



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
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## Approval Sheet For Product Specification

Issued Date: Sep, 5, 2005

Product Name: SAW Filter 1575.42 MHz for GPS

TST Parts No.: TA0224A

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

Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_ 9,5,2005



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## SAW Filter 1575.42 MHz for GPS

MODEL NO.: TA0224A

REV. NO.:3

### A. MAXIMUM RATING:

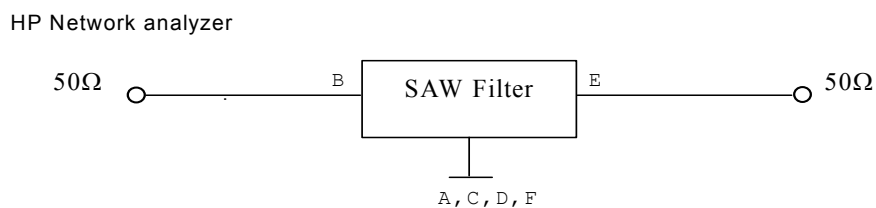
1. Maximum Input Signal Level : +10 dBm
2. DC voltage: 5 V
3. Operating Temperature: -40°C ~ +85°C
4. Storage Temperature: -40°C ~ +105°C

RoHS Compliant  
Lead free  
Lead-free soldering

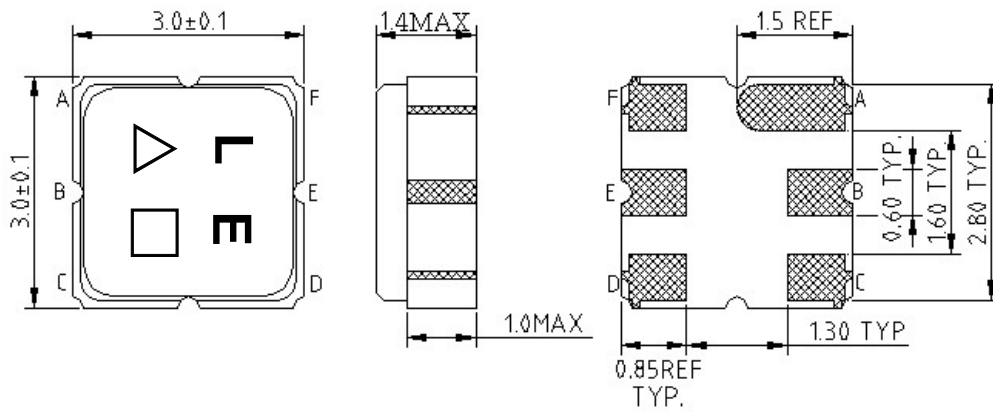
### B. ELECTRICAL CHARACTERISTICS:

Item		Min.	Typ.	Max.
<b>Center frequency</b>	<b>F<sub>c</sub></b> (dB)	-	1575.42	-
<b>Insertion loss</b> within F <sub>c</sub> +/- 1 MHz	<b>IL</b> (dB)	-	2.6	3.5
<b>Amplitude ripple</b> (p-p) within F <sub>c</sub> +/- 1 MHz	(dB)	-	0.1	1.0
<b>Attenuation</b> (Reference level from 0 dB)				
880 ~ 915	MHz (dB)	35.0	37.0	-
1525.42	MHz (dB)	30.0	47.0	-
1535.42	MHz (dB)	20.0	44.5	-
1615.42	MHz (dB)	20.0	62.5	-
1625.42	MHz (dB)	30.0	75.0	-
1710 ~ 1785	MHz (dB)	50.0	54.0	-
<b>VSWR</b> within F <sub>c</sub> +/- 1 MHz		-	1.5	2.5
<b>Source impedance</b>	Z <sub>s</sub> (Ω)	-	50	-
<b>Load impedance</b>	Z <sub>L</sub> (Ω)	-	50	-

### C. MEASUREMENT CIRCUIT:



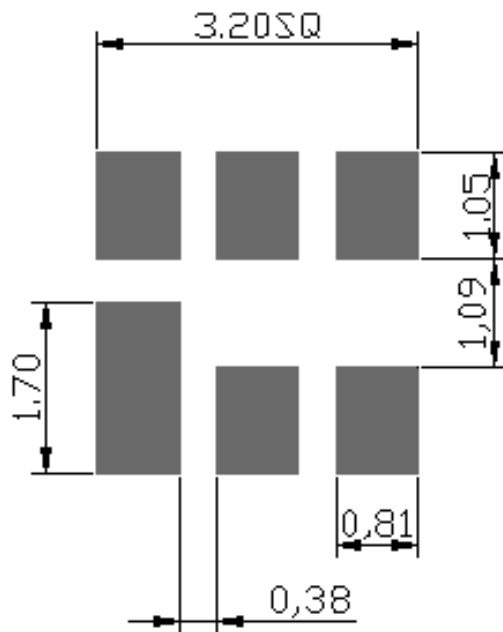
**D. OUTLINE DRAWING:**



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

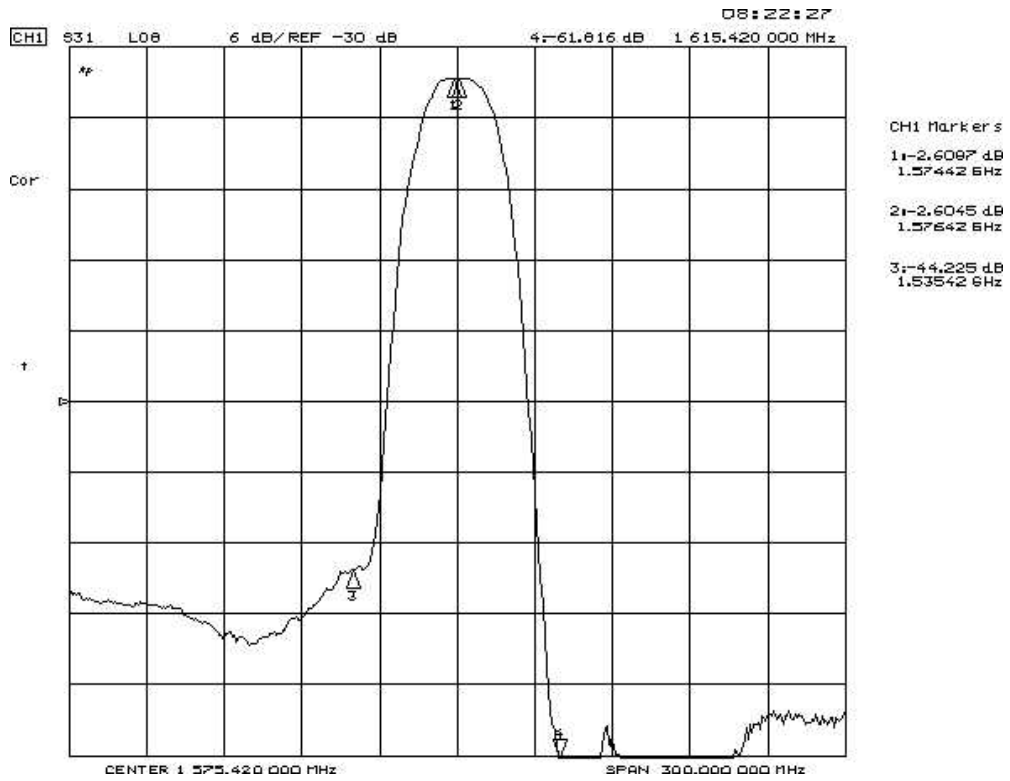
△ : Year Code  
 □ : Date Code

**E. PCB Footprint:**

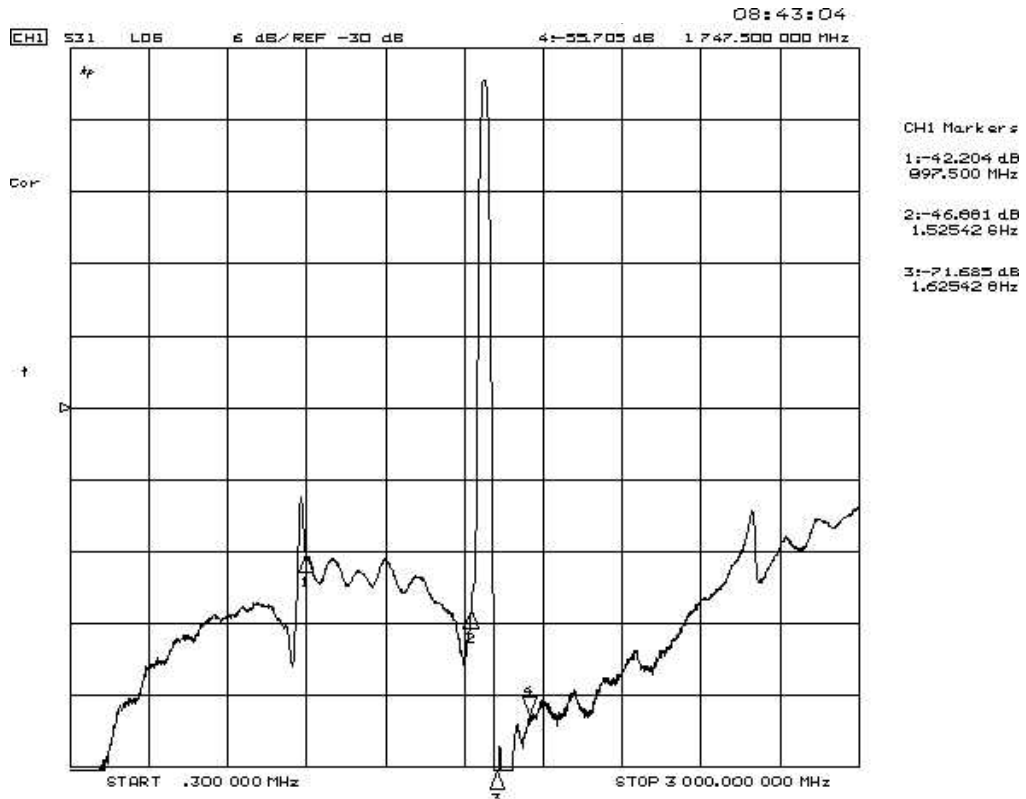


## F. FREQUENCY CHARACTERISTICS:

### 1. Transfer function (25 °C)

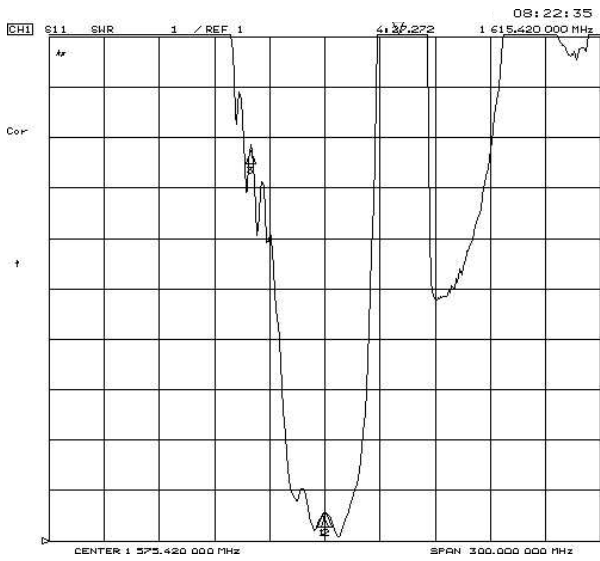


(wideband)



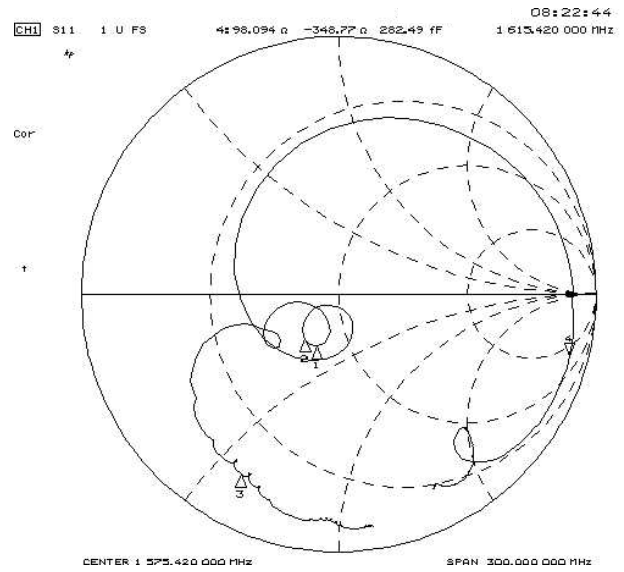
# Reflections Functions :

## S11 VSWR



CH1 Markers

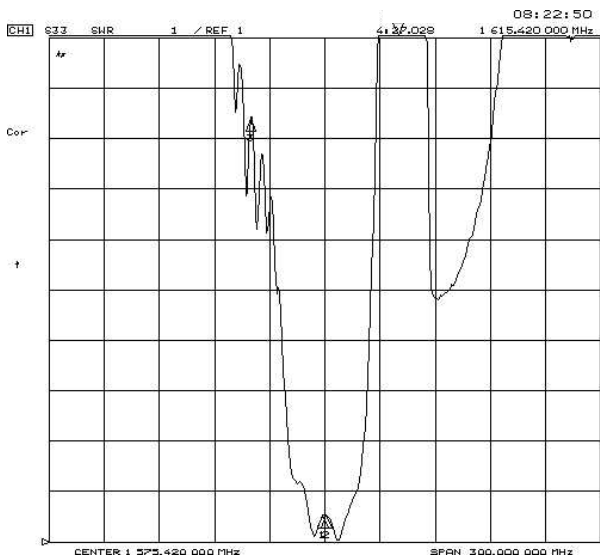
1:	1.5499	1.57442 GHz
2:	1.5490	1.57642 GHz
3:	2.7458	1.53542 GHz



CH1 Markers

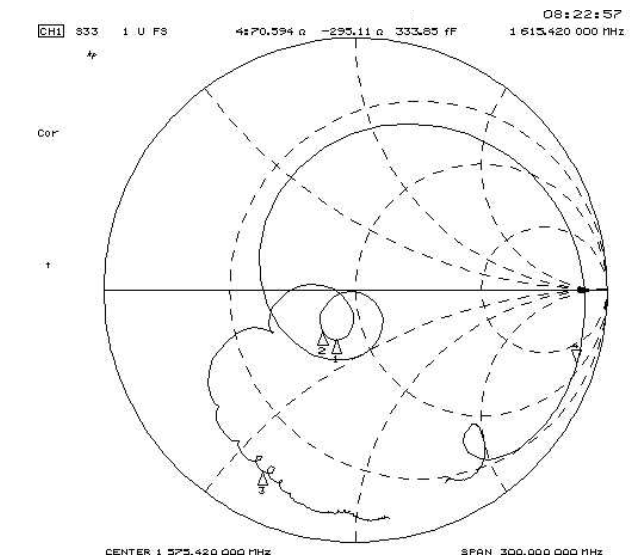
1:	39.246 $\Omega$	-16.428 $\Omega$	1.57442 GHz
2:	36.443 $\Omega$	-13.211 $\Omega$	1.57642 GHz
3:	7.8855 $\Omega$	-29.221 $\Omega$	1.53542 GHz

## S22 VSWR



CH1 Markers

1:	1.5316	1.57442 GHz
2:	1.5320	1.57642 GHz
3:	9.4006	1.53542 GHz

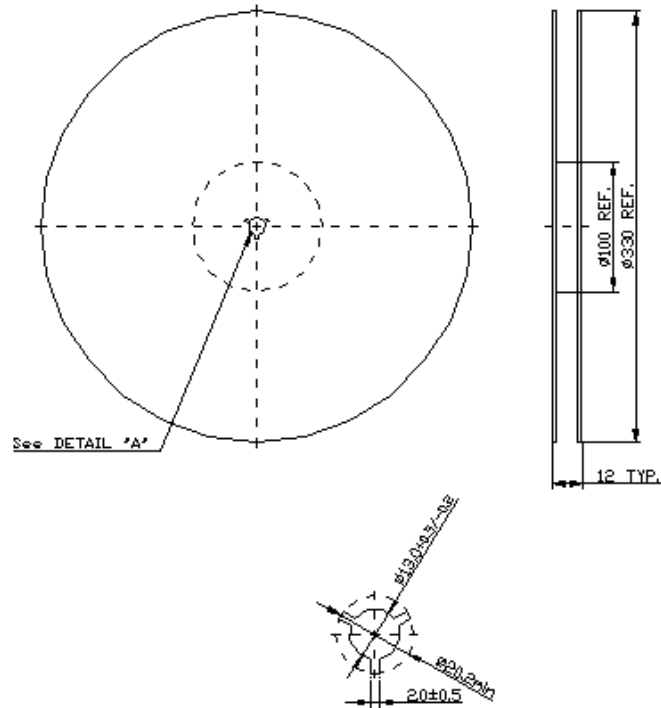


CH1 Markers

1:	40.169 $\Omega$	-16.259 $\Omega$	1.57442 GHz
2:	36.742 $\Omega$	-12.826 $\Omega$	1.57642 GHz
3:	7.2314 $\Omega$	-30.139 $\Omega$	1.53542 GHz

## G. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION

