



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet for Product Specification

Issued Date:

Product Name: SAW Resonator 666.6043 MHz SMD 3.8X3.8 mm

TST Parts No.: TC0237A

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

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

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

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

Date: \_\_\_\_\_ 2004/8/20



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## SAW Resonator 666.6043 MHz

Model No.: TC0237A

Rev. No.:2

### A. Features:

1. 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:

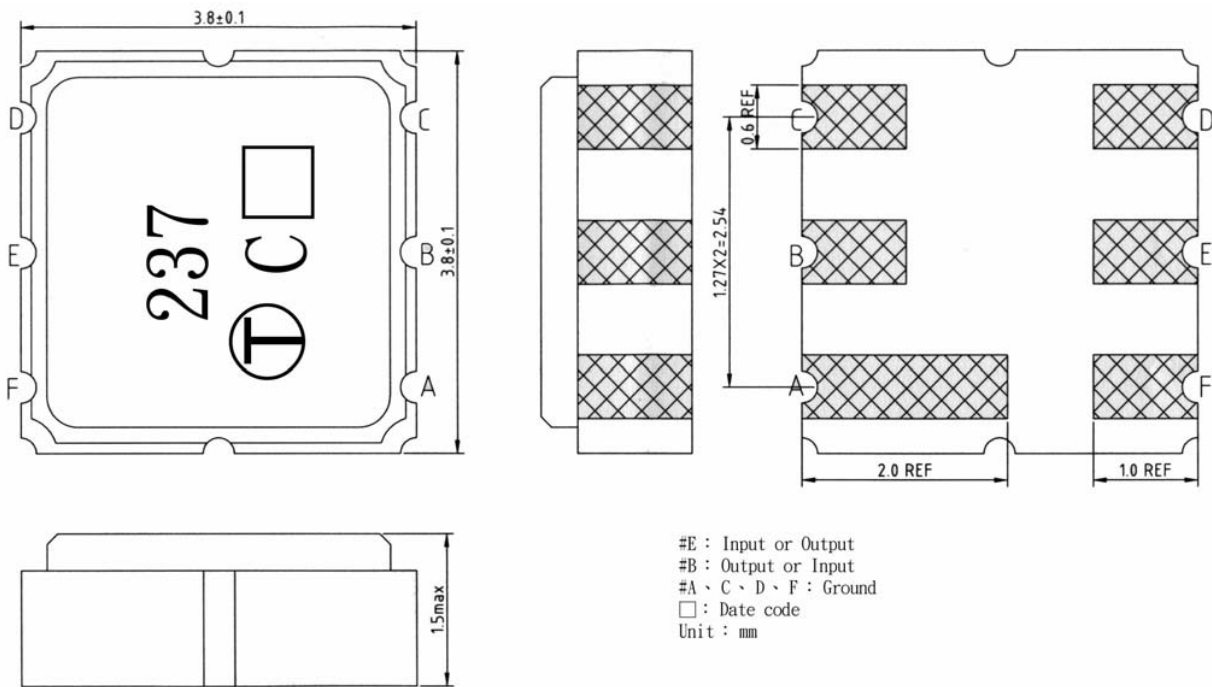
Reference Temperature  $T_A=25\text{ }^\circ\text{C}$

Characteristic	Units	Minimum	Typical	Maximum
Nominal Frequency, $f_c$	<b>MHz</b>	666.5743	666.6043	666.6343
Insertion Loss, <b>IL</b>	<b>dB</b>	-	1.3	2.5
Unload Quality Factor, $Q_U$		6000	7543	-
Aging of $f_c$	<b>ppm/ yr</b>	-	-	$\pm 10$
Equivalent Circuit Model				
Motional Capacitance, $C_m$	<b>fF</b>	-	1.99	-
Motional Inductance, $L_m$	<b><math>\mu\text{H}</math></b>	-	28.62	-
Motional Resistance, $R_m$	<b><math>\Omega</math></b>	-	15.89	-
Shunt Static Capacitance, $C_o$	<b>pF</b>	-	3.28	-
Temp. Coefficient.	<b>ppm/ <math>^\circ\text{C}^2</math></b>	-	0.032	-
Turnover Temperature, $T_o$	<b><math>^\circ\text{C}</math></b>	10	25	40
Package size		SMD 3.8x3.8x1.2 mm		

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

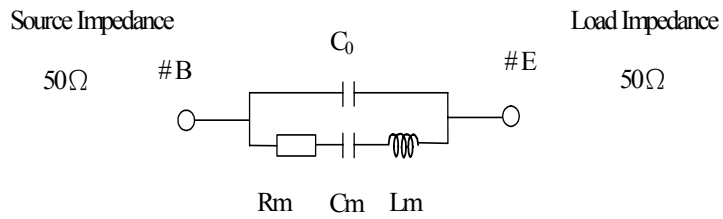
RoHS Compliant  
Lead free  
Lead-free soldering

D. Outline Drawing:

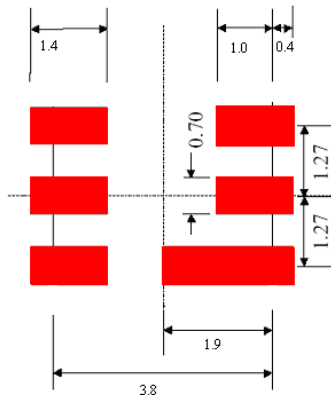


E. Equivalent Circuit Model:

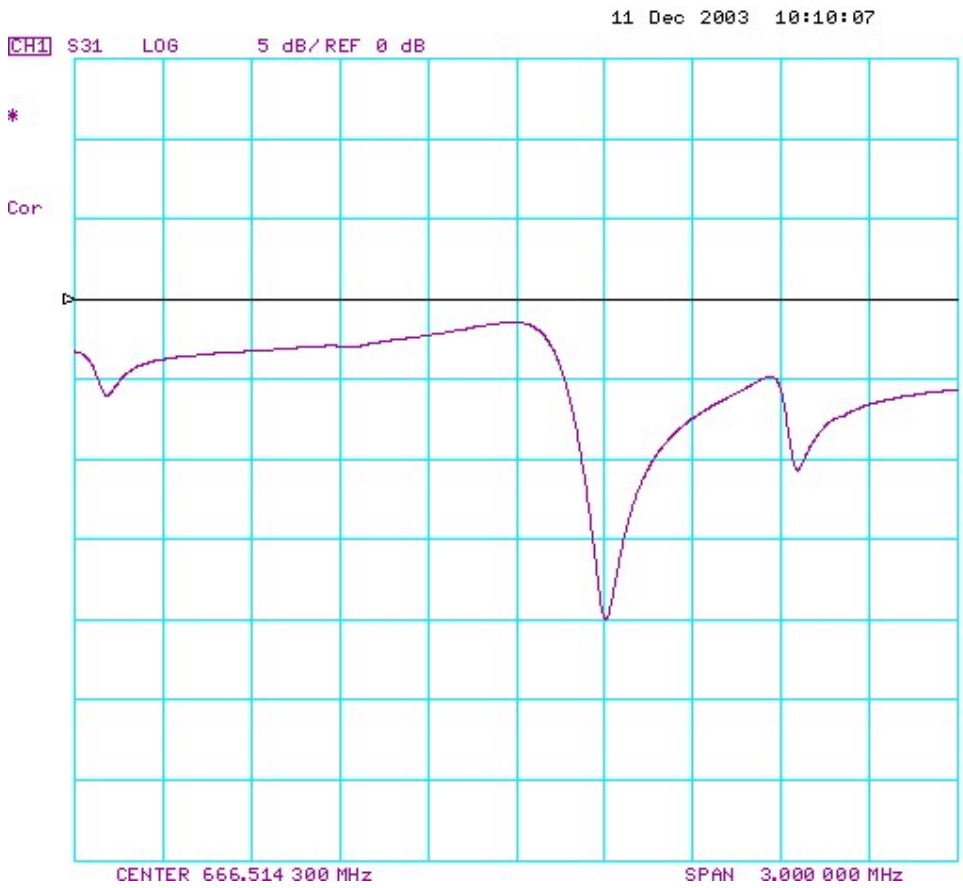
One-Port Resonator:



F. PCB FOOTPRINT

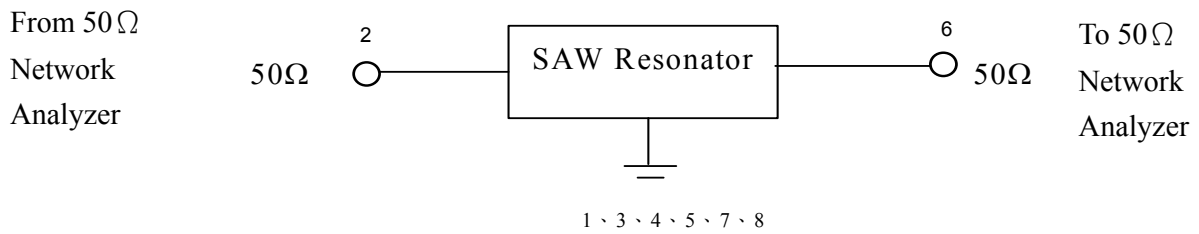


### G. Frequency Characteristics:



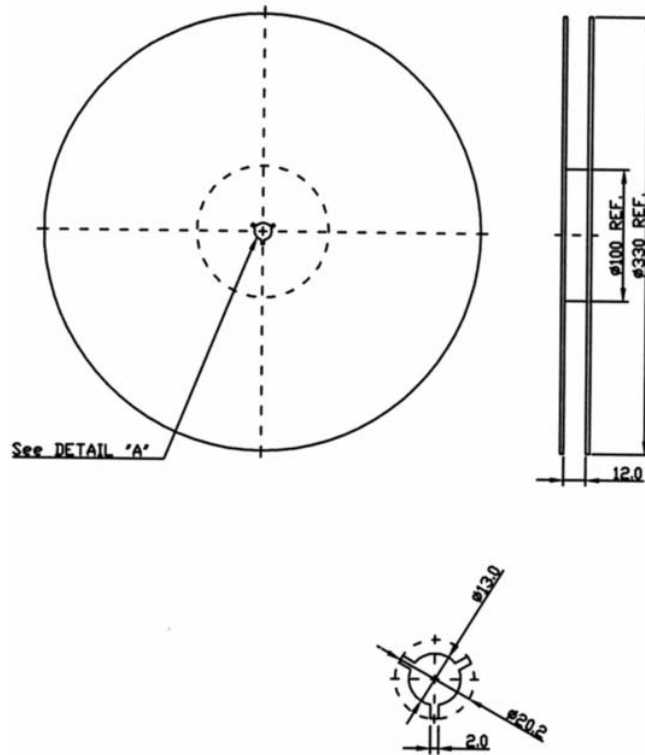
### H. Test Circuit:

Network analyzer



I. Packing:

1. Reel dimension



2. Tape dimension

