



# 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: Two-Port SAW Resonator 433.92MHz SMD5X5mm

TST Parts No.: TD0103A

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

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

Checked by: Asin Lin

Approval by: Francis Chen

Date: 2007/01/29



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## SAW Resonator 433.92 MHz

MODEL NO.: TD0103A

REV. NO.:2

### A. FEATURES:

1. 2-Port Resonator.
2. nominal 180° -phase at resonance.

RoHS Compliant  
Lead free  
Lead-free soldering

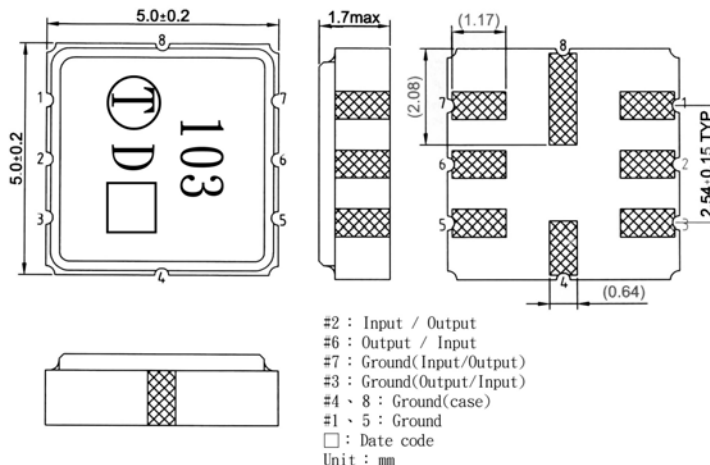
### B. MAXIMUM RATING:

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

### C. ELECTRICAL CHARACTERISTICS:

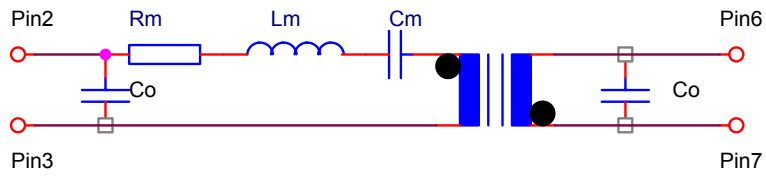
| Characteristic                 | Units          | Minimum    | Typical | Maximum |
|--------------------------------|----------------|------------|---------|---------|
| Center frequency <b>Fr</b>     | <b>MHz</b>     | 433.845    | 433.920 | 433.995 |
| Insertion Loss <b>IL</b>       | <b>dB</b>      | -          | 7.0     | 9.0     |
| Unloaded Quality factor        |                | 8000       | -       | -       |
| Equivalent Elements            |                |            |         |         |
| Motional capacitance <b>C1</b> | <b>fF</b>      | -          | 0.15    | -       |
| Motional inductance <b>L1</b>  | <b>μH</b>      | -          | 900     | -       |
| Motional resistance <b>R1</b>  | <b>Ohm</b>     | -          | 166     | 217     |
| Parallel capacitance <b>Co</b> | <b>pF</b>      | 2.3        | 2.6     | 2.9     |
| Temp.coeff.                    | <b>ppm/c*2</b> | -          | 0.032   | -       |
| Turnover To                    | <b>deg.C</b>   | 36         | -       | 66      |
| Package size                   |                | SMD5X5X1.4 |         |         |

### D. OUTLINE DRAWING:

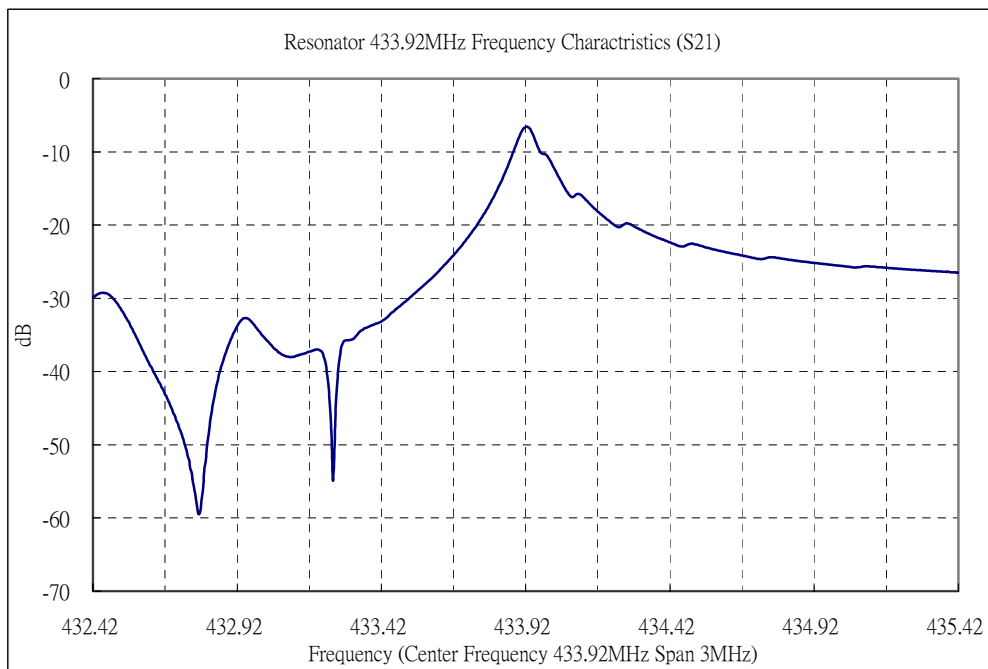


E. EQUIVALENT CIRCUIT:

Two-Port Resonator:

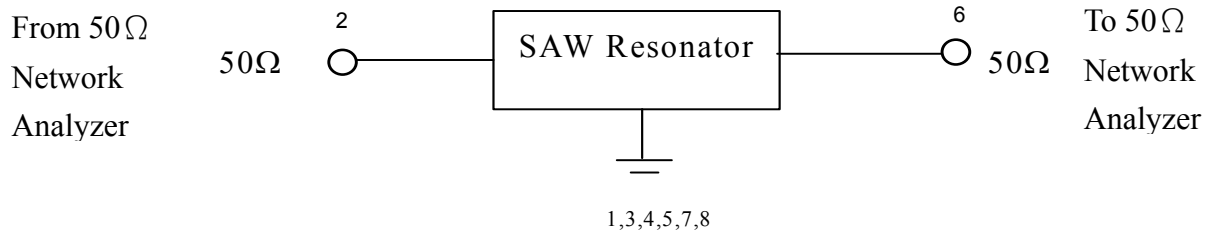


F. FREQUENCY CHARACTERISTICS:



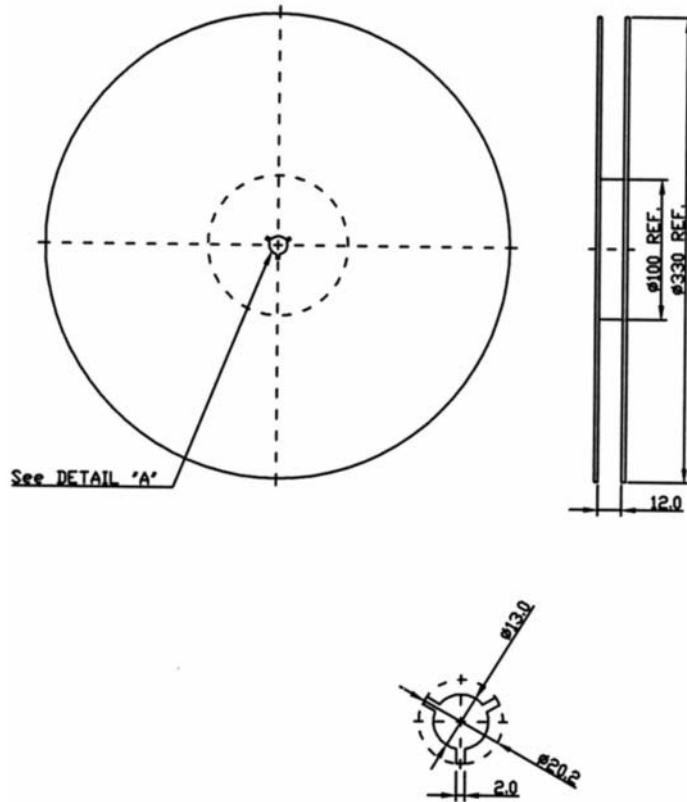
G. TEST CIRCUIT:

Network analyzer



F. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

