



# 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: Jan, 3, 2008

Product Name: SAW Filter 1575.42 MHz SMD 2.5X2.0 mm

TST Parts No.:TA0295A

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

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

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

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

Date: \_\_\_\_\_ 1, 3, 2008



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## SAW Filter 1575.42 MHz for GPS

MODEL NO.: TA0295A

REV. NO.:4

### A. MAXIMUM RATING:

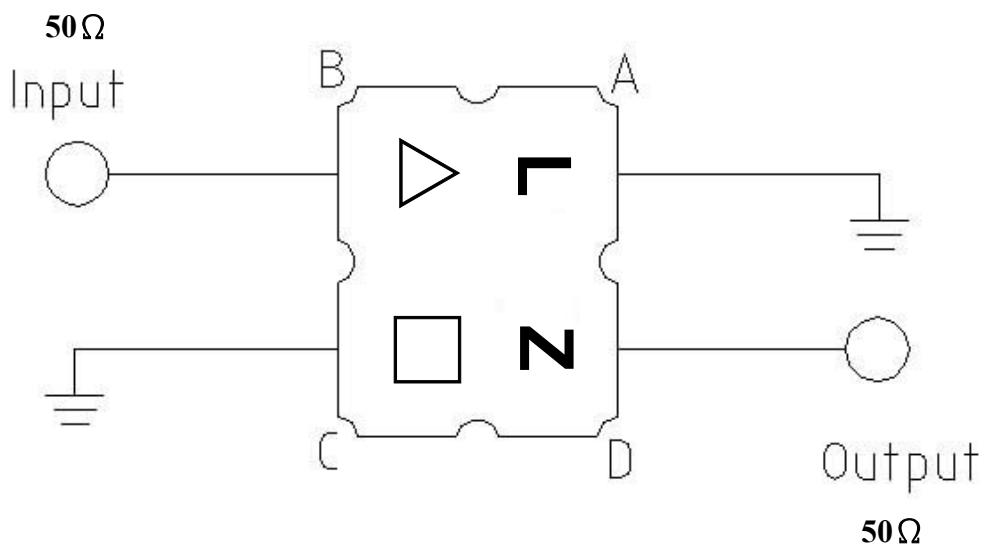
1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 5 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -50°C to +100°C

RoHS Compliant  
Lead free  
Lead-free soldering

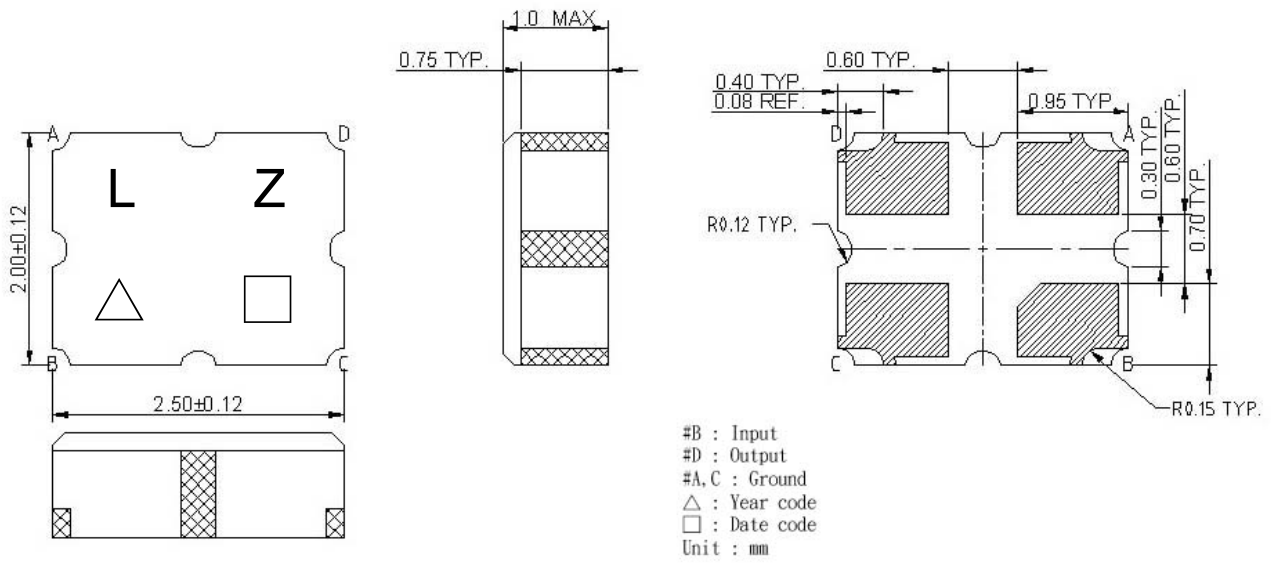
### B. ELECTRICAL CHARACTERISTICS:

Item		Min.	Typ.	Max.
<b>Center frequency</b>	<b>Fc</b> (MHz)	-	1575.42	-
<b>Insertion loss</b> within Fc +/- 1 MHz	<b>IL</b> (dB)	-	2.7	3.5
<b>Amplitude ripple</b> (p-p) within Fc +/- 1 MHz	(dB)	-	0.07	1.0
<b>Attenuation</b> (Reference level from 0 dB)				
1475.42	MHz (dB)	35	40	-
1535.42	MHz (dB)	30	37	-
1615.42	MHz (dB)	30	60	-
1675.42	MHz (dB)	40	62	-
<b>VSWR</b> within Fc +/- 1 MHz		-	1.3	2.0
<b>Source impedance</b>	Z <sub>s</sub> (Ω)	-	50	-
<b>Load impedance</b>	Z <sub>L</sub> (Ω)	-	50	-

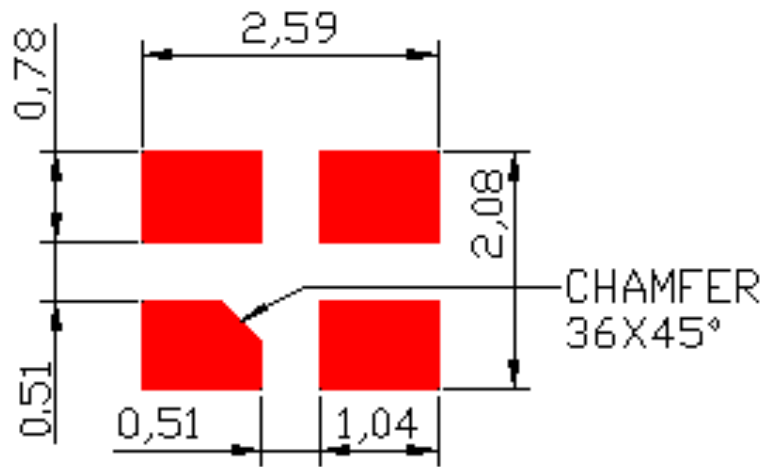
### C. MEASUREMENT CIRCUIT:



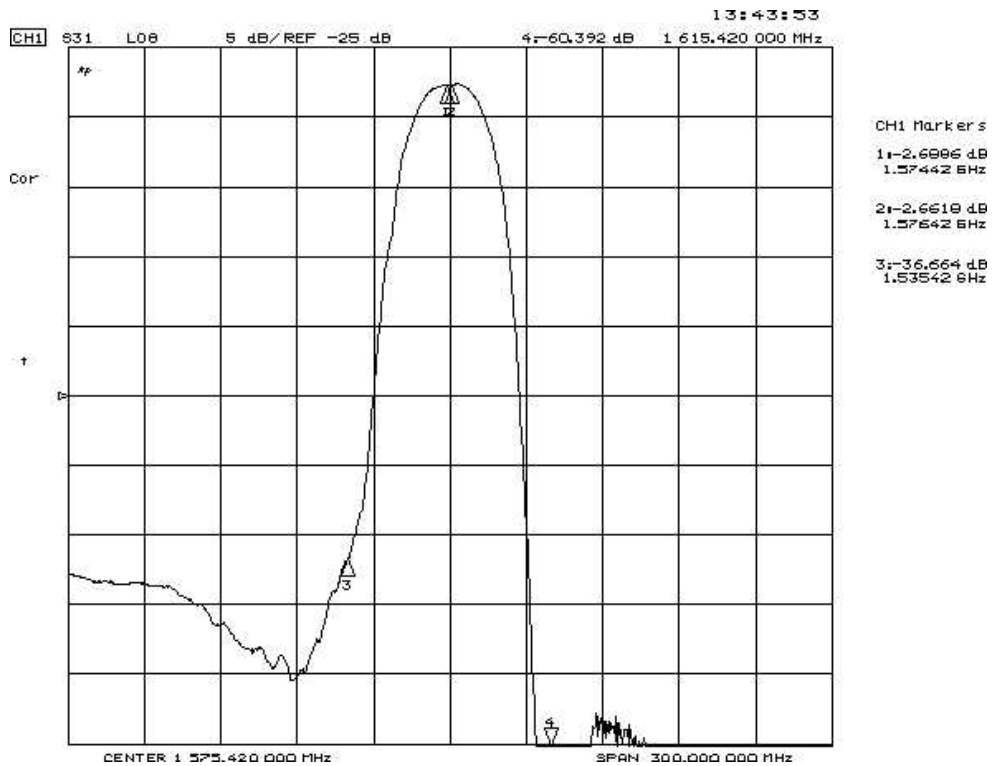
**D. OUTLINE DRAWING:**



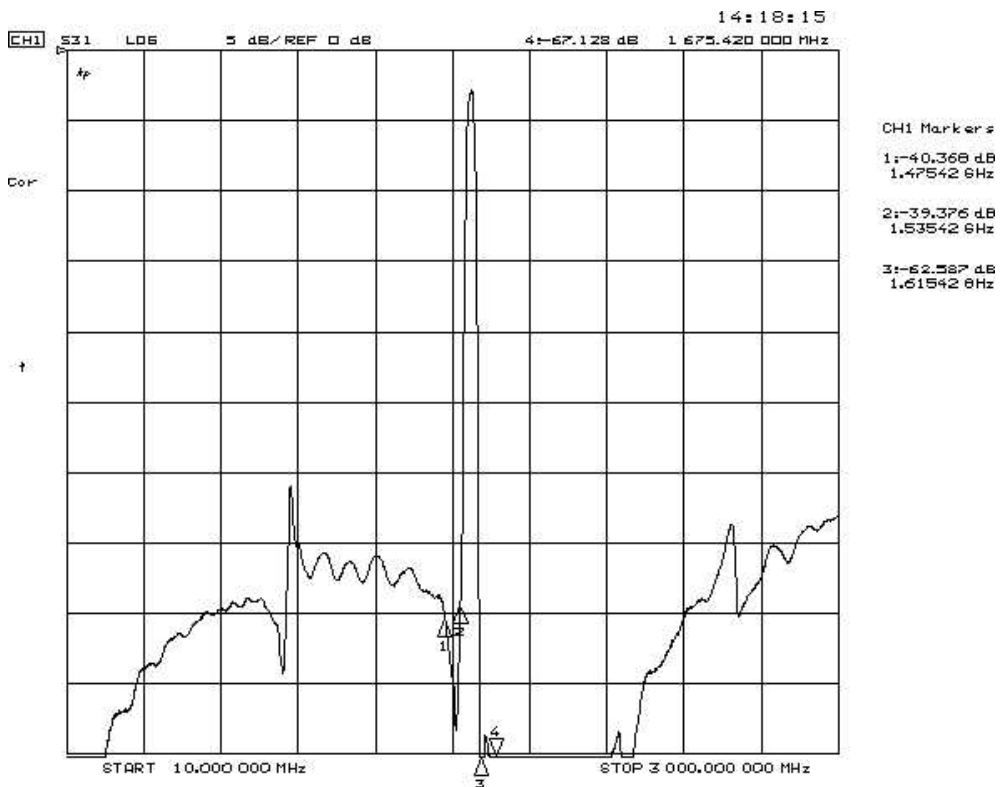
**E. PCB Footprint:**



## F. Frequency Characteristics : Transfer function

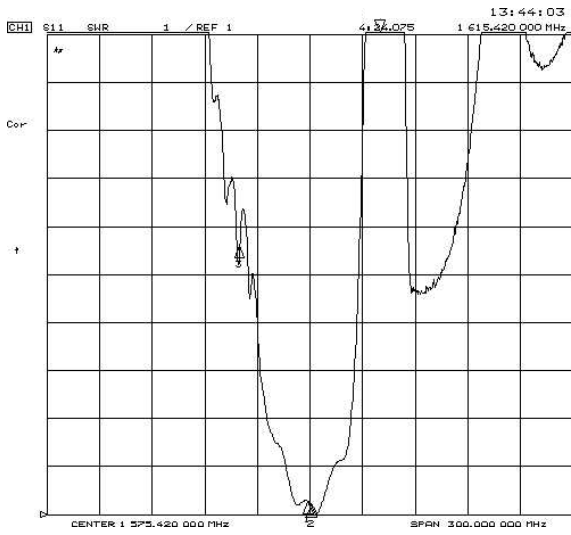


( wide band )

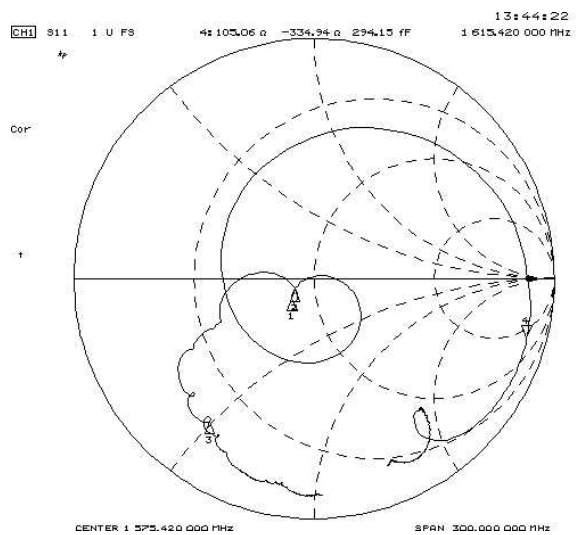


# Reflections Functions :

## S11 VSWR

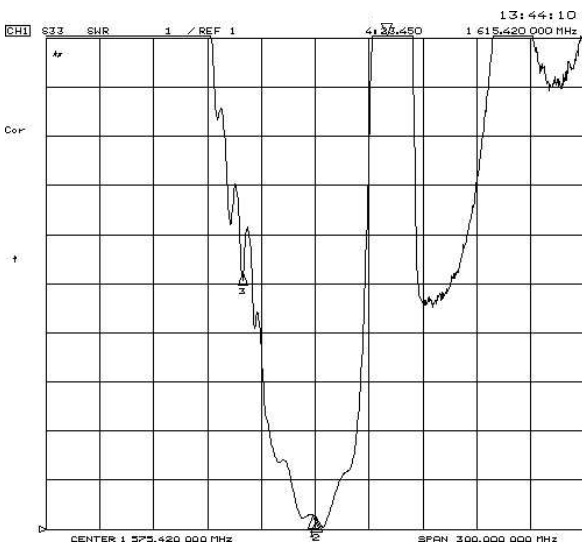


CHI Markers  
 1: 1.2783  
 1.57442 GHz  
 2: 1.2020  
 1.57642 GHz  
 3: 6.6072  
 1.53542 GHz

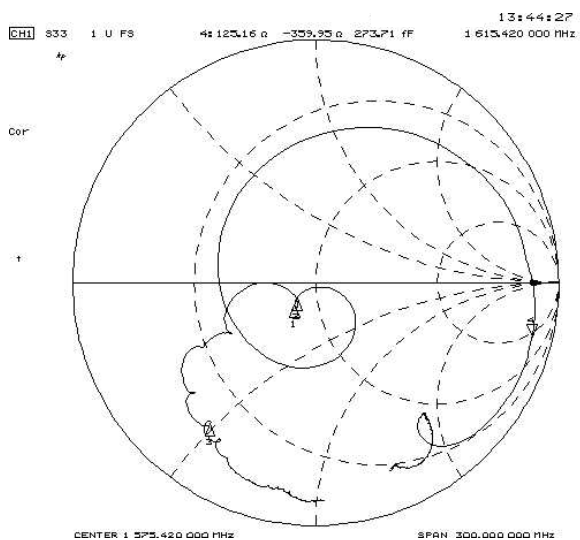


CHI Markers  
 1: 41.111 a  
 -6.6602 a  
 1.57442 GHz  
 2: 42.357 a  
 -3.6797 a  
 1.57642 GHz  
 3: 9.4775 a  
 -24.613 a  
 1.53542 GHz

## S22 VSWR



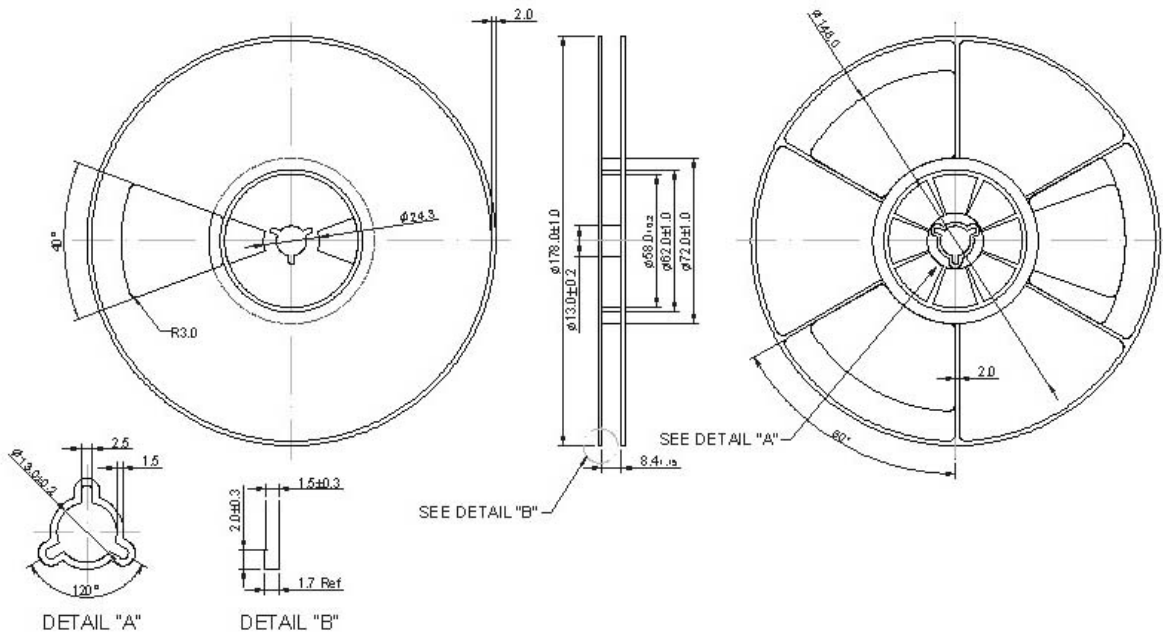
CHI Markers  
 1: 1.2903  
 1.57442 GHz  
 2: 1.2150  
 1.57642 GHz  
 3: 6.2371  
 1.53542 GHz



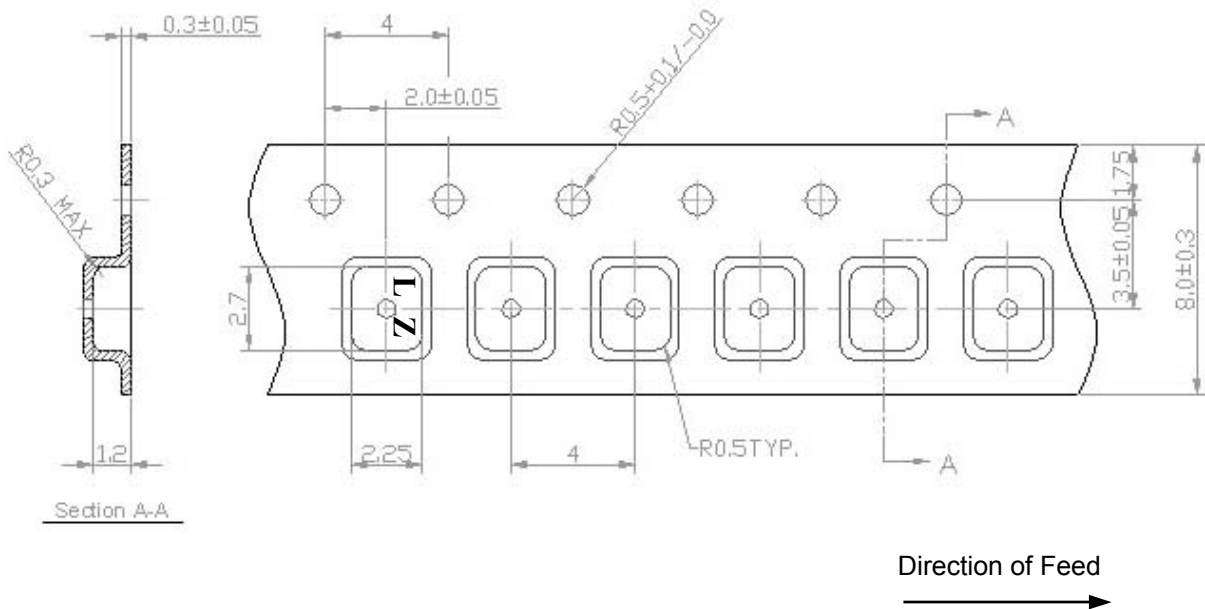
CHI Markers  
 1: 41.342 a  
 -7.7421 a  
 1.57442 GHz  
 2: 42.698 a  
 -3.2637 a  
 1.57642 GHz  
 3: 9.9570 a  
 -24.224 a  
 1.53542 GHz

**G. PACKING:**

**1. REEL DIMENSION**



**2. TAPE DIMENSION**



**H. RECOMMENDED REFLOW PROFILE :**

