



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Resonator 868.35 MHz SMD 3X3 mm

TST Parts No.: TC0331B

Customer Parts No.: _____

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

Checked by: _____ Paul Ni

Approval by: _____ Francis Chen

Date: _____ 2007/6/25



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SAW Resonator 868.35MHz

MODEL NO.: TC0331B

REV. NO.:1

A. FEATURES:

- 1-Port Resonator.

B. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC voltage: 3 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

C. ELECTRICAL CHARACTERISTICS:

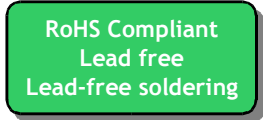
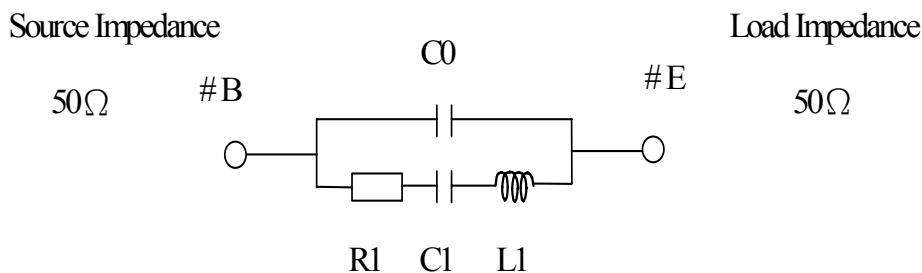
Reference Temperature $T_A=25^\circ\text{C}$

| Characteristic | Units | Minimum | Typical | Maximum |
|--|----------------|----------------|---------|---------|
| Center frequency Fc | MHz | 868.275 | 868.350 | 868.425 |
| Insertion Loss IL | dB | - | 1.5 | 2.5 |
| Unload quality factor Q_U | | - | 9500 | - |
| Ageing of fc | ppm/yr | - | - | ±10 |
| Motional capacitance C1 | fF | - | 1.02 | - |
| Motional inductance L1 | μH | - | 37.2 | - |
| Motional resistance R1 | Ohm | - | 21.3 | - |
| Parallel capacitance C₀ | pF | - | 2.26 | - |
| Frequency Temperature coefficient (TC _f) | ppm/c*2 | - | 0.032 | - |
| Turnover To | deg.C | - | 25 | - |
| Package size | | SMD 3x3x1.1 mm | | |

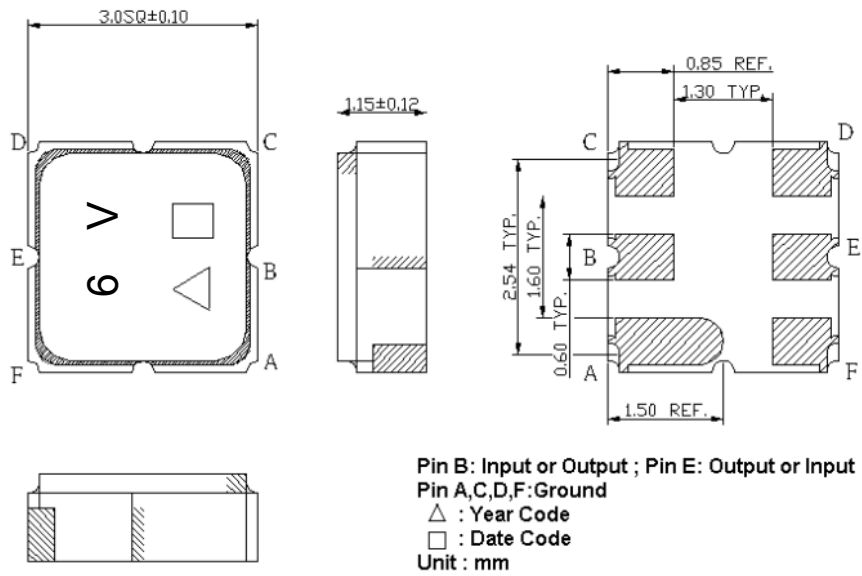
Temperature dependence of fc: $fc(T_A)=fc(T_O)(1+TC_f(T_A-T_O)^2)$

D. EQUIVALENT CIRCUIT:

One-Port Resonator:



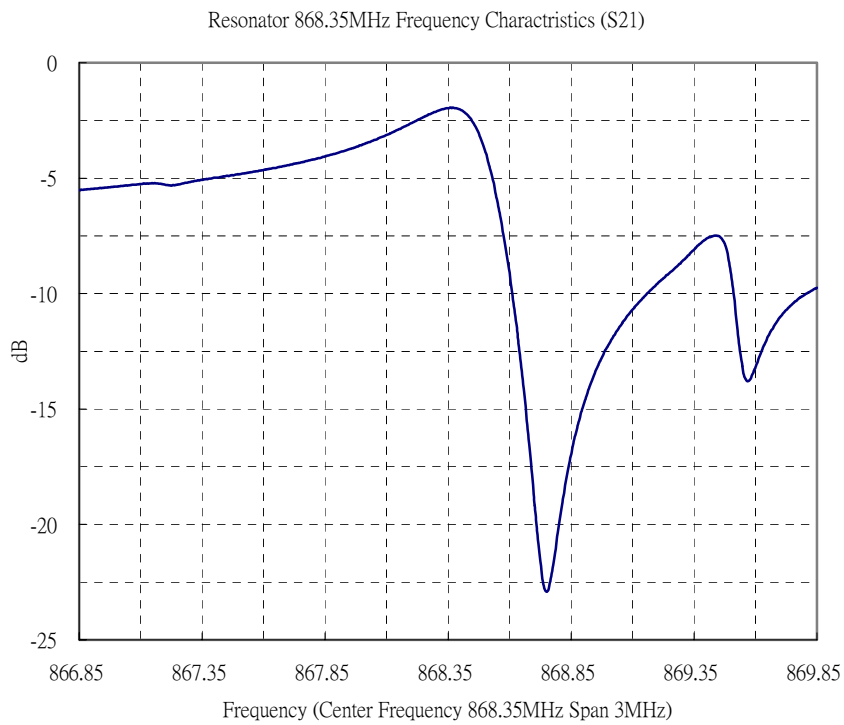
E. OUTLINE DRAWING:



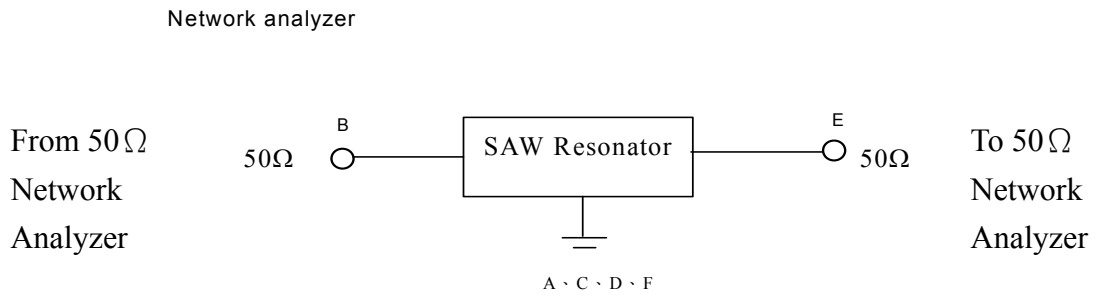
Date code: Provided by planer each year

Year code: 7 for 2007, 8 for 2008, ...

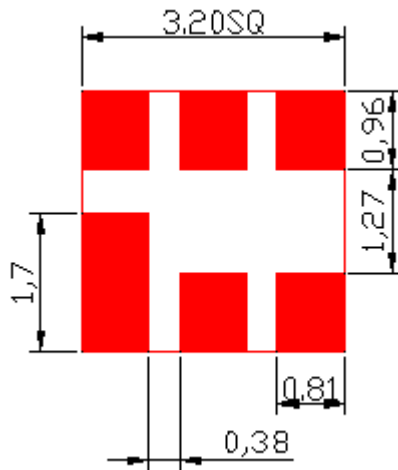
F. FREQUENCY CHARACTERISTICS:



G. TEST CIRCUIT:

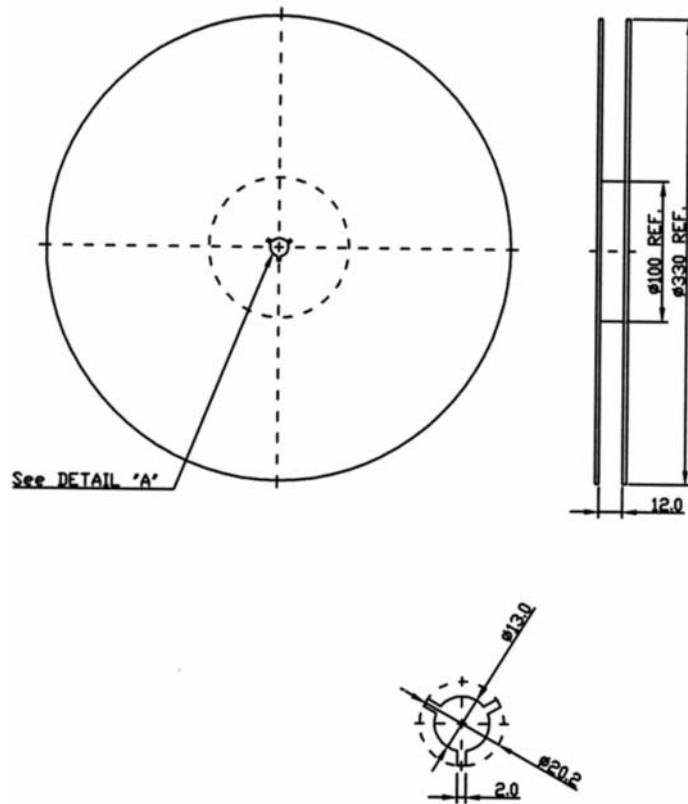


H. LAND PATTERN:

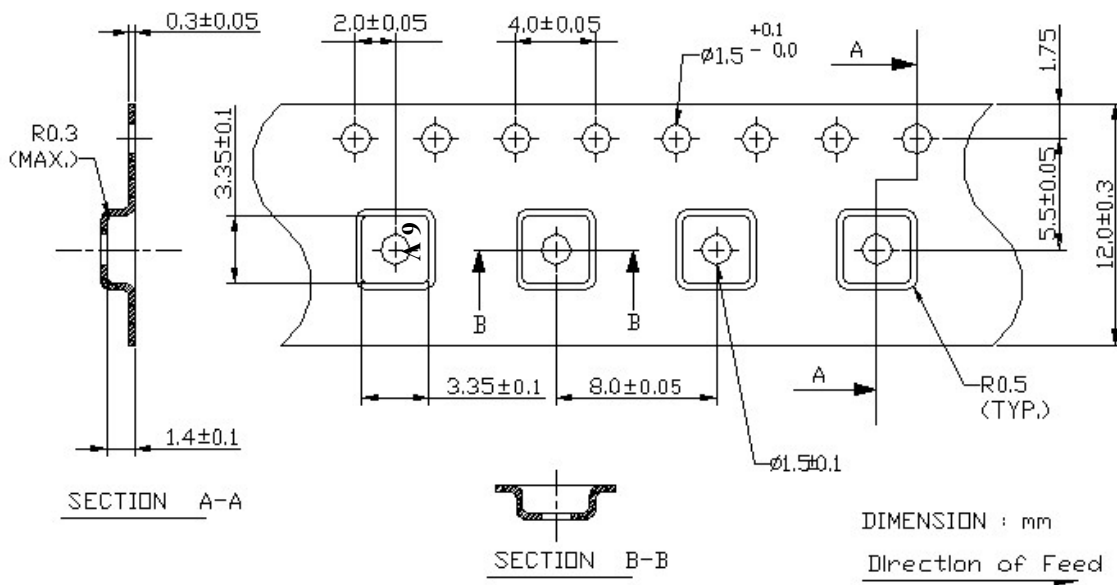


I. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H.RECOMMENDED REFLOW PROFILE:

