



# 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: 2005/06/08

Product Name: SAW Resonator 302 MHz SMD3.8X3.8 mm

TST Parts No.: TC0287A

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

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

Checked by: \_\_\_\_\_ Stanley Tian

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

Date: \_\_\_\_\_ 2005/06/08



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## SAW Resonator 302 MHz

MODEL NO.: TC0287A

REV. NO.:1

### A. FEATURES:

- 1-Port Resonator.

### B. MAXIMUM RATING:

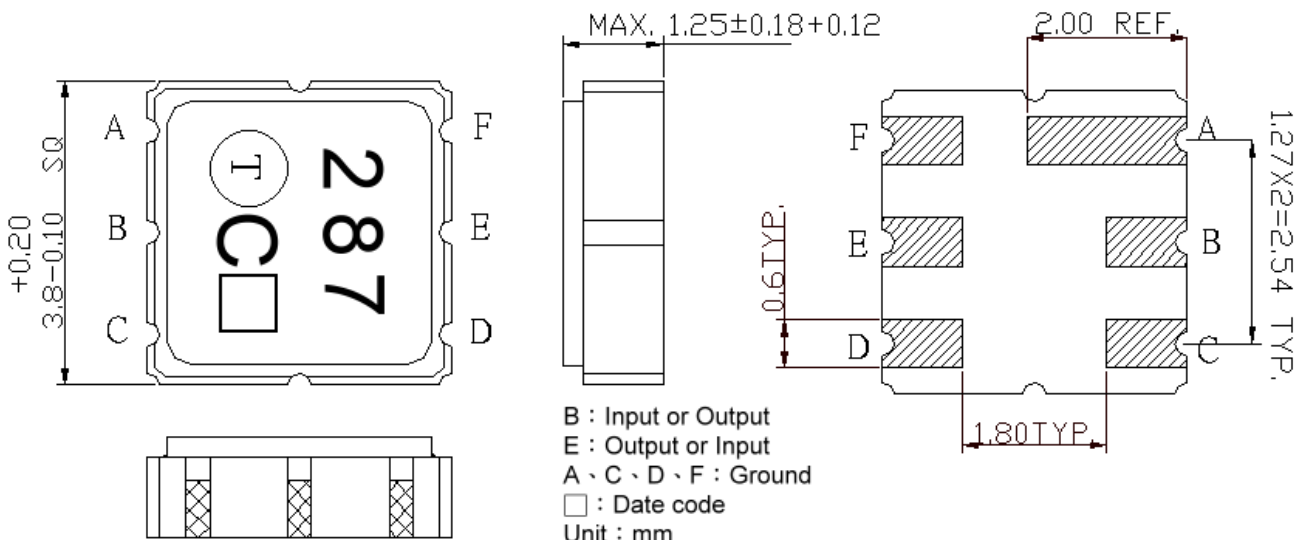
1. Input Power Level: 0 dBm
2. DC voltage: 12 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

### C. ELECTRICAL CHARACTERISTICS:

Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fr</b>	<b>MHz</b>	301.925	301.995	302.075
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.53	2.5
Equivalent Elements				
Motional capacitance <b>C1</b>	<b>fF</b>	-	3.309	-
Motional inductance <b>L1</b>	<b>μH</b>	-	83.93	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	27.01	-
Parallel capacitance <b>Co</b>	<b>pF</b>	-	4.958	-
Temp. coeff.	<b>ppm/c*2</b>	-	0.032	-
Turnover <b>To</b>	<b>deg.C</b>	10		40
Package size		SMD3.8X3.8X1.4 mm		

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

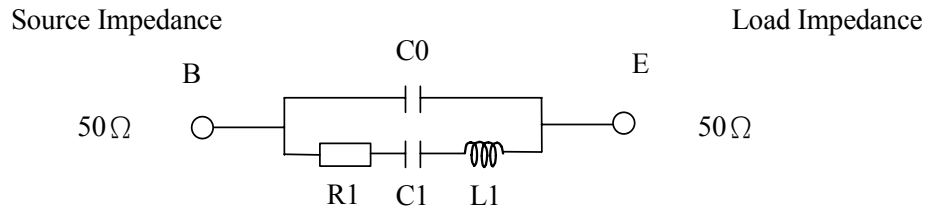
### D. OUTLINE DRAWING:



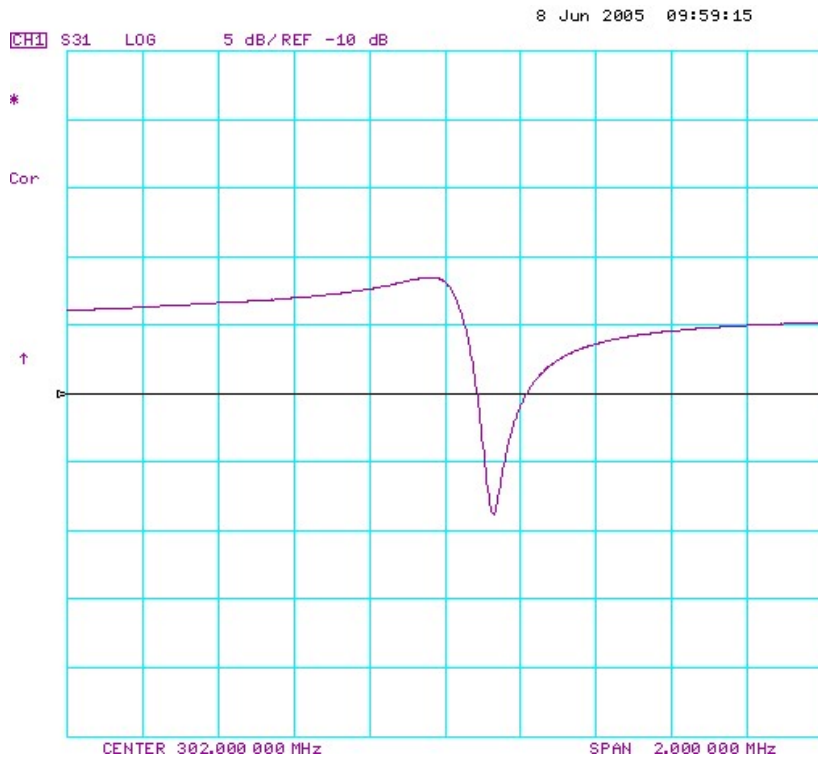
RoHS Compliant  
Lead free  
Lead-free soldering

**E. EQUIVALENT CIRCUIT:**

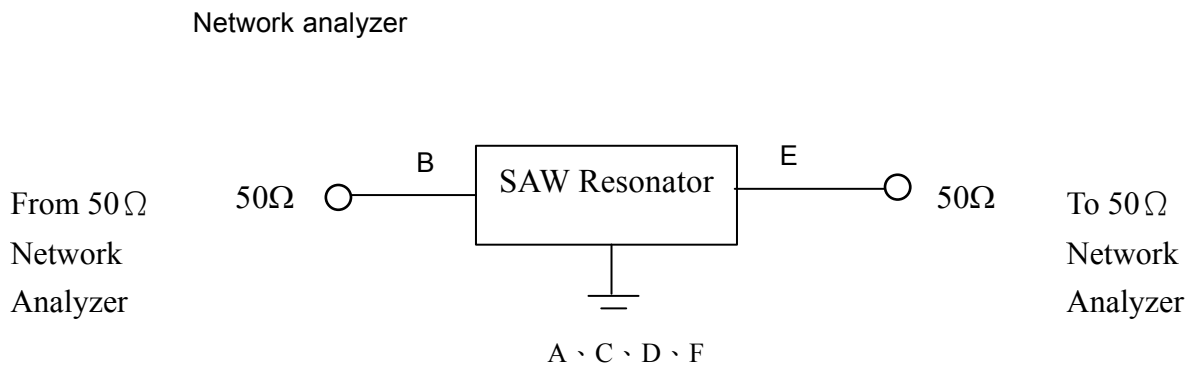
One-Port Resonator:



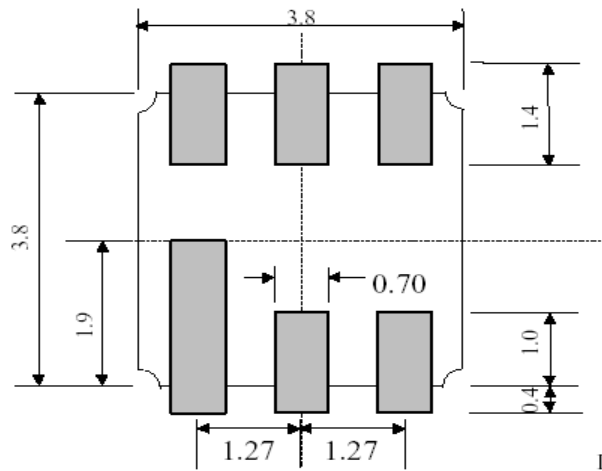
**F. FREQUENCY CHARACTERISTICS:**



**G. TEST CIRCUIT:**



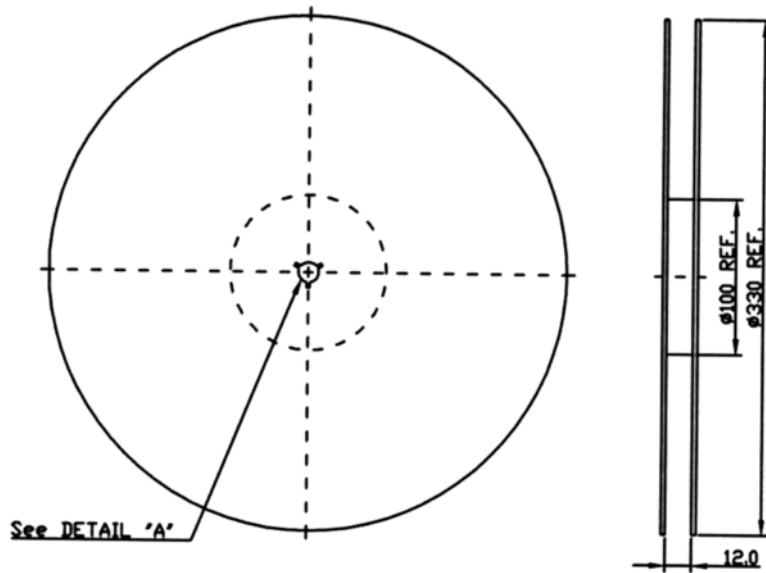
H. PCB FOOTPRINT:



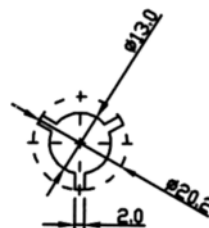
Dimensions in mm

I. PACKING:

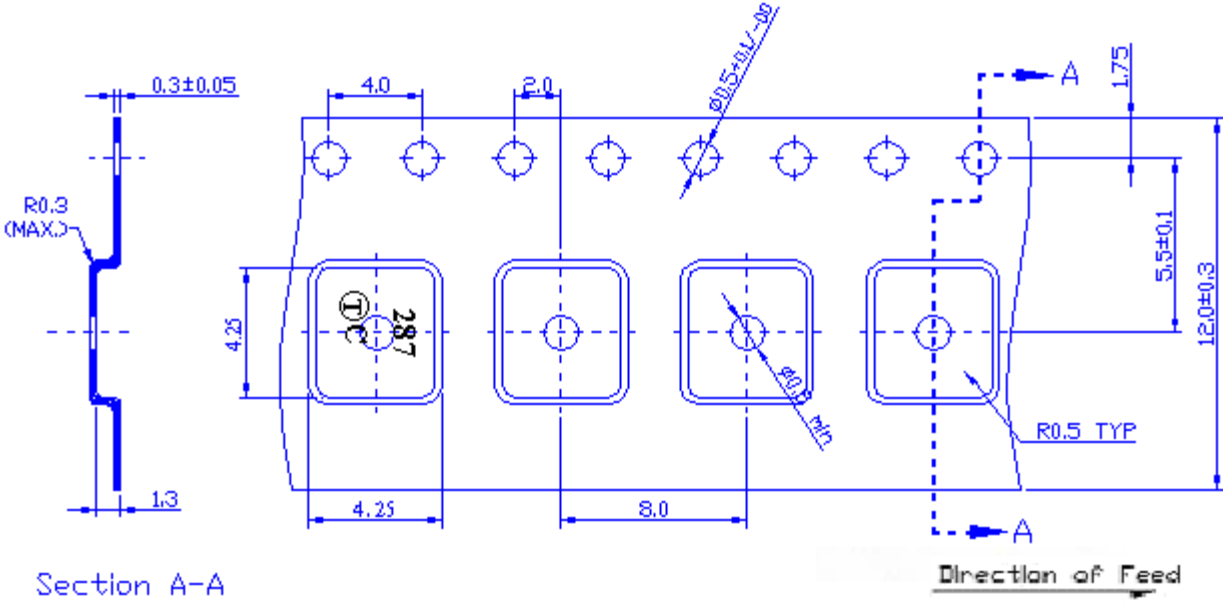
1. REEL DIMENSION



See DETAIL 'A'



2.TAPE DIMENSION



Section A-A