



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Resonator 868.35 MHz SMD 3.8X3.8 mm

TST Parts No.: TC0163A

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

Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ Vincent Liu

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

Date: \_\_\_\_\_ 2003/4/16



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## SAW Resonator 868.35 MHz

MODEL NO.: TC0163A

REV. NO.:2

### A. FEATURES:

1. 1-Port Resonator.

### B. MAXIMUM RATING:

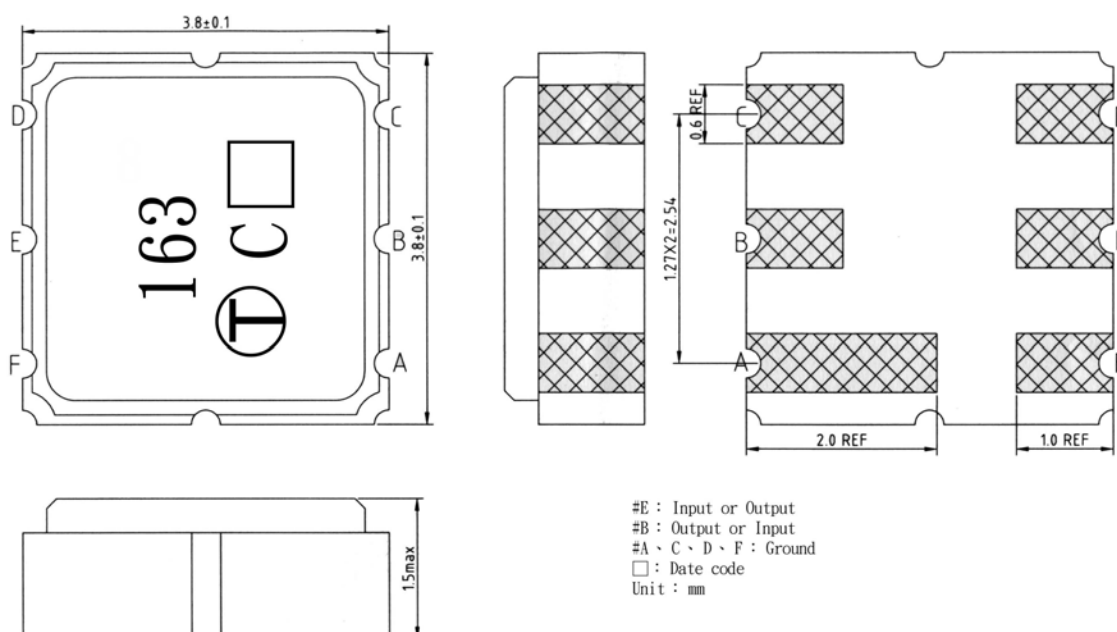
1. Input Power Level: 0 dBm
2. DC voltage: 12 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

### C. ELECTRICAL CHARACTERISTICS:

| Characteristic                 | Units          | Minimum           | Typical | Maximum |
|--------------------------------|----------------|-------------------|---------|---------|
| Center frequency <b>Fr</b>     | <b>MHz</b>     | 868.275           | 868.350 | 868.425 |
| Insertion Loss <b>IL</b>       | <b>dB</b>      | -                 | 1.3     | 2.5     |
| Equivalent Elements            |                |                   |         |         |
| Motional capacitance <b>C1</b> | <b>fF</b>      | -                 | 1.21    | -       |
| Motional inductance <b>L1</b>  | <b>μH</b>      | -                 | 27.66   | -       |
| Motional resistance <b>R1</b>  | <b>Ohm</b>     | -                 | 17.92   | -       |
| Parallel capacitance <b>Co</b> | <b>pF</b>      | -                 | 2.51    | -       |
| Temp.coeff.                    | <b>ppm/c*2</b> | -                 | 0.032   | -       |
| Turnover To                    | <b>deg.C</b>   | 10                | 25      | 40      |
| Package size                   |                | SMD 3.8X3.8X1.2mm |         |         |

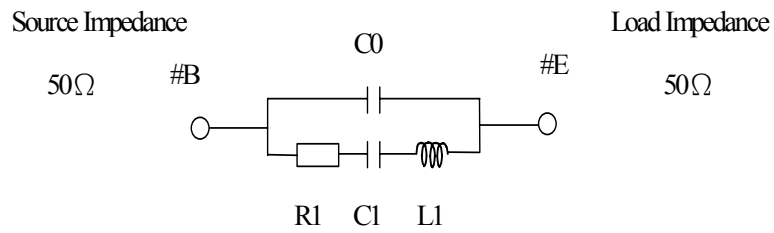
RoHS Compliant  
Lead free  
Lead-free soldering

### D. OUTLINE DRAWING:



### E. EQUIVALENT CIRCUIT:

One-Port Resonator:

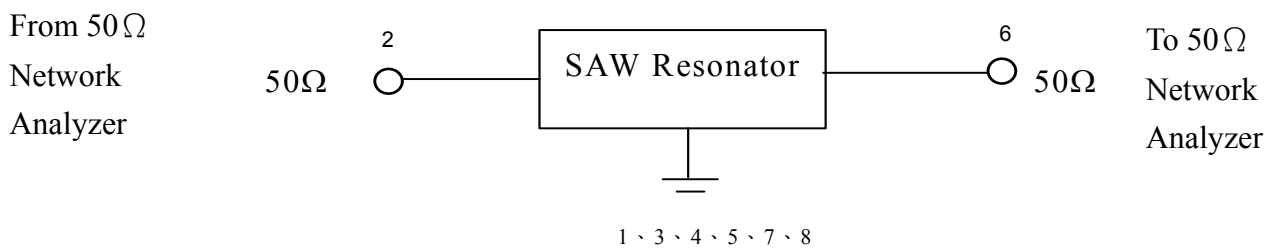


### F. FREQUENCY CHARACTERISTICS:



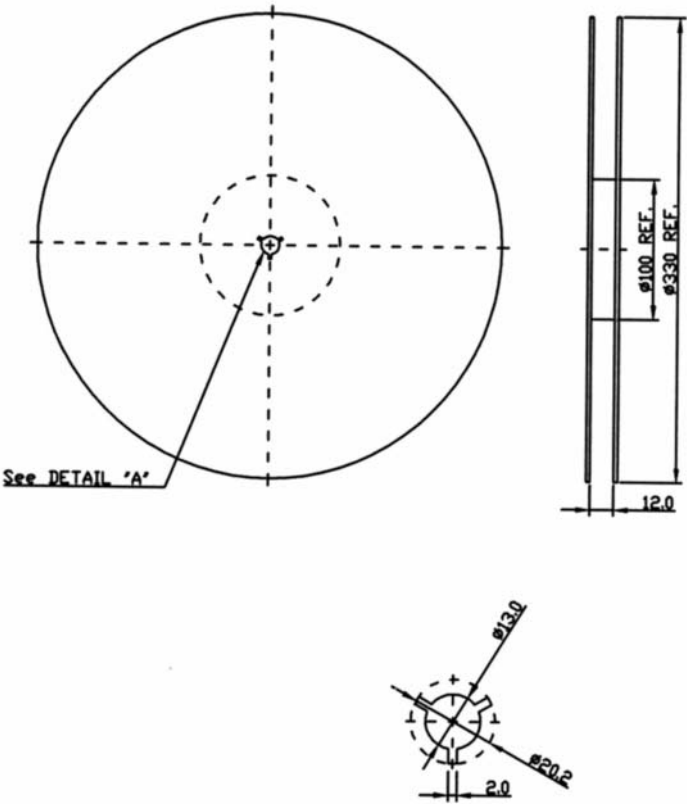
### G. TEST CIRCUIT:

Network analyzer



H. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

