



# 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, 1, 2005

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

TST Parts No.:TA0531A

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

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

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

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

Date: \_\_\_\_\_ 11, 1, 2005



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## SAW Filter 1575.42 MHz

MODEL NO.: TA0531A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 5 V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C

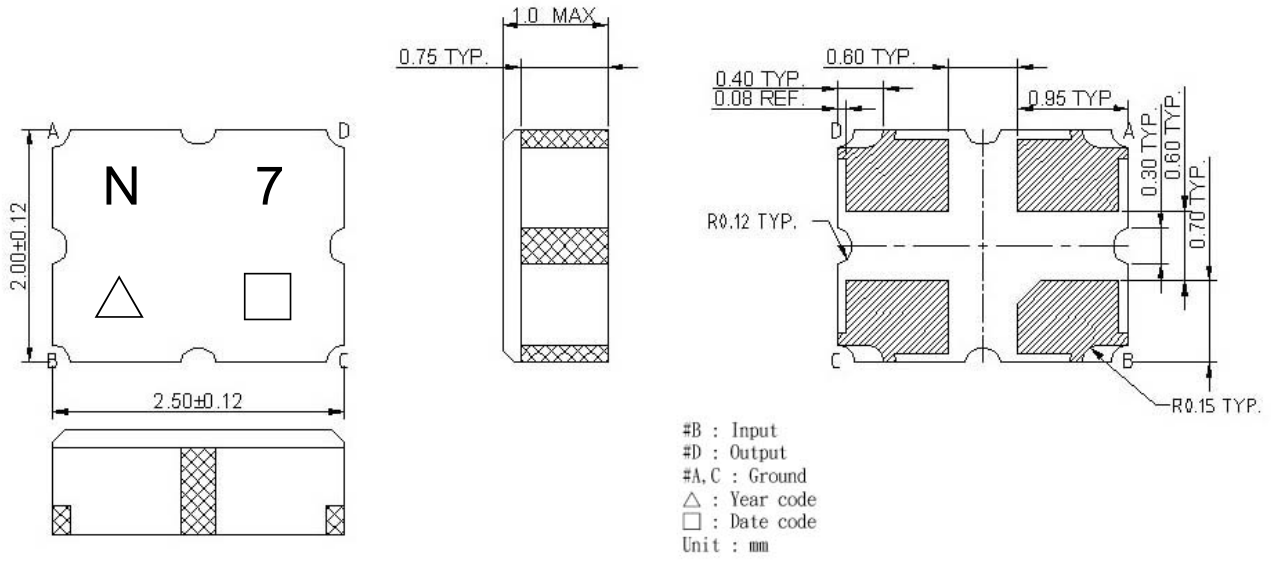
RoHS Compliant  
Lead free  
Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

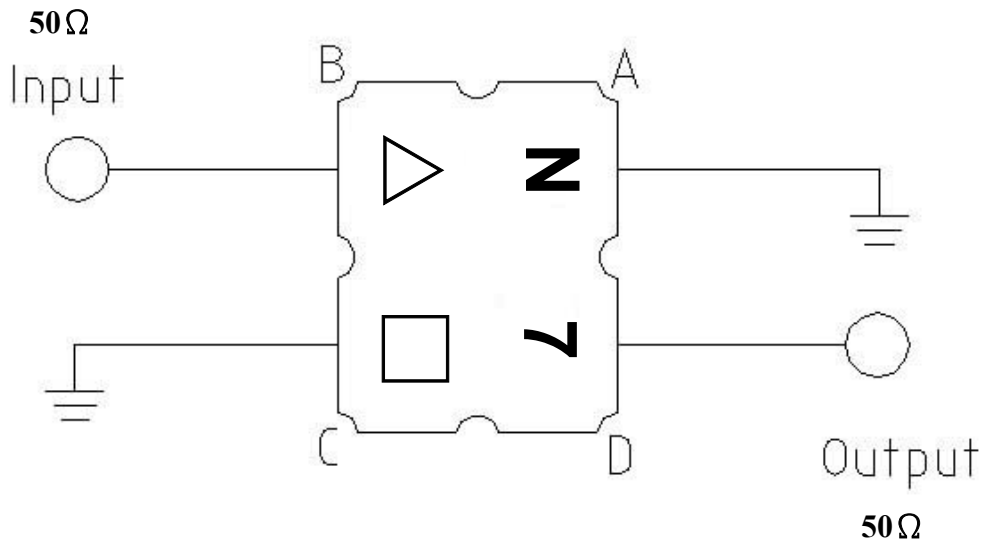
Item		Min.	Typ.	Max.
<b>Center frequency</b>	<b>F<sub>c</sub></b> (MHz)	-	1575.42	-
<b>Insertion loss</b> (1570.42~1580.42 MHz)	<b>IL</b> (dB)	-	1.8	3
<b>Amplitude ripple</b> (1570.42~1580.42 MHz)	(dB)	-	0.1	1.7
<b>Attenuation</b> (Reference level from 0 dB)				
D.C. ~ 1400	MHz (dB)	35.0	37.0	-
1400 ~ 1475	MHz (dB)	30.0	34.0	-
1475 ~ 1525	MHz (dB)	25.0	37.0	-
1625 ~ 1640	MHz (dB)	30.0	45.0	-
1640 ~ 2000	MHz (dB)	32.0	34.0	-
2000 ~ 3000	MHz (dB)	20.0	28.0	-
<b>VSWR</b> (1570.42~1580.42 MHz)		-	1.3	2.0
<b>Source impedance</b>	<b>Z<sub>s</sub></b> (Ω)	-	50	-
<b>Load impedance</b>	<b>Z<sub>L</sub></b> (Ω)	-	50	-

Note1. The standard definitions is in JIS C 6703

**C. OUTLINE DRAWING:**

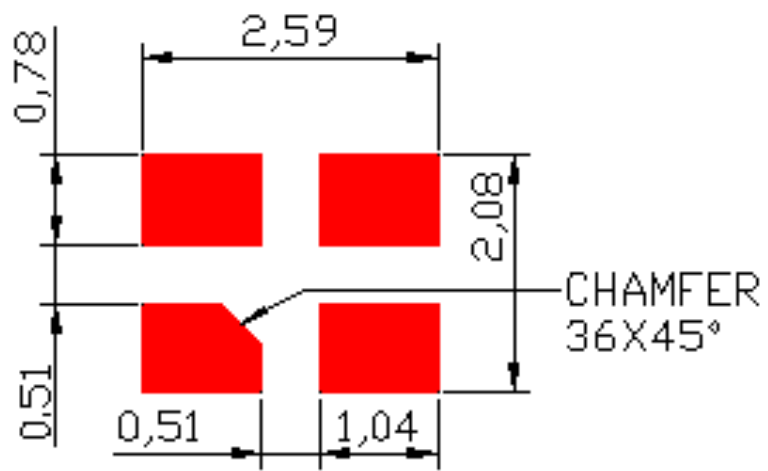


**D. MEASUREMENT CIRCUIT:**

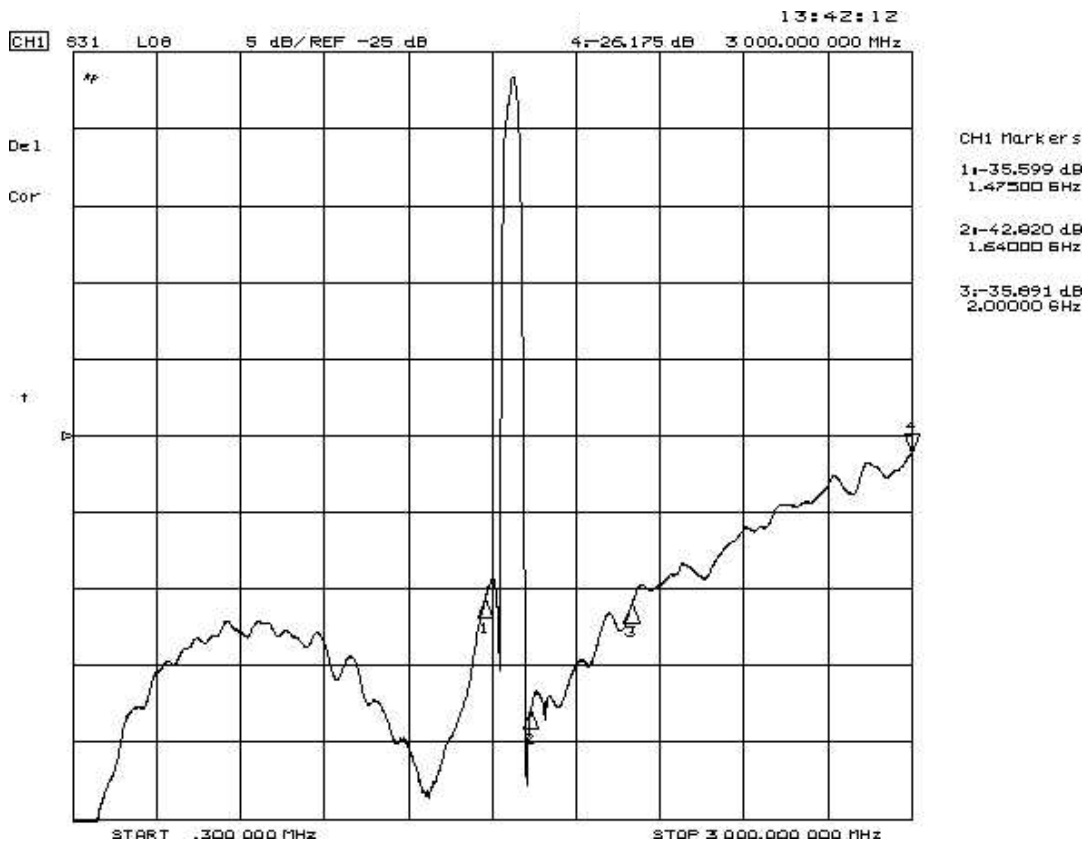
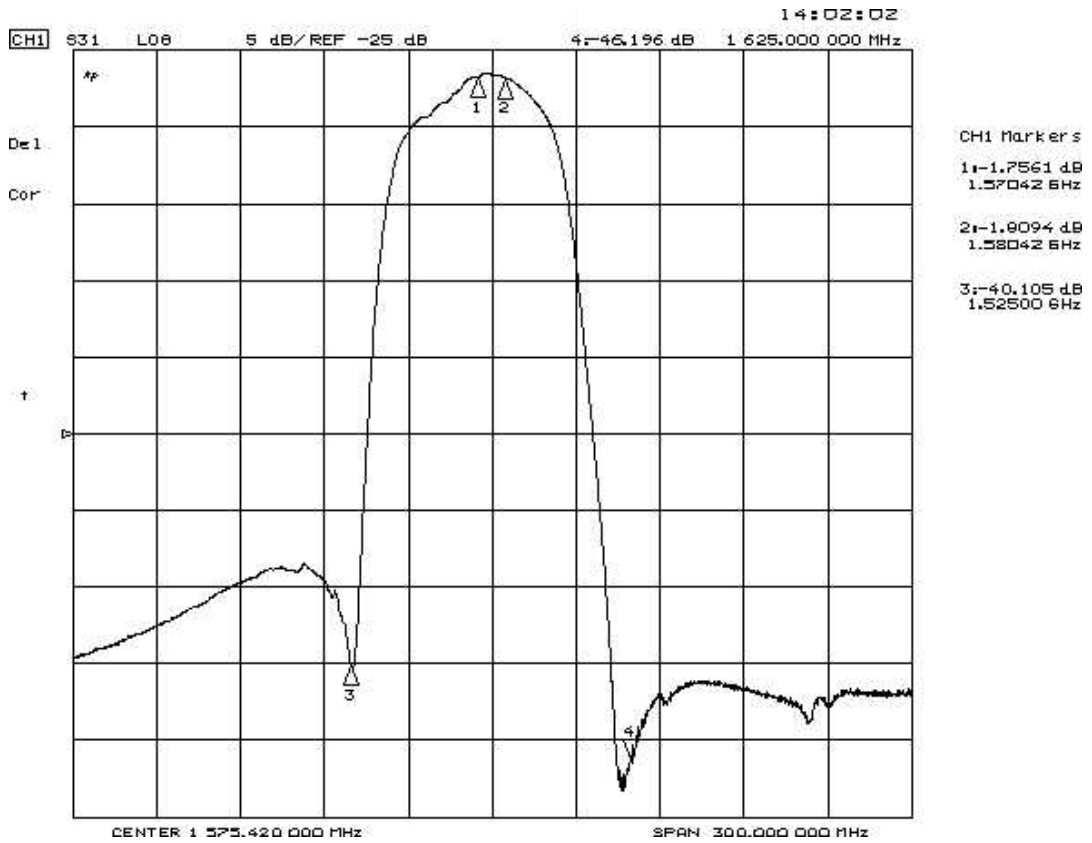


△ : Year Code  
 □ : Date Code

**E. PCB Footprint:**

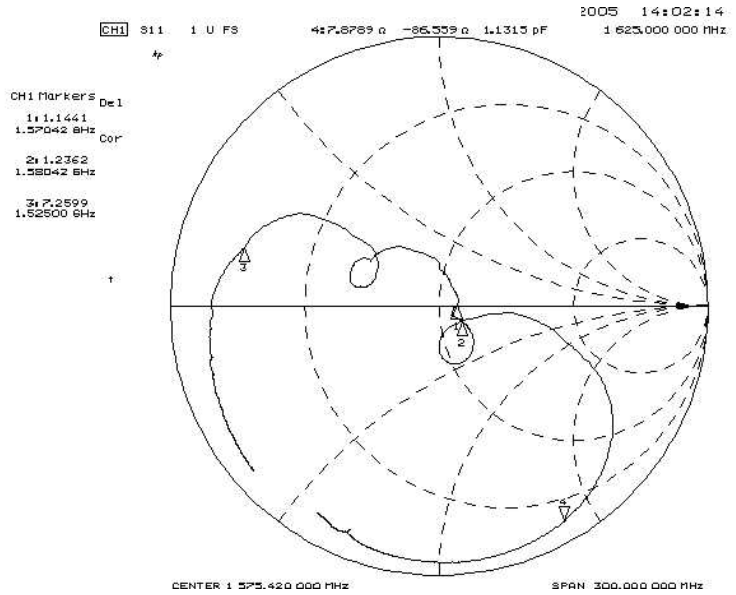
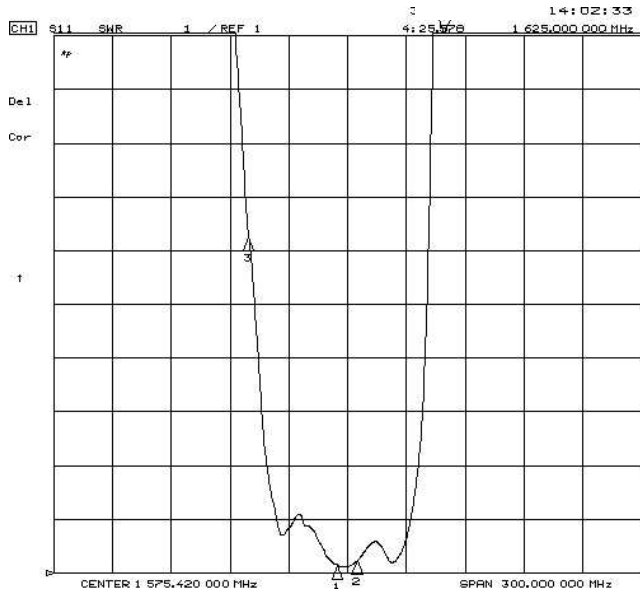


## F. Frequency Characteristics : Transfer function



# Reflections Functions :

## S11 VSWR



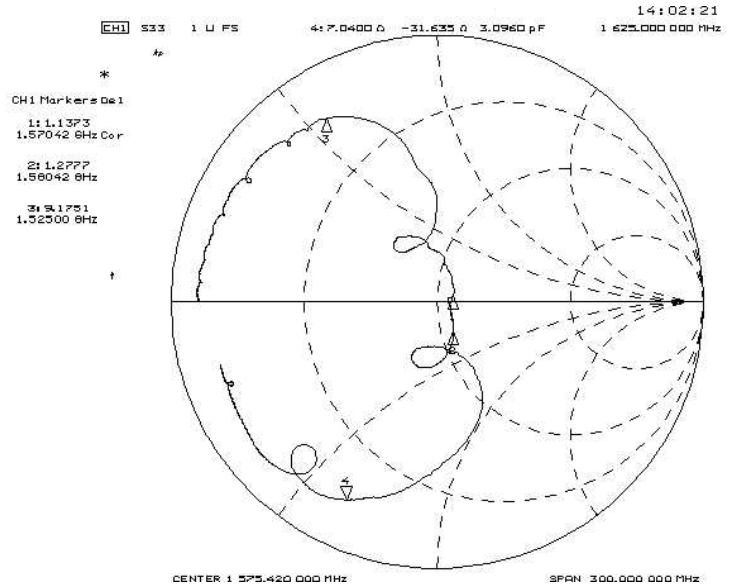
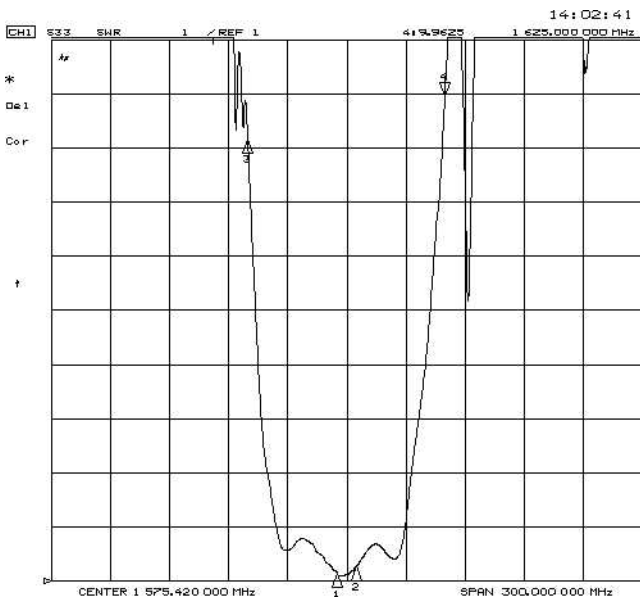
CHI Markers De1

1:	1.1441
	1.57042 GHz
2:	1.2362
	1.58042 GHz
3:	7.2599
	1.52500 GHz

CHI Markers

1:	57.162 $\Omega$
	0.3867 $\Omega$
	1.57042 GHz
2:	59.162 $\Omega$
	-7.0469 $\Omega$
	1.58042 GHz
3:	7.0313 $\Omega$
	7.2358 $\Omega$
	1.52500 GHz

## S22 VSWR



CHI Markers De1

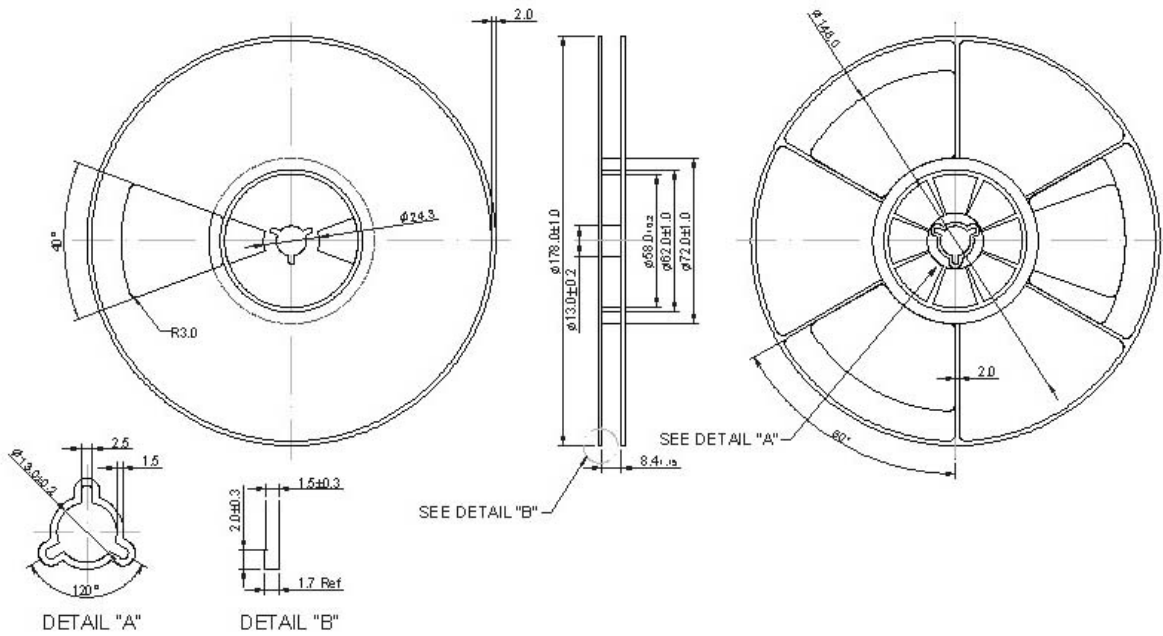
1:	1.1373
	1.57042 GHz
2:	1.2777
	1.58042 GHz
3:	9.1751
	1.52500 GHz

CHI Markers

1:	56.263 $\Omega$
	2.4250 $\Omega$
	1.57042 GHz
2:	58.192 $\Omega$
	-11.852 $\Omega$
	1.58042 GHz
3:	7.1504 $\Omega$
	27.878 $\Omega$
	1.52500 GHz

**G. PACKING:**

**1. REEL DIMENSION**



**2. TAPE DIMENSION**

