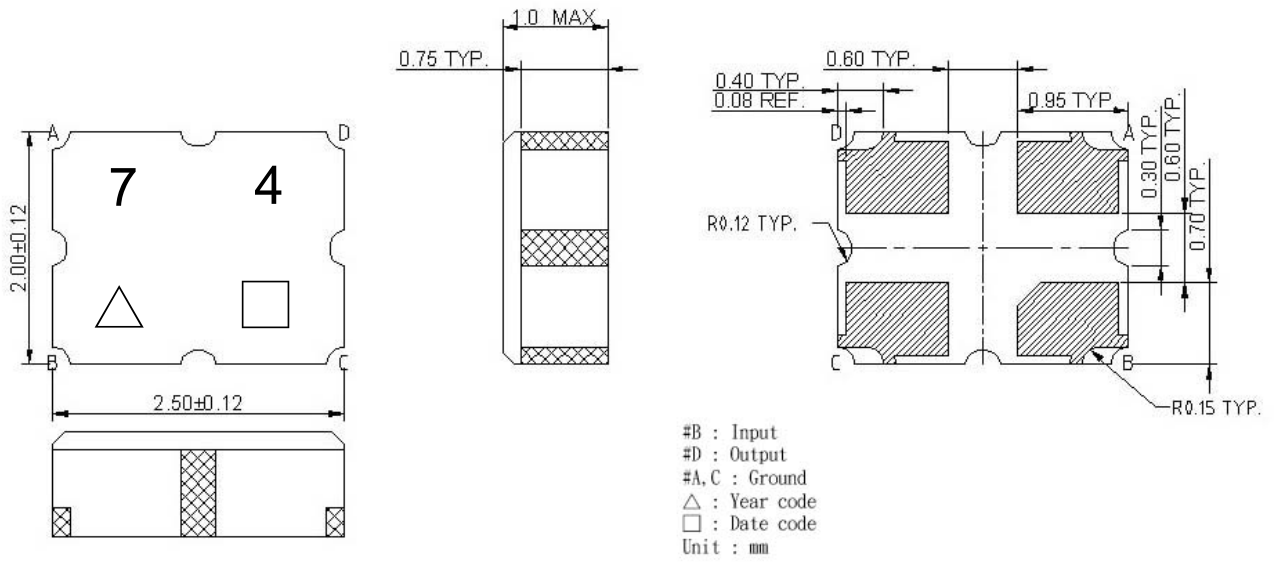
RoHS Compliant  
 Lead free  
 Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

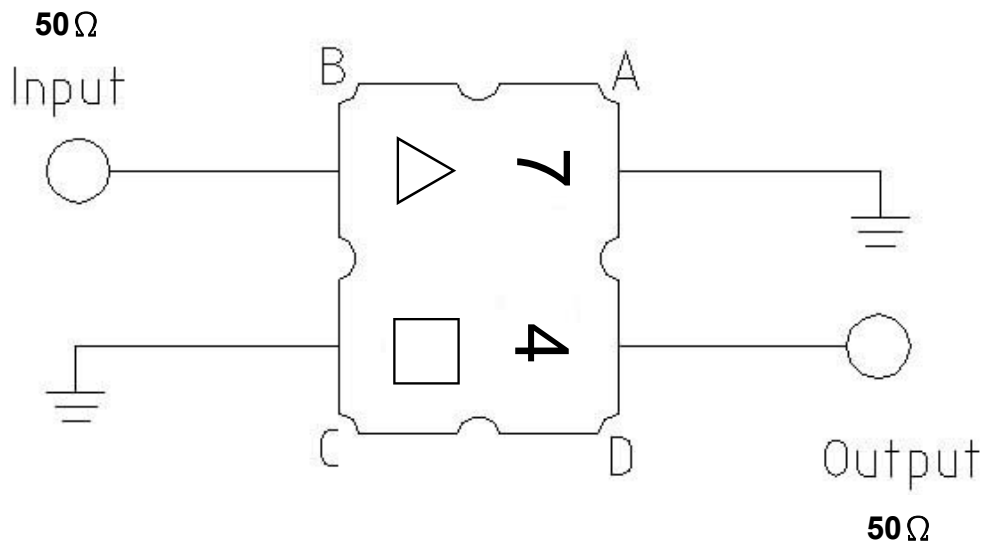
Item	Min.	Typ.	Max.
<b>Center frequency</b> <span style="float: right;"><b>F<sub>c</sub></b> (dB)</span>	-	1642.5	-
<b>Insertion loss</b> within 1625 ~1660 MHz <span style="float: right;"><b>IL</b> (dB)</span>	-	2.1	3.5
<b>Amplitude ripple</b> (p-p) within 1625 ~ 1660 MHz (dB)	-	0.9	2.0
<b>Attenuation</b> (Reference level from 0 dB)			
DC ~ 1500 MHz (dB)	21	28	-
1525 ~ 1559 MHz (dB)	30	34	-
1700 ~ 2050 MHz (dB)	30	33	-
2050 ~ 3500 MHz (dB)	25	33	-
<b>VSWR</b> within 1625 ~1660 MHz	-	1.5	2.3
<b>Source impedance</b> <span style="float: right;"><b>Z<sub>s</sub></b> (Ω)</span>	-	50	-
<b>Load impedance</b> <span style="float: right;"><b>Z<sub>L</sub></b> (Ω)</span>	-	50	-

Note1. No matching network required for operation at 50 Ω

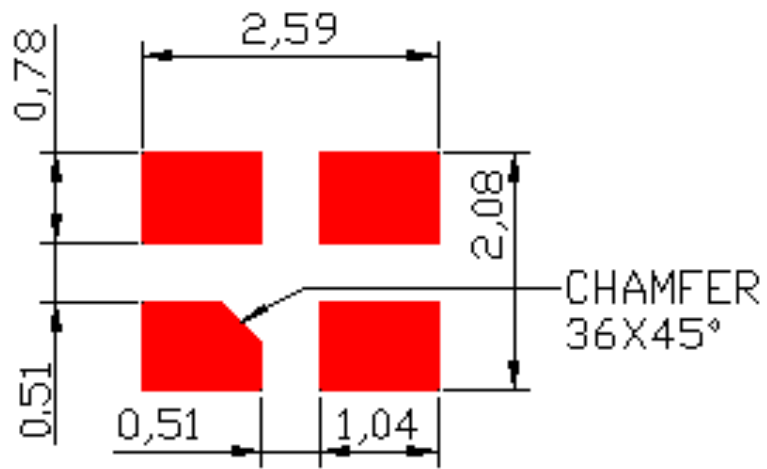
**C. OUTLINE DRAWING:**



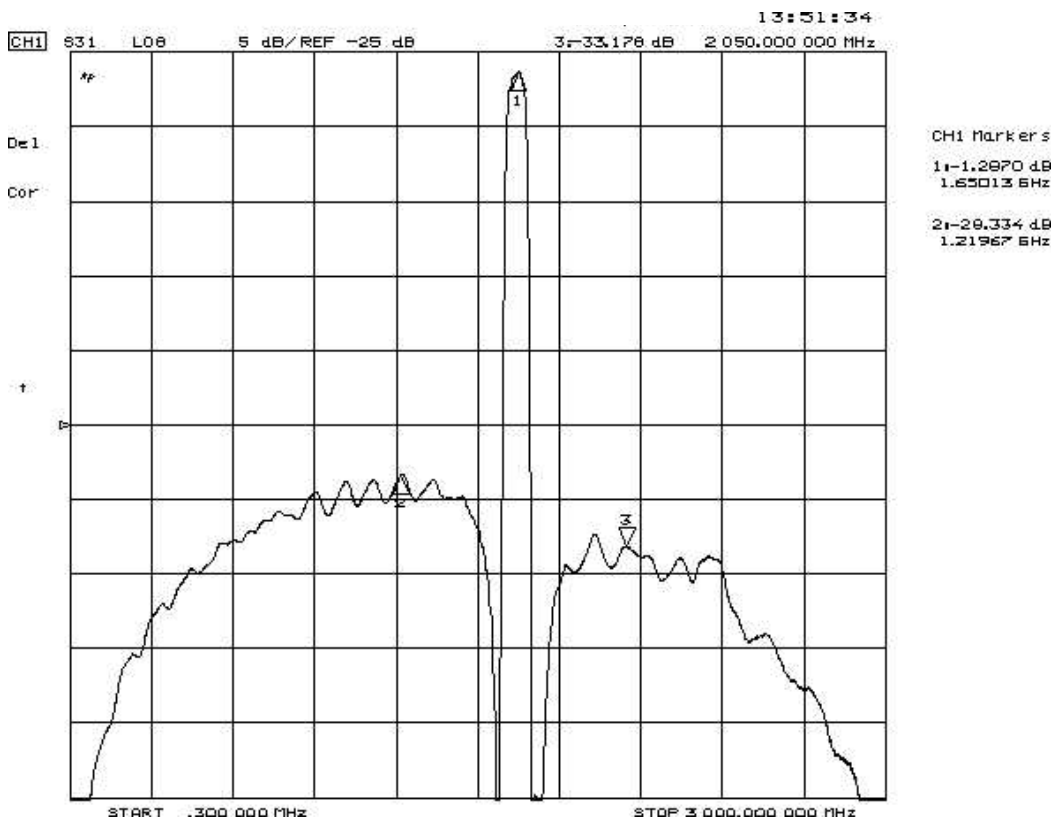
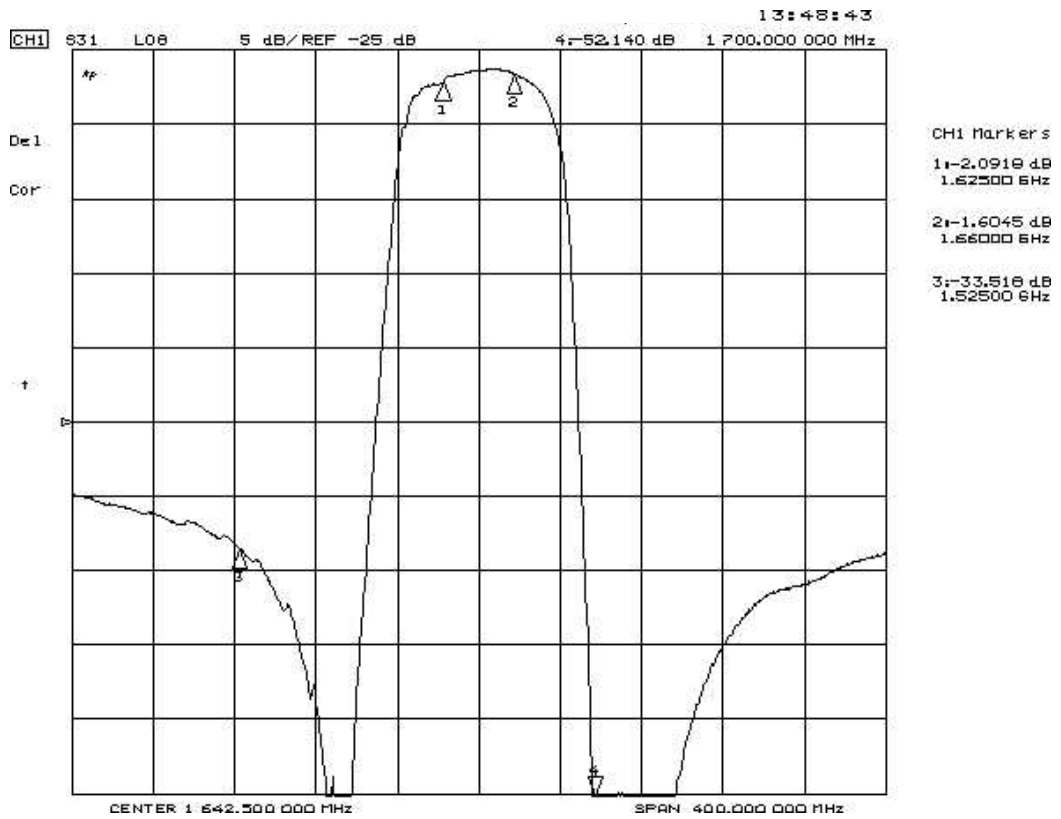
**D. MEASUREMENT CIRCUIT:**



E. PCB Footprint:

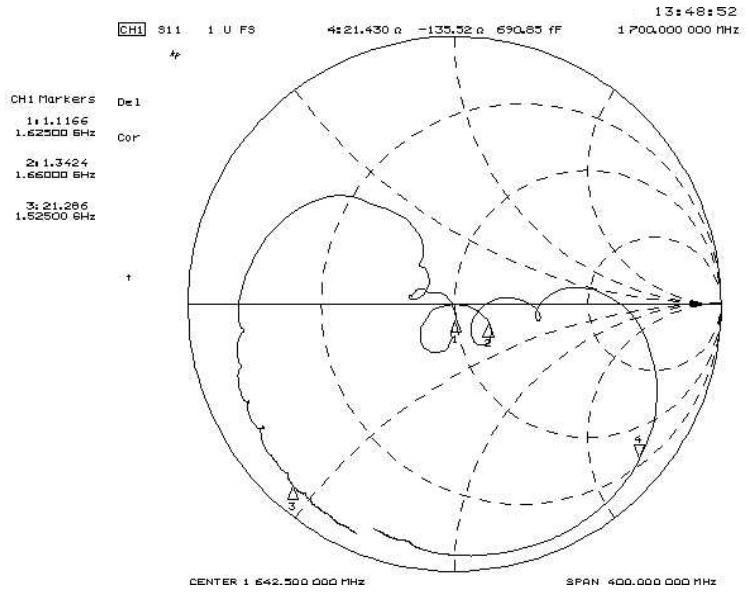
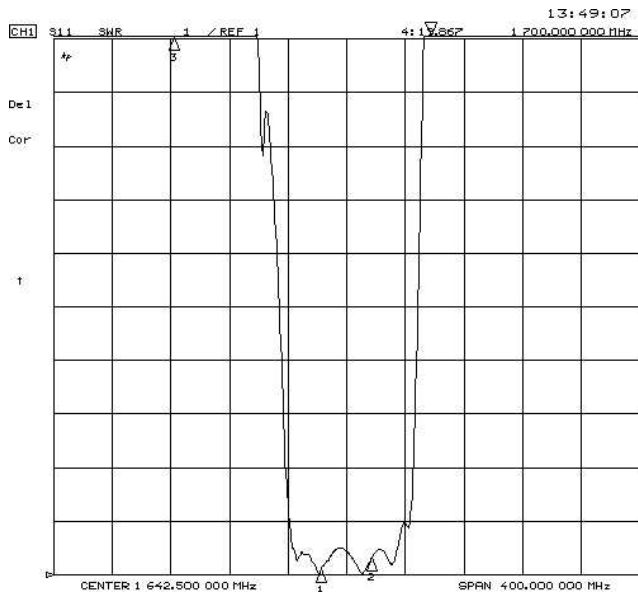


## F. Frequency Characteristics : Transfer function



# Reflections Functions :

## S11 VSWR



CHI Markers

1: 1.1166  
1.62500 GHz

2: 1.3424  
1.65000 GHz

3: 21.286  
1.52500 GHz

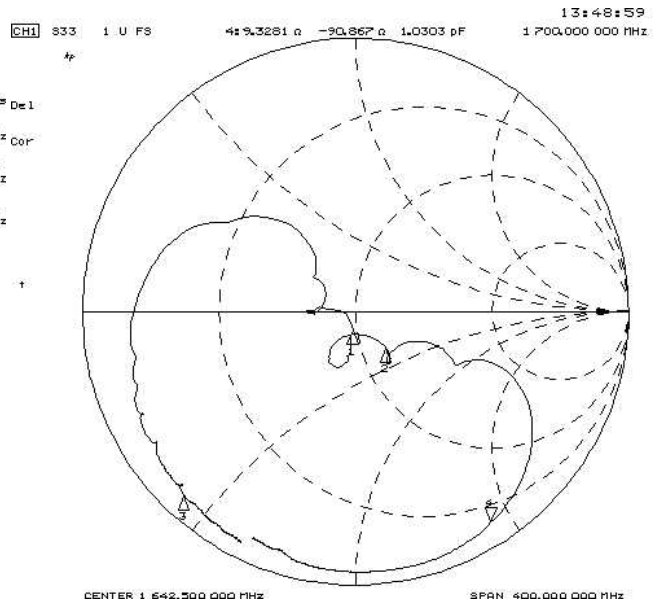
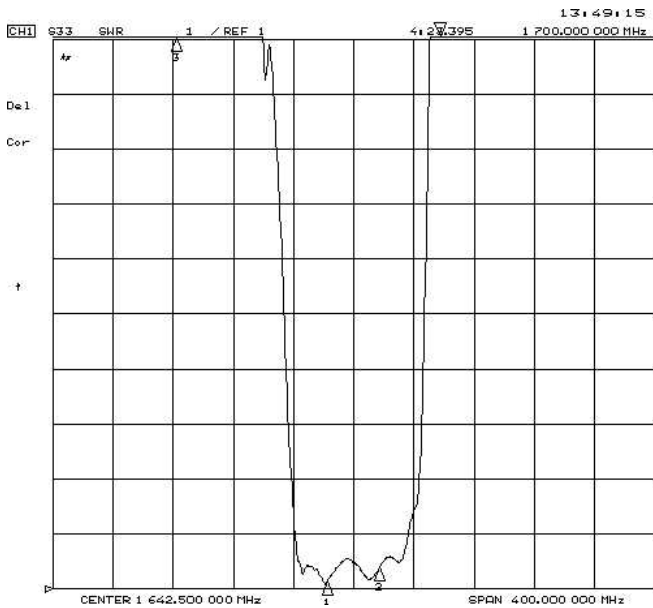
CHI Markers

1: 50.346 a  
-2.5703 a  
1.62500 GHz

2: 63.963 a  
-9.2388 a  
1.65000 GHz

3: 277.44 a  
-22.359 a  
1.52500 GHz

## S22 VSWR



CHI Markers

1: 1.1501  
1.62500 GHz

2: 1.4148  
1.65000 GHz

3: 24.140  
1.52500 GHz

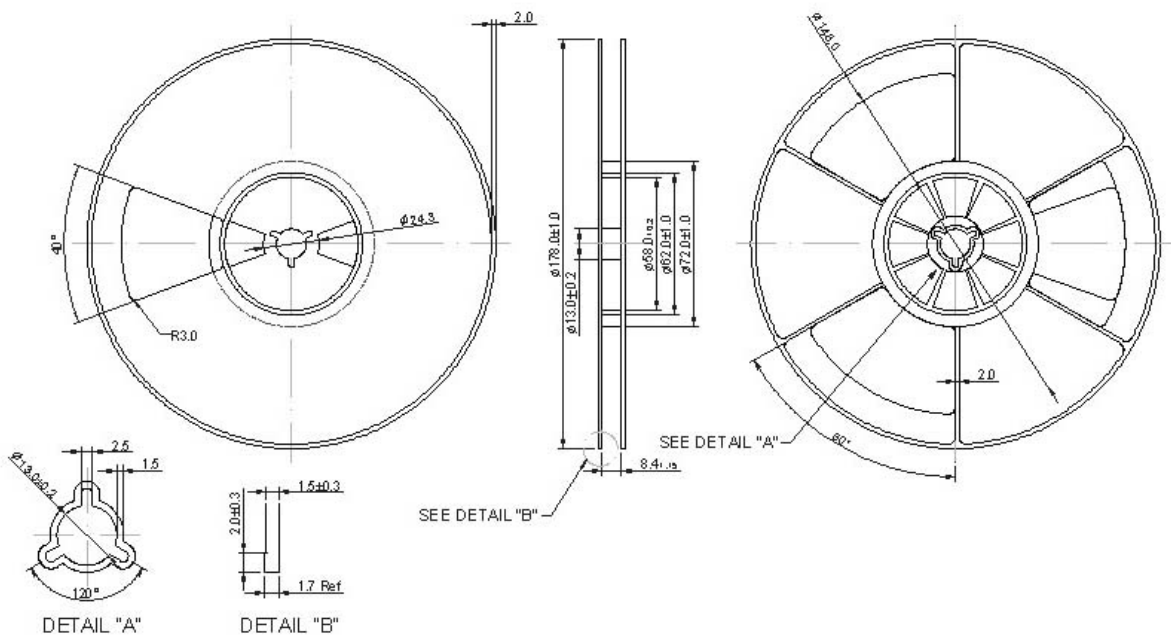
CHI Markers

1: 49.480 a  
-6.7378 a  
1.62500 GHz

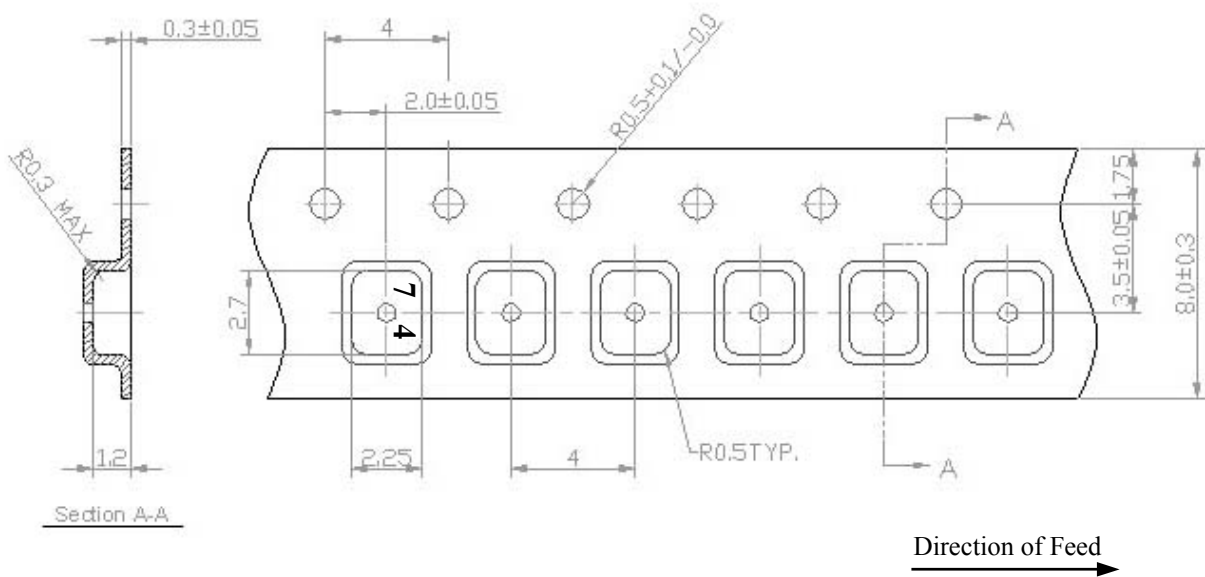
2: 59.977 a  
-16.250 a  
1.65000 GHz

3: 2.4639 a  
-21.668 a  
1.52500 GHz

**G. PACKING:**  
**1. REEL DIMENSION**



**2. TAPE DIMENSION**



**G.RECOMMENDED REFLOW PROFILE:**

