



# 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:

Product Name: SAW Resonator 737.552 MHz SMD 3X3 mm

TST Parts No.: TC0309A

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

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

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

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

Date: \_\_\_\_\_ 2005/12/22



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## SAW Resonator 737.552 MHz

MODEL NO.: TC0309A

REV. NO.:1

### A. FEATURES:

1. 1-Port Resonator.

### B. MAXIMUM RATING:

1. Input Power Level: 0 dBm
2. DC voltage: 12V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

### C. ELECTRICAL CHARACTERISTICS:

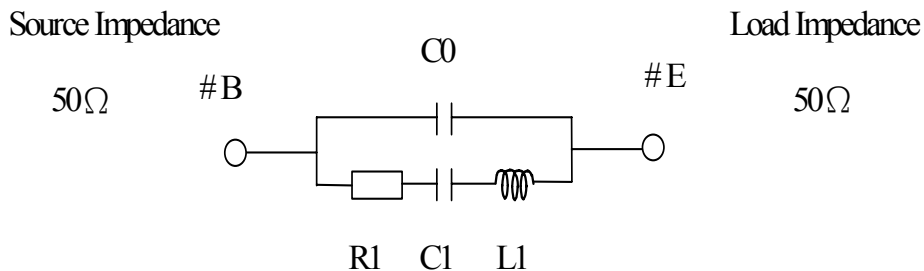
Reference Temperature  $T_A=25^\circ\text{C}$

Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fc</b>	<b>MHz</b>	737.508	737.552	737.596
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.26	2.0
Unload quality factor <b>Q<sub>U</sub></b>		-	9216	-
Ageing of fc	<b>ppm/yr</b>	-	-	±10
Motional capacitance <b>C1</b>	<b>fF</b>	-	1.62	-
Motional inductance <b>L1</b>	<b>μH</b>	-	28.64	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	14.4	-
Parallel capacitance <b>C<sub>0</sub></b>	<b>pF</b>	-	2.84	-
Frequency Temperature coefficient <b>C<sub>f</sub></b> )	<b>ppm/c*2</b>	-	0.032	-
Turnover <b>T<sub>0</sub></b>	<b>deg.C</b>	-	25	-
Package size		SMD 3x3x1.1 mm		

Temperature dependence of fc:  $f_c(T_A)=f_c(T_0)(1+TC_f(T_A-T_0)^2)$

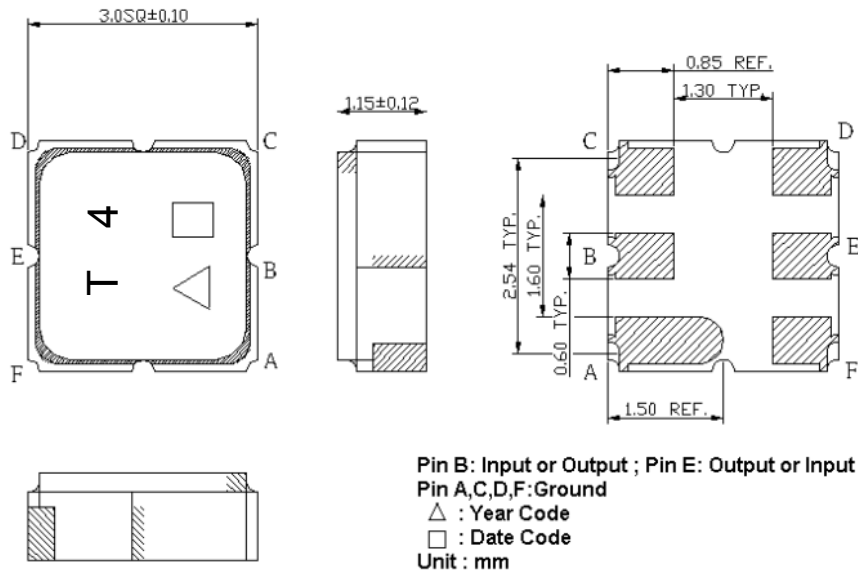
### D. EQUIVRENT CIRCUIT:

One-Port Resonator:



RoHS Compliant  
Lead free  
Lead-free soldering

**E. OUTLINE DRAWING:**

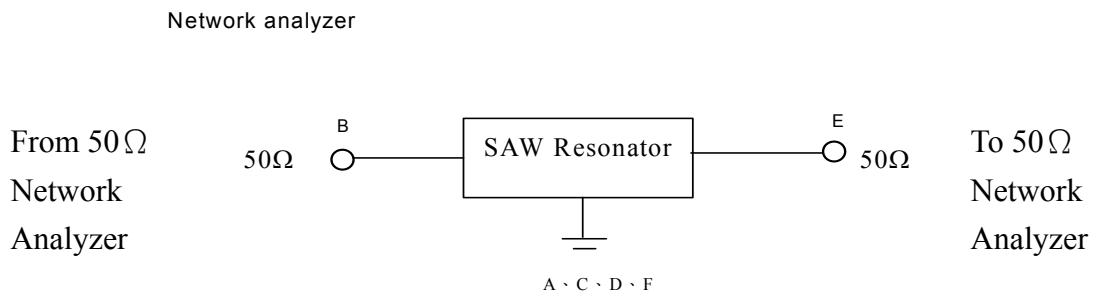


$\square$  Date code: Provided by planer each year  
 Year code: 5 for 2005, 6 for 2006, ...

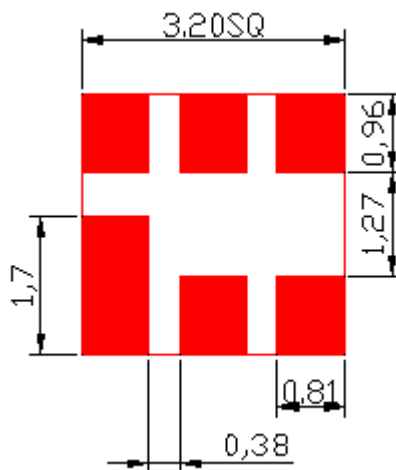
**F. FREQUENCY CHARACTERISTICS:**



### G. TEST CIRCUIT:

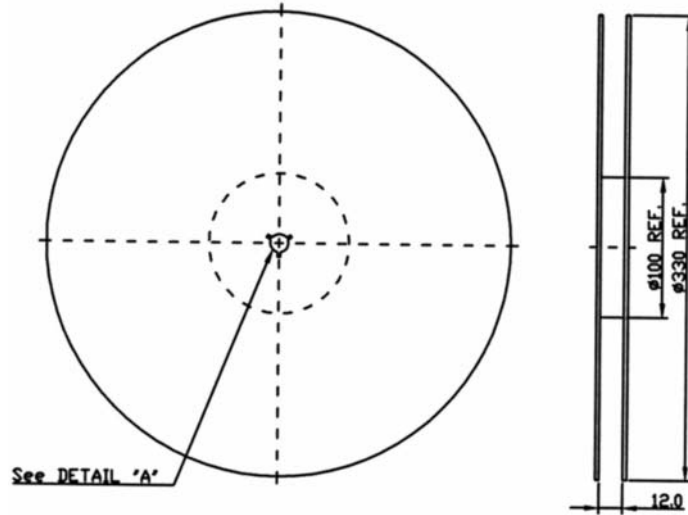


### H. LAND PATTERN:



I. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

