



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Resonator 669.557 MHz SMD 3.8X3.8 mm

TST Parts No.: TC0224A

Customer Parts No.: _____

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

Checked by: Vincent Liu

Approval by: Francis Chen

Date: 2003/08/21



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SAW Resonator 669.557 MHz

MODEL NO.: TC0224A

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

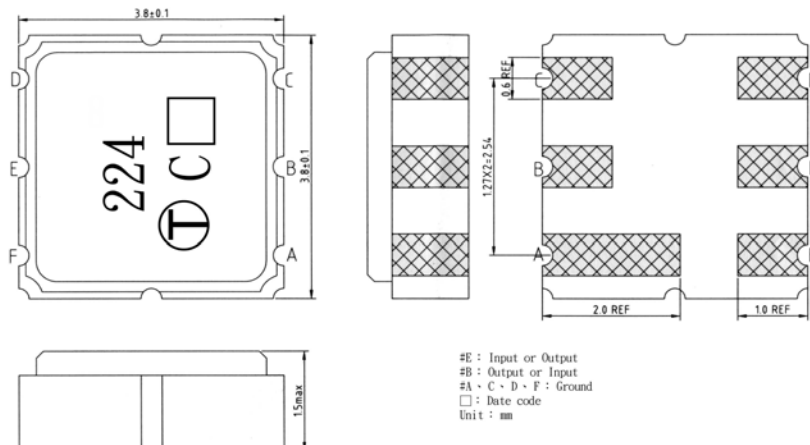
C. ELECTRICAL CHARACTERISTICS:

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

| Characteristic | Units | Minimum | Typical | Maximum |
|---|---------------------------|-------------------|---------|---------|
| Center frequency Fc | MHz | 669.527 | 669.557 | 669.587 |
| Insertion Loss IL | dB | - | 1.3 | 2.0 |
| Unload quality factor Q_U | | 6000 | 7000 | - |
| Ageing of fc | ppm/yr | - | - | ±10 |
| Motional capacitance C1 | fF | - | 1.69 | - |
| Motional inductance L1 | μH | - | 33.5 | - |
| Motional resistance R1 | Ohm | - | 19.9 | - |
| Parallel capacitance C_o | pF | - | 2.92 | - |
| Frequency Temperature coefficient (TC_f) | ppm/°C² | - | 0.032 | - |
| Turnover To | deg.C | 10 | 25 | 40 |
| Package size | | SMD 3.8X3.8X1.2mm | | |

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

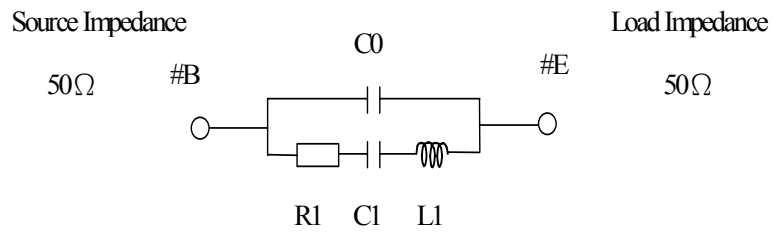
D. OUTLINE DRAWING:



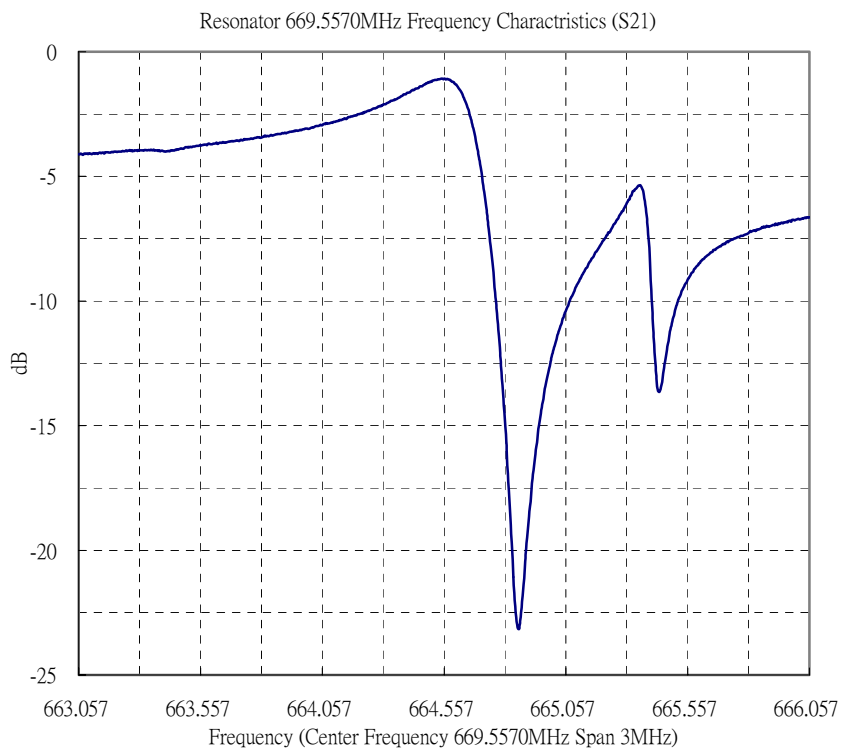
RoHS Compliant
Lead free
Lead-free soldering

E. EQUIVALENT CIRCUIT:

One-Port Resonator:

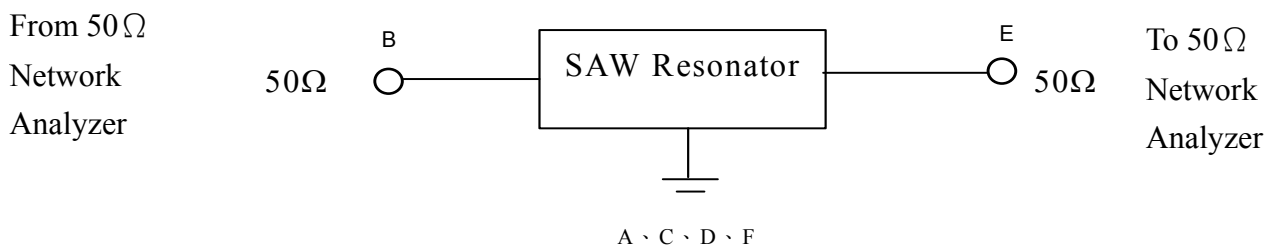


F. FREQUENCY CHARACTERISTICS:



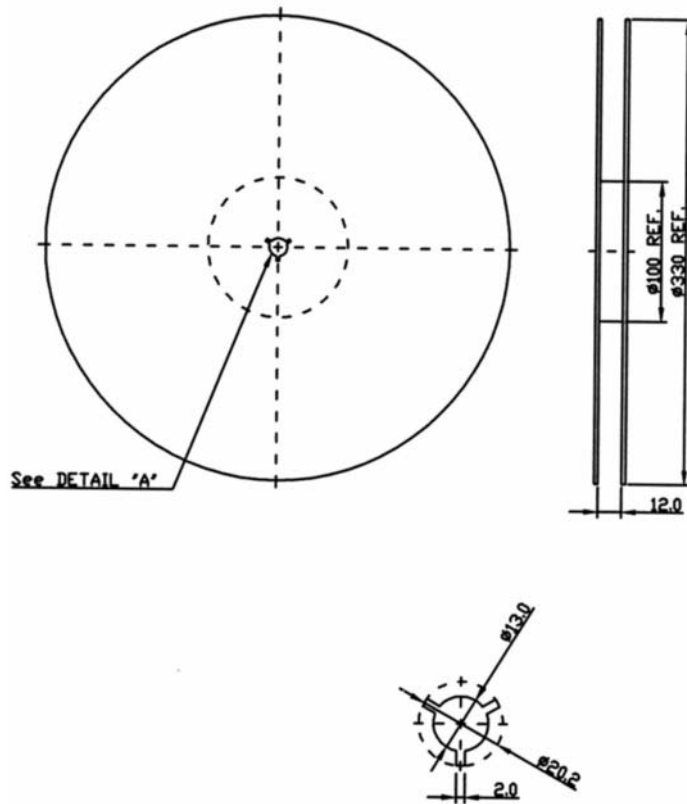
G. TEST CIRCUIT:

Network analyzer

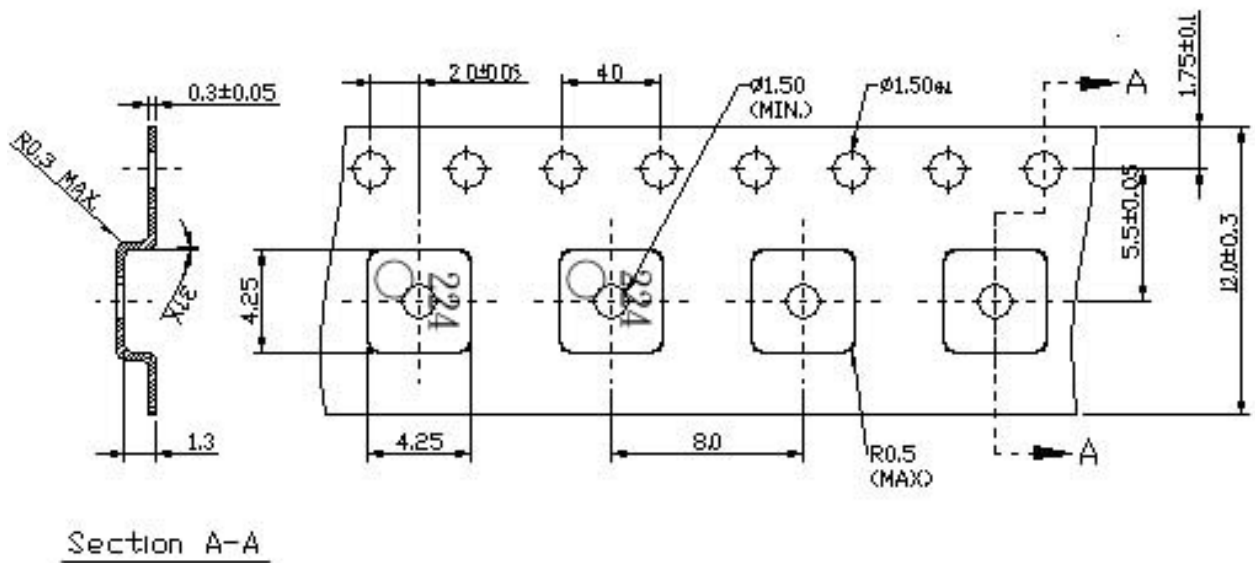


H. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



Section A-A