



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date: 2004/08/20

Product Name: SAW Resonator 622.164 MHz SMD 3.8X3.8 mm

TST Parts No.: TC0254A

Customer Parts No.: _____

| |
|---------------------|
| Company: _____ |
| Division: _____ |
| Approved by : _____ |
| Date: _____ |

Checked by: AsinLin

Approval by: Francis Chen

Date: 2004/08/20



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SAW Resonator 622.164 MHz

MODEL NO.: TC0254A

REV. NO.:1

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

RoHS Compliant
Lead free
Lead-free soldering

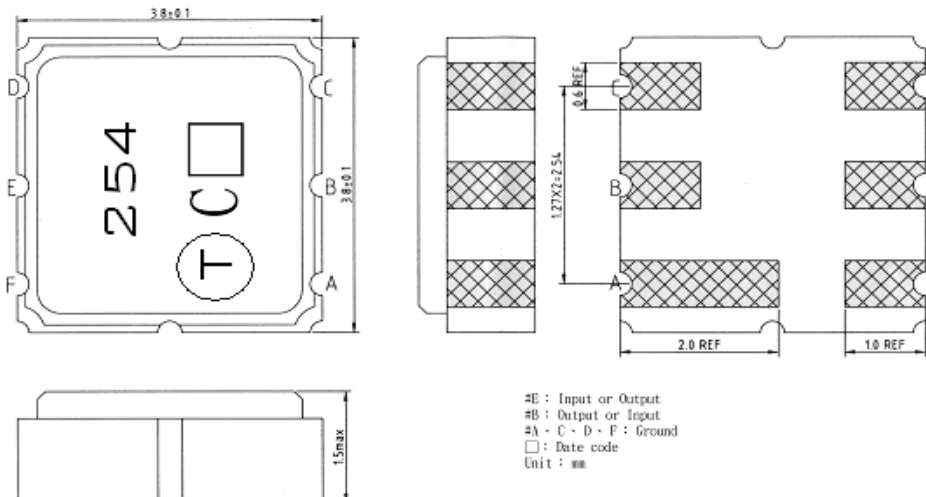
C. ELECTRICAL CHARACTERISTICS:

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

| Characteristic | Units | Minimum | Typical | Maximum |
|--|----------------|-------------------|---------|---------|
| Center frequency F_c | MHz | 622.114 | 622.164 | 622.214 |
| Insertion Loss IL | dB | - | 1.0 | 2.0 |
| Unload quality factor Q_U | | 6000 | 7000 | - |
| Motional capacitance C1 | fF | - | 1.85 | - |
| Motional inductance L1 | μH | - | 35.38 | - |
| Motional resistance R1 | Ohm | - | 14.19 | - |
| Parallel capacitance C_o | pF | - | 2.99 | - |
| Frequency Temperature coefficient (TC _f) | ppm/c*2 | - | 0.032 | - |
| Turnover To | deg.C | 10 | 25 | 40 |
| Package size | | SMD 3.8X3.8X1.2mm | | |

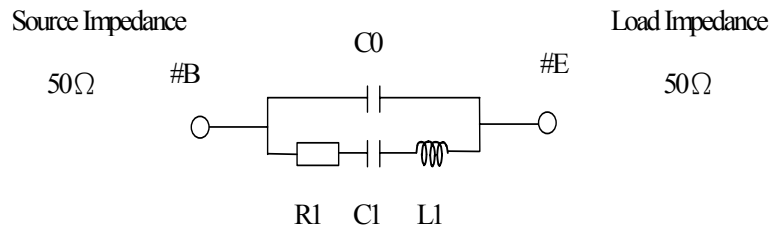
Temperature dependence of f_c : $f_c(T_A)=f_c(T_O)(1+TC_f(T_A-T_O)^2)$

D. OUTLINE DRAWING:

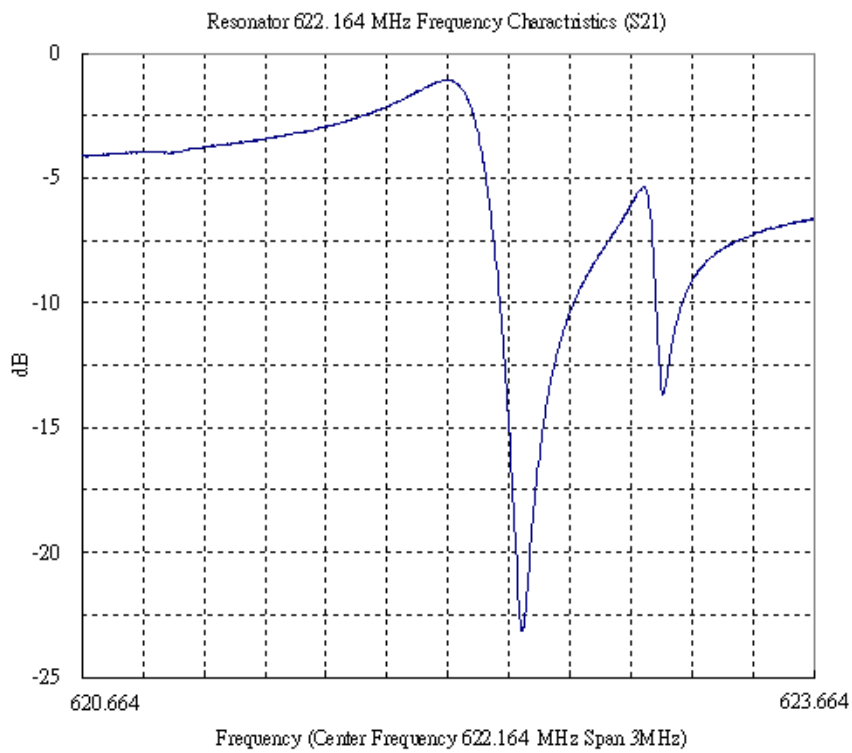


E. EQUIVALENT CIRCUIT:

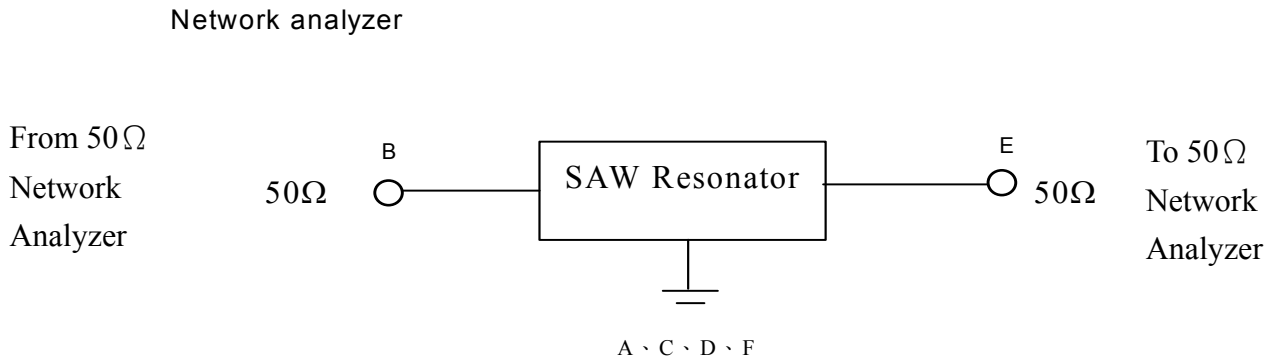
One-Port Resonator:



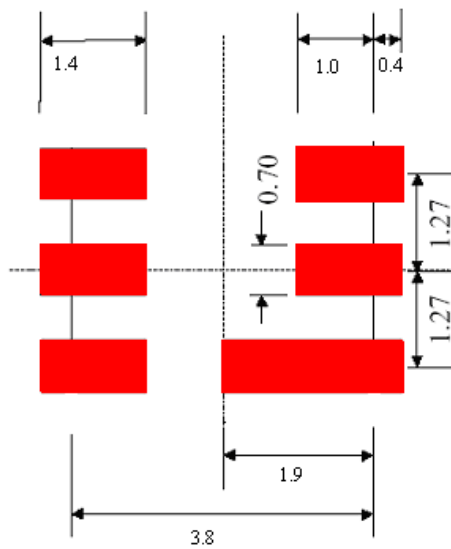
F. FREQUENCY CHARACTERISTICS:



G. TEST CIRCUIT:

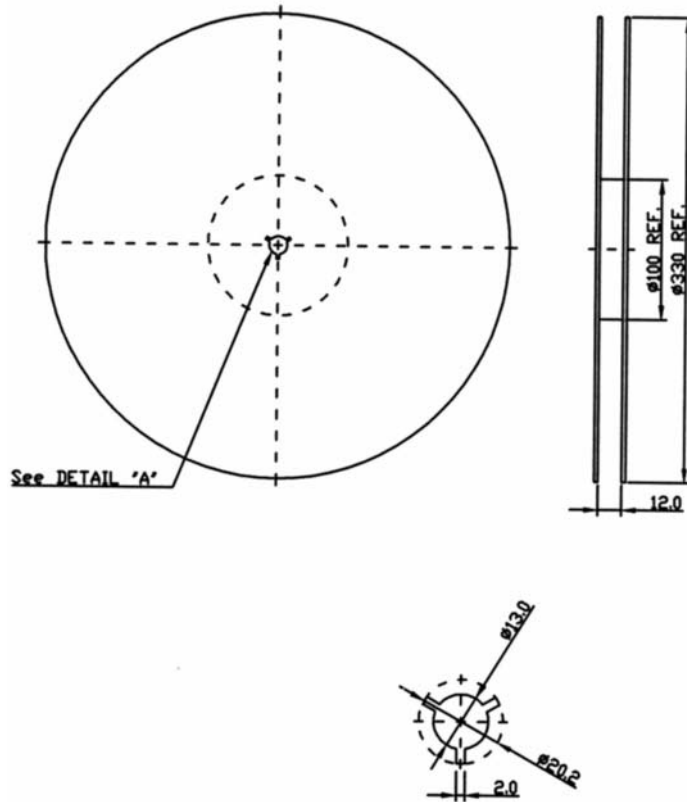


H.PCB FOOTPRINT



I. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

