



# 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 666.761 MHz SMD 3X3 mm

TST Parts No.: TC0247A

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

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

Checked by: \_\_\_\_\_ Vincent-WT Chiu

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

Date: \_\_\_\_\_ 2004/06/11



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## SAW Resonator 666.761 MHz

MODEL NO.: TC0247A

REV. NO.:1

### 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

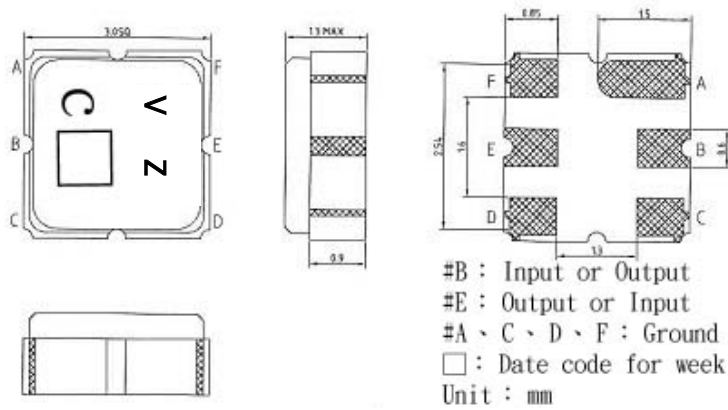
### C. ELECTRICAL CHARACTERISTICS:

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

Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fc</b>	<b>MHz</b>	666.721	666.761	666.791
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.3	2.0
Unload quality factor <b>Q<sub>U</sub></b>		9500	10750	-
Ageing of fc	<b>ppm/yr</b>	-	-	±10
Motional capacitance <b>C1</b>	<b>fF</b>	-	1.57	-
Motional inductance <b>L1</b>	<b>μH</b>	-	36.298	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	14.15	-
Parallel capacitance <b>Co</b>	<b>pF</b>	-	2.8	-
Frequency Temperature coefficient ( $C_f$ )	<b>ppm/c*2</b>	-	0.032	-
Turnover $T_o$	<b>deg.C</b>	10		40
Package size		SMD 3x3x1.1 mm		

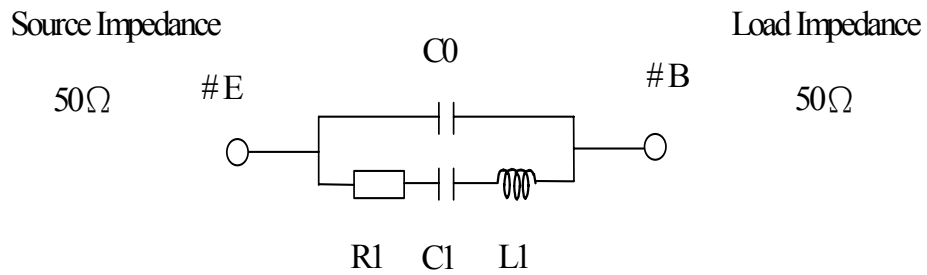
Temperature dependence of fc:  $f_c(T_A)=f_c(T_O)(1+TC_f(T_A-T_O)^2)$

### D. OUTLINE DRAWING:



**E. EQUIVALENT CIRCUIT:**

One-Port Resonator:

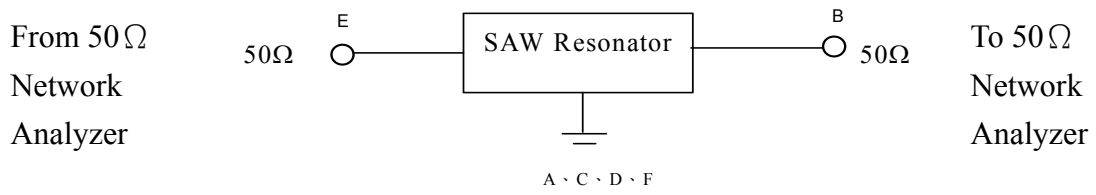


**F. FREQUENCY CHARACTERISTICS:**

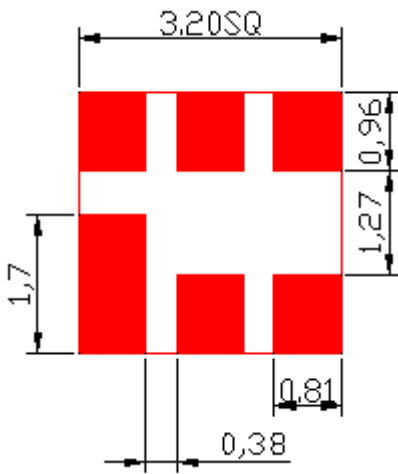


**G. TEST CIRCUIT:**

Network analyzer



**H. LAND PATTERN:**



**I. PACKING:**

**1. REEL DIMENSION**

