



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 669.4169 MHz SMD 3.8X3.8 mm

TST Parts No.: TC0236A

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 669.4169 MHz

Model No.: TC0236A

Rev. No.:2

A. Features:

- 1-Port Resonator.

RoHS Compliant
Lead free
Lead-free soldering

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

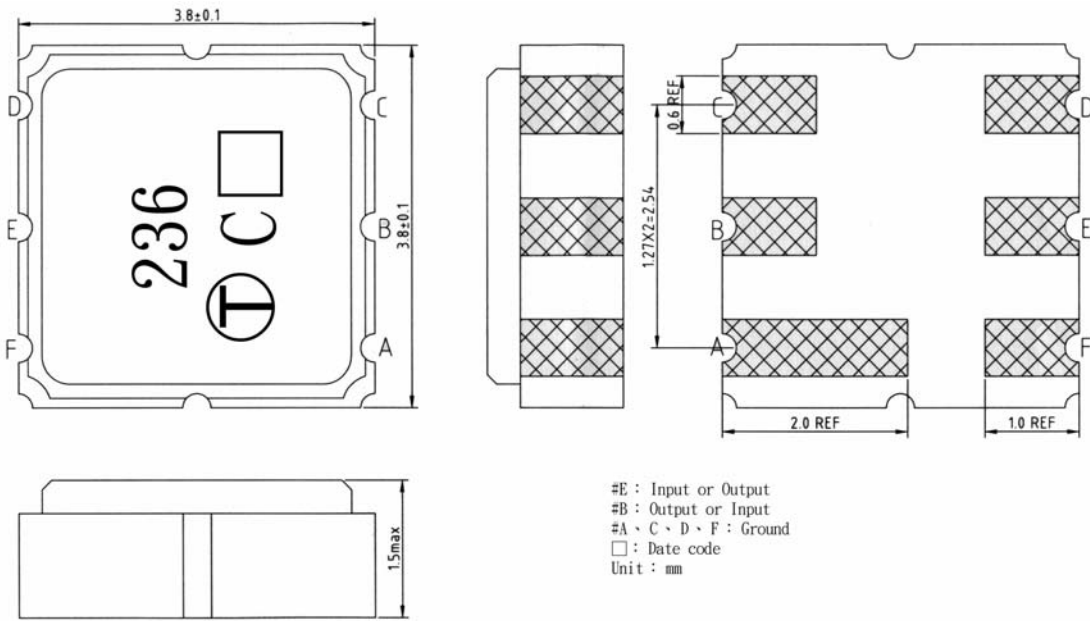
C. Electrical Characteristics:

Reference Temperature $T_A=25\text{ °C}$

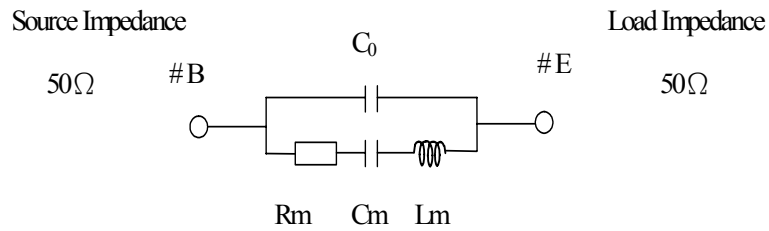
Characteristic	Units	Minimum	Typical	Maximum
Nominal Frequency, f_c	MHz	669.3869	669.4169	669.4469
Insertion Loss, IL	dB	-	1.3	2.5
Unload Quality Factor, Q_U		6000	8619	-
Aging of f_c	ppm/ yr	-	-	± 10
Equivalent Circuit Model				
Motional Capacitance, C_m	fF	-	1.79	-
Motional Inductance, L_m	μH	-	31.48	-
Motional Resistance, R_m	Ω	-	15.36	-
Shunt Static Capacitance, C_o	pF	-	2.96	-
Temp. Coefficient.	ppm/ °C²	-	0.032	-
Turnover Temperature, T_o	°C	10	25	40
Package size		SMD 3.8x3.8x1.2 mm		

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

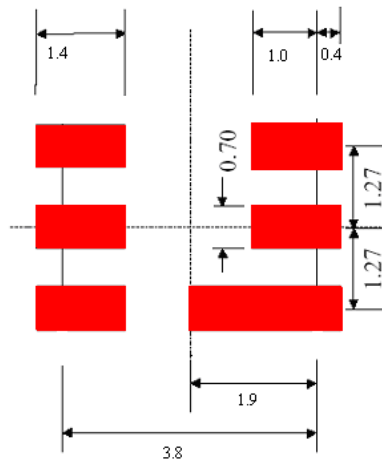
D. Outline Drawing:



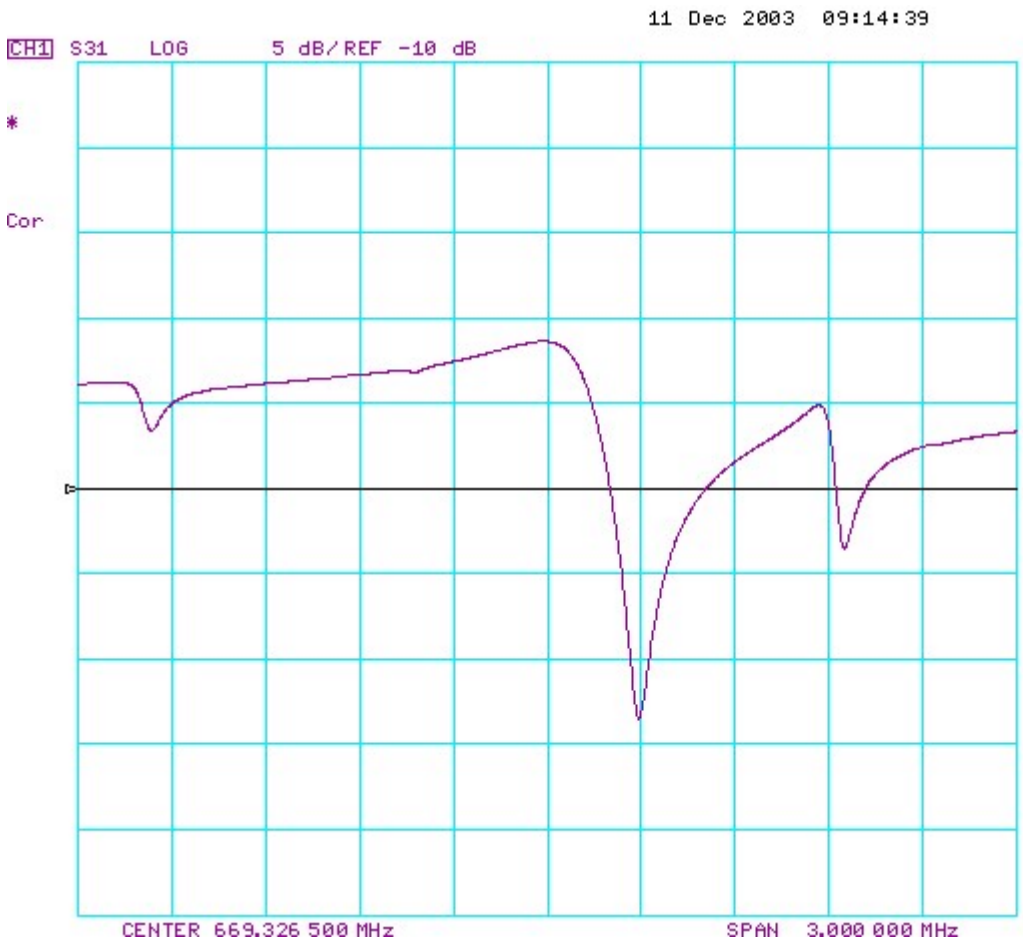
E. Equivalent Circuit Model:
One-Port Resonator:



F. PCB FOOTPRINT

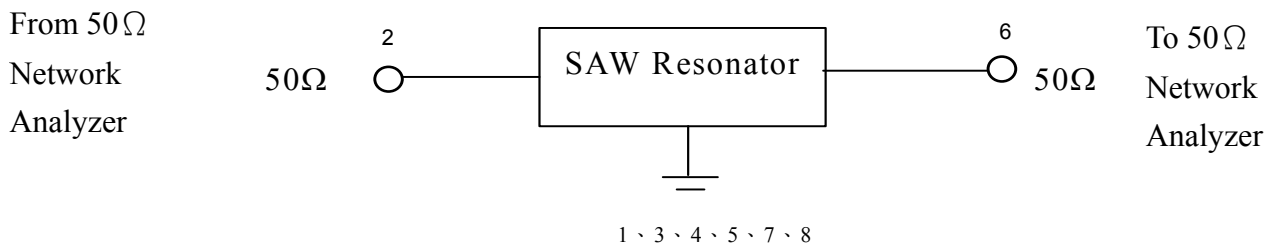


G. Frequency Characteristics:



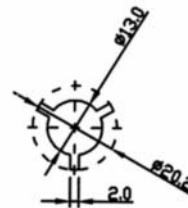
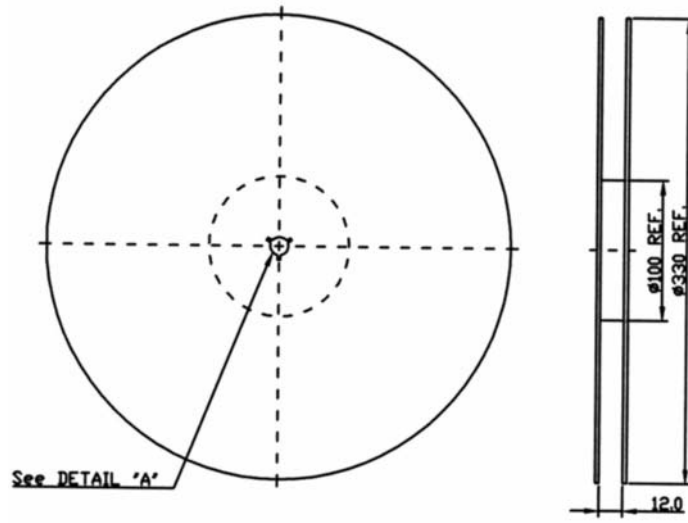
H. Test Circuit:

Network analyzer

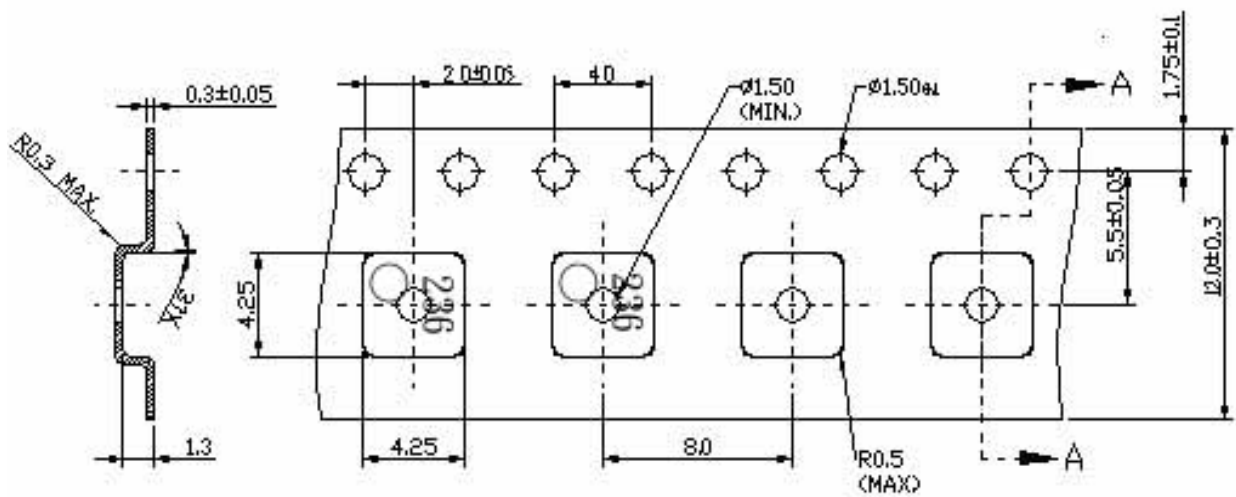


I. Packing:

1. Reel dimension



2. Tape dimension



Section A-A