



# 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: Sep, 9, 2005

Product Name: SAW Filter 874.55 MHz SMD 3.8X3.8 mm

TST Parts No.:TA0512A

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

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

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

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

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



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## SAW Filter 874.55 MHz

MODEL NO.: TA0512A

REV. NO.:1

### A. MAXIMUM RATING:

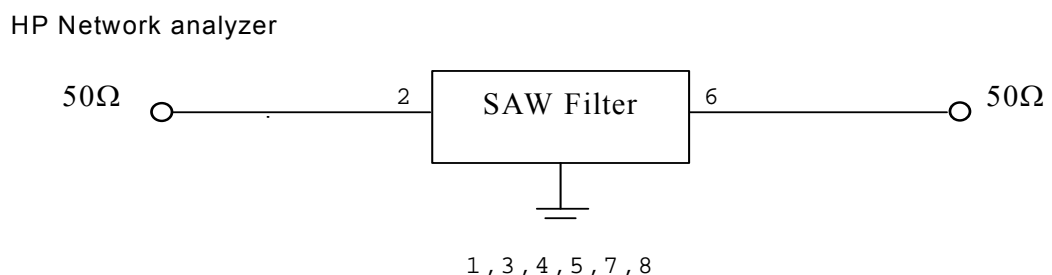
1. Input Power Level: 13 dBm
2. DC voltage: 5 V
3. Operating Temperature: -20°C to +70°C
4. Storage Temperature: -30°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

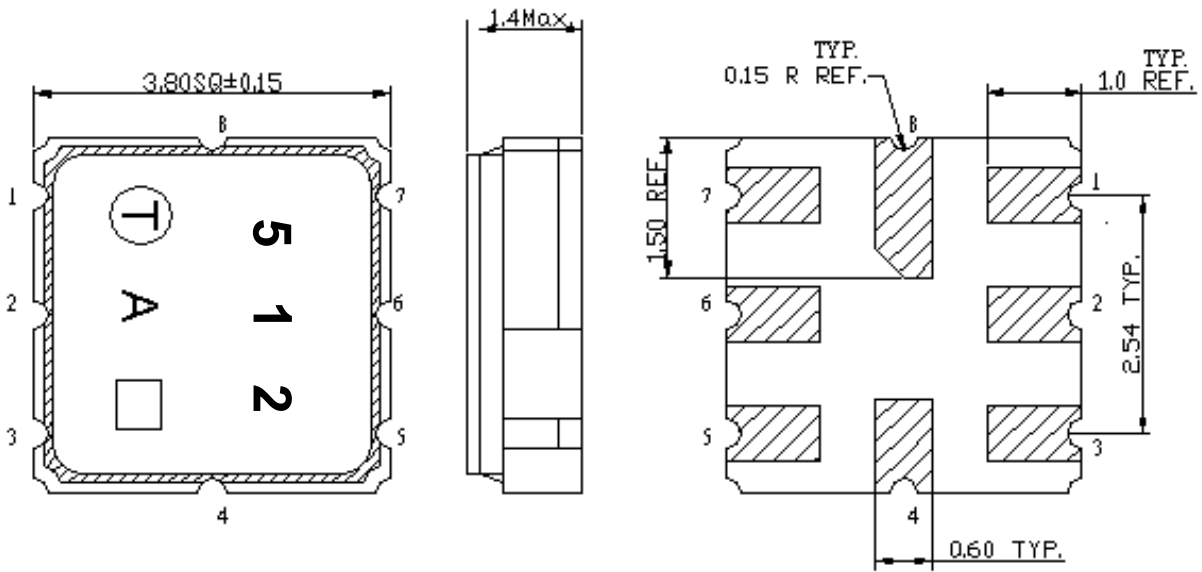
### B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.
Center frequency <b>F<sub>o</sub></b>	MHz	-	874.55	-
1.5-dB Bandwidth	MHz	-	F <sub>o</sub> ±4.6	-
Operational Bandwidth	MHz	870	-	879.1
Insertion Loss at F <sub>o</sub>	dB	-	2.7	3.5
Amplitude Variation (870~879.1 MHz)	dB	-	0.5	1.5
<b>Attenuation</b> (Reference level from 0 dB)				
0 ~ 850 MHz	dB	35	59	-
850 ~ 859 MHz	dB	10	33	-
888 ~ 893 MHz	dB	10	28	-
893 ~ 902 MHz	dB	30	38	-
902 ~ 2000 MHz	dB	34	37	-
Input/Output VSWR (870~879.1 MHz)		-	1.7	2.5
Source impedance <b>Z<sub>s</sub></b>	Ω	-	50	-
Load impedance <b>Z<sub>L</sub></b>	Ω	-	50	-

### C. MEASUREMENT CIRCUIT:

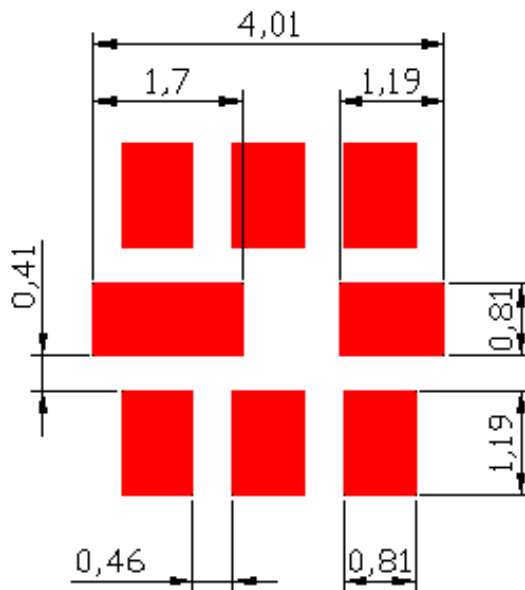


**D. OUTLINE DRAWING:**

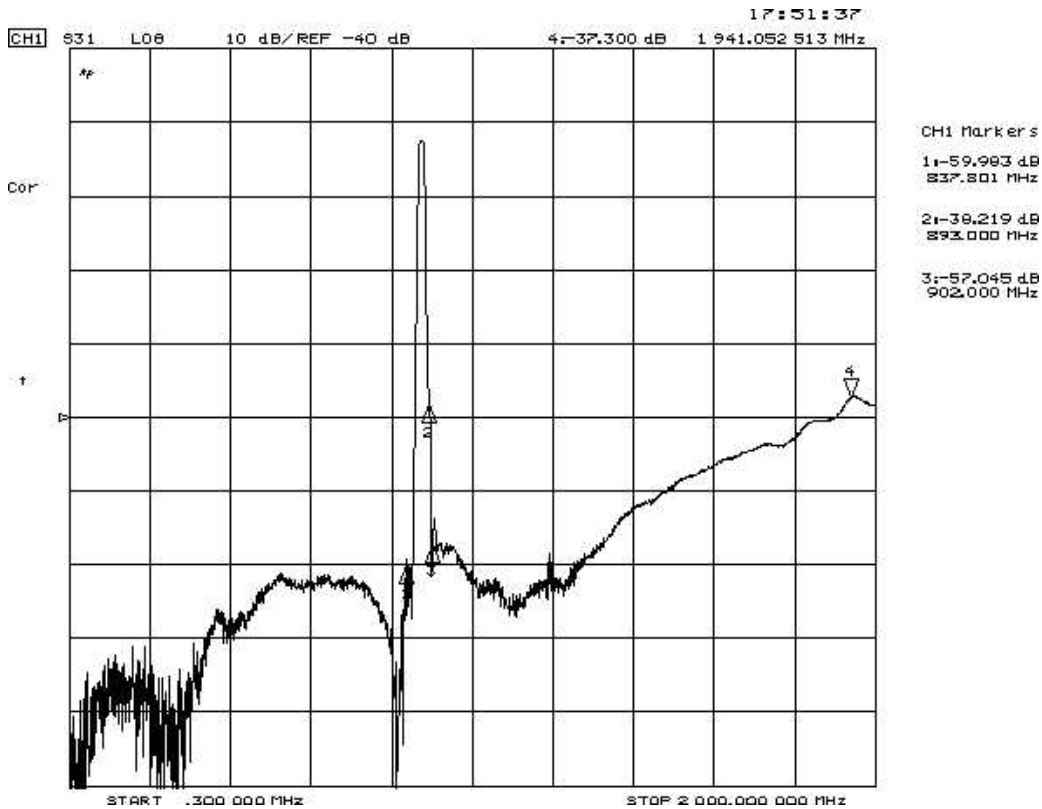


- 2 : Input
- 6: Output
- 1,3,4,5,7,8: Ground
- : Date Code
- Unit: mm

**E. PCB Footprint:**

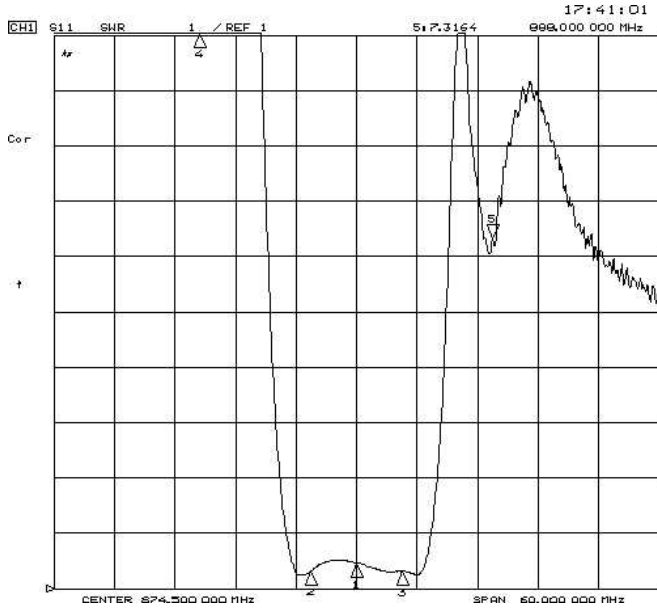


## F. Frequency Characteristics : Transfer function



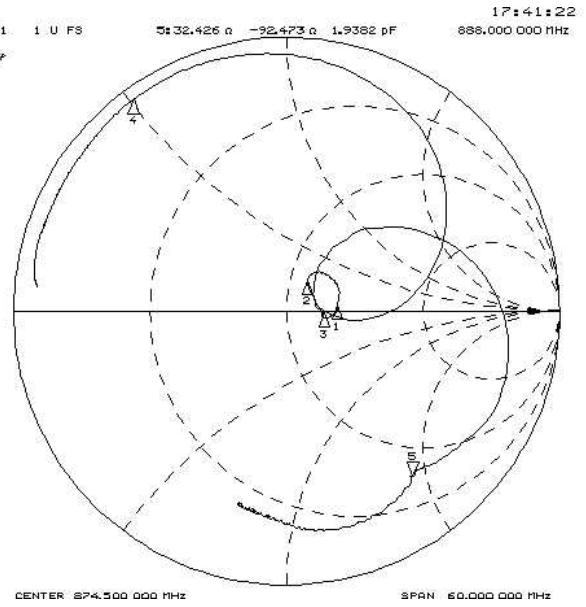
# Reflections Functions :

## S11



CHI Markers

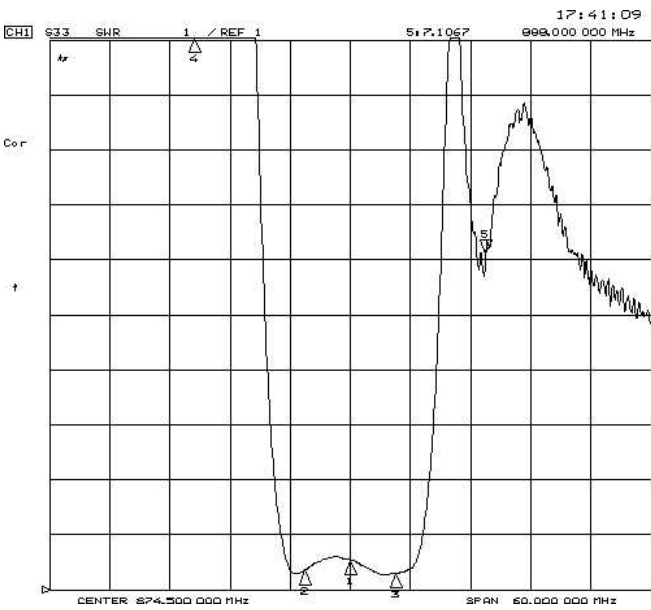
1: 1.4651	874.550 MHz
2: 1.3232	870.000 MHz
3: 1.3213	879.100 MHz
4: 44.320	859.000 MHz



CHI Markers

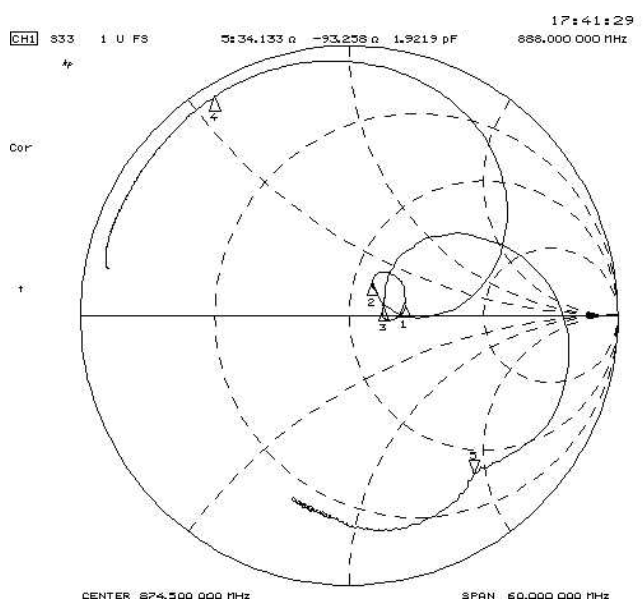
1: 72.996 a	3.2461 a	874.550 MHz
2: 56.695 a	13.270 a	870.000 MHz
3: 66.039 a	-7.5516 a	879.100 MHz
4: 1.4131 a	25.553 a	859.000 MHz

## S22



CHI Markers

1: 1.5404	874.550 MHz
2: 1.3596	870.000 MHz
3: 1.3063	879.100 MHz
4: 42.755	859.000 MHz

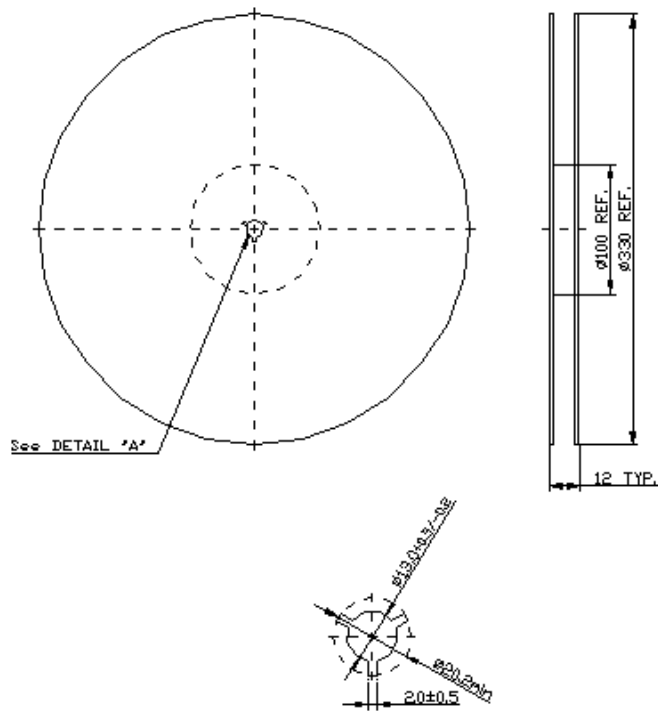


CHI Markers

1: 75.959 a	7.0937 a	874.550 MHz
2: 57.434 a	14.813 a	870.000 MHz
3: 64.617 a	-4.2391 a	879.100 MHz
4: 1.5439 a	27.951 a	859.000 MHz

**G. PACKING:**

**1. REEL DIMENSION**



**2. TAPE DIMENSION**

