



# 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:

Product Name: Dual SAW Resonator 390/315 MHz SMD 5.0X5.0 mm

TST Parts No.: TE0109A

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

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

Checked by: \_\_\_\_\_ Asin Lin

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

Date: \_\_\_\_\_ 2005/6/01



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## SAW Resonator 390/315 MHz

MODEL NO.: TE0109A

REV. NO.:1

### A. FEATURES:

- 1-Port Resonator.

### B. MAXIMUM RATING:

1. Input Power Level: 0 dBm
2. DC voltage: 3 V
3. Operating Temperature: -30°C to +70°C
4. Storage Temperature: -40°C to +85°C

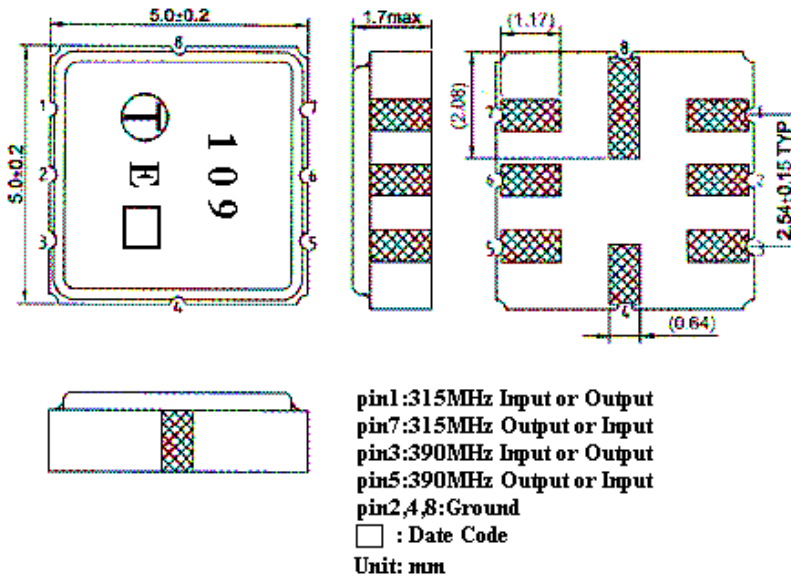
### C. ELECTRICAL CHARACTERISTICS:

RoHS Compliant  
Lead free  
Lead-free soldering

Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fr</b>	<b>MHz</b>	314.9	315	315.1
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.7	2.5
Equivalent Elements				
Motional capacitance <b>C1</b>	<b>fF</b>	-	3.595	-
Motional inductance <b>L1</b>	<b>μH</b>	-	71.62	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	21.8	-
Parallel capacitance <b>Co</b>	<b>pF</b>	-	5.2	-
Temp.coeff.	<b>ppm/c*2</b>	-	0.032	-
Turnover To	<b>deg.C</b>		25	
Package size		SMD 5.0X5.0X1.4mm		

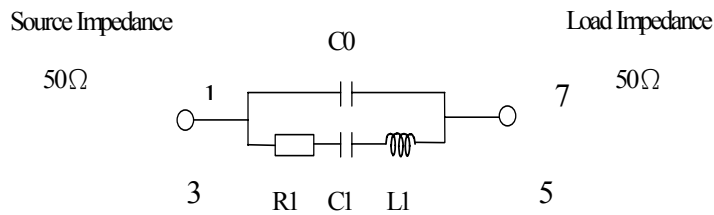
Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fr</b>	<b>MHz</b>	389.9	390	390.1
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.7	2.5
Equivalent Elements				
Motional capacitance <b>C1</b>	<b>fF</b>	-	1.59	-
Motional inductance <b>L1</b>	<b>μH</b>	-	104.8	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	23.1	-
Parallel capacitance <b>Co</b>	<b>pF</b>	-	3.06	-
Temp.coeff.	<b>ppm/c*2</b>	-	0.032	-
Turnover To	<b>deg.C</b>		25	
Package size		SMD 5.0X5.0X1.4mm		

**D. OUTLINE DRAWING:**



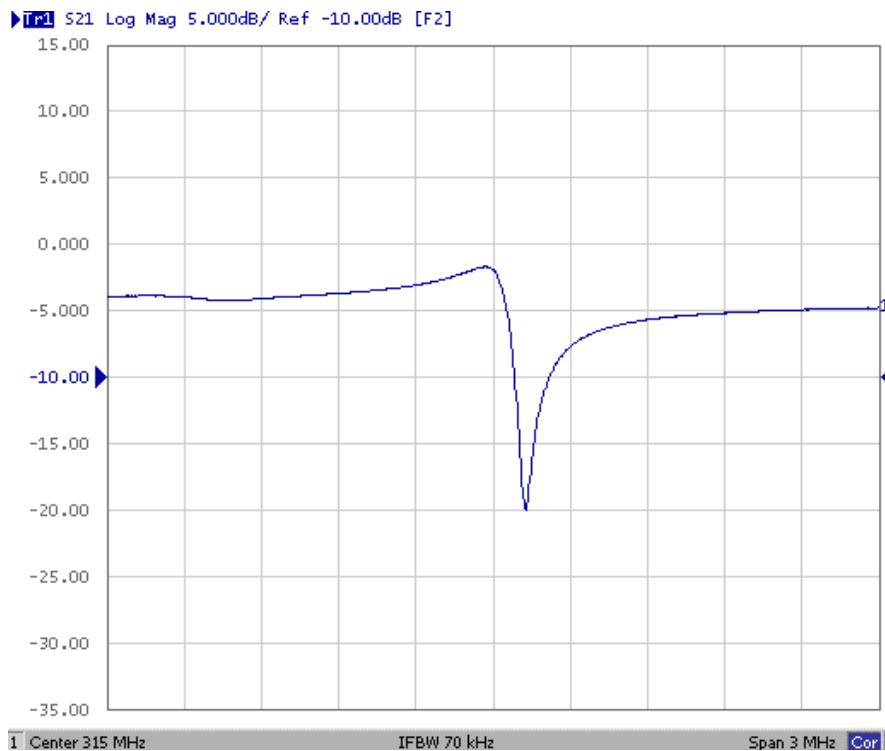
**E. EQUIVALENT CIRCUIT:**

One-Port Resonator:

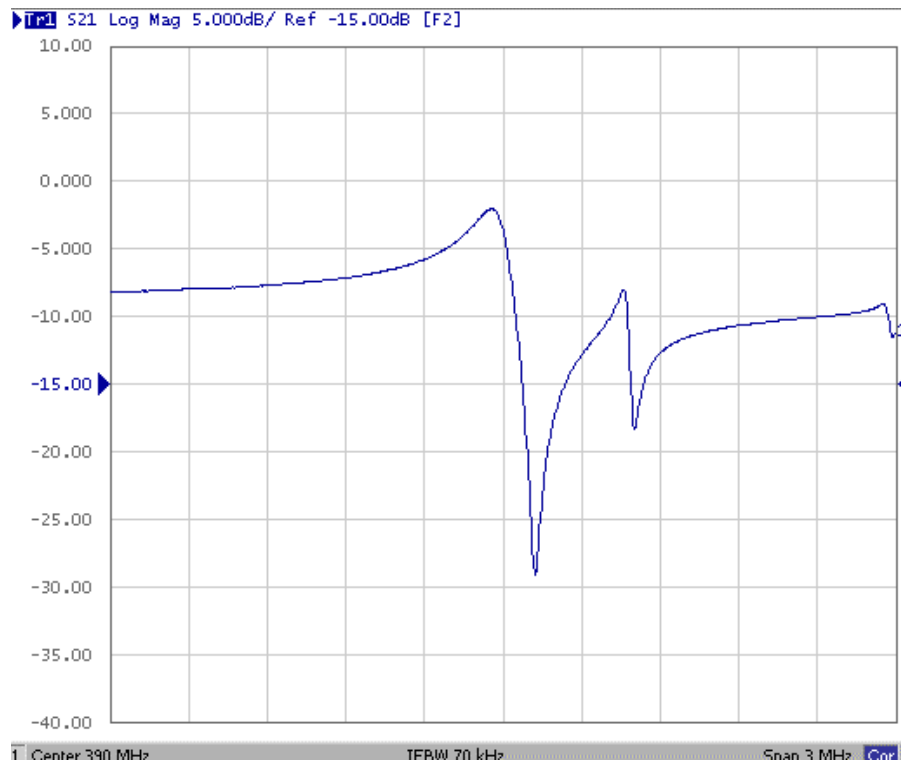


**F. FREQUENCY CHARACTERISTICS:**

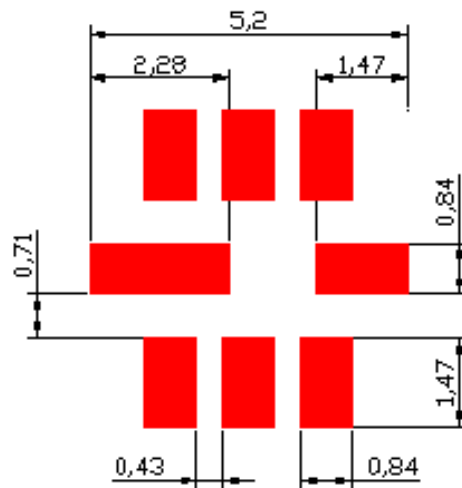
a. 315MHz



## b.390MHz

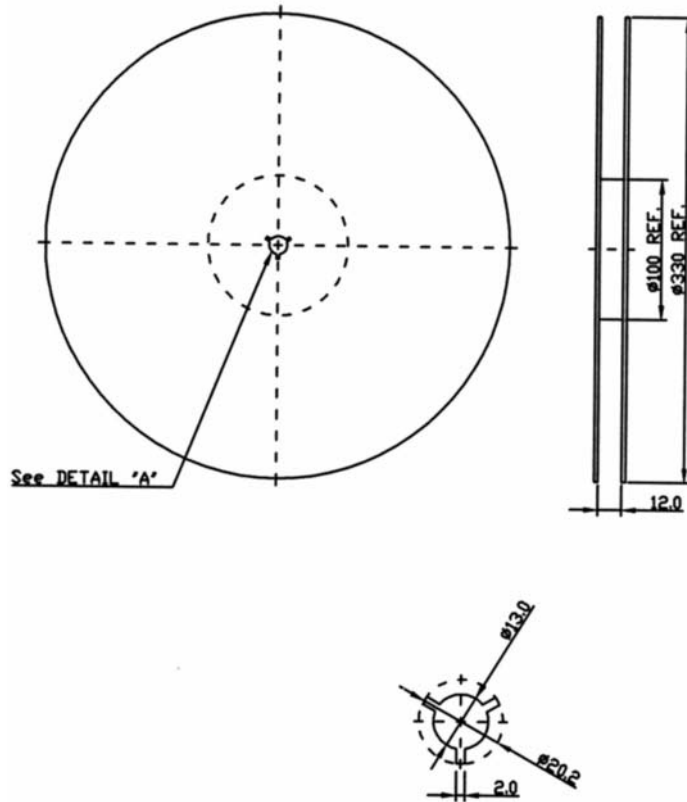


## H. PCB FOOTPRINT



# I. PACKING:

## 1. REEL DIMENSION



## 2. TAPE DIMENSION

