



# 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 315.500 MHz TO-39

TST Parts No.: TC0221F

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

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

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

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

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

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

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

Date: \_\_\_\_\_ 2003/5/26



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## SAW Resonator 315.500 MHz

MODEL NO.: TC0221F

REV. NO.:1

### A. FEATURES:

1. 1-Port Resonator.

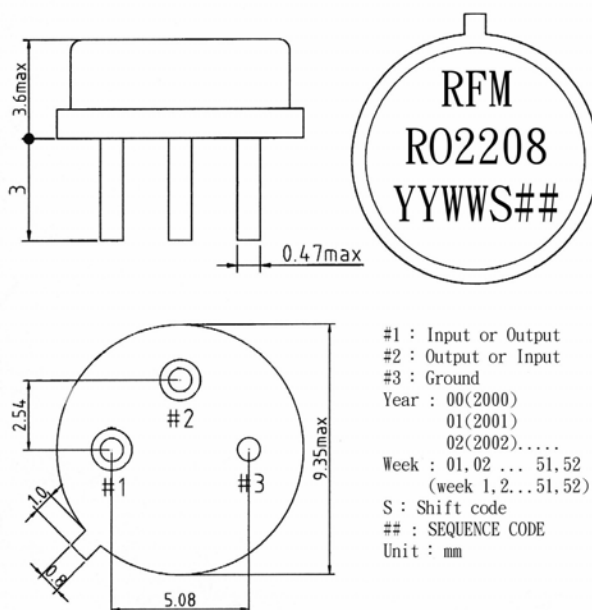
### B. MAXIMUM RATING:

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:

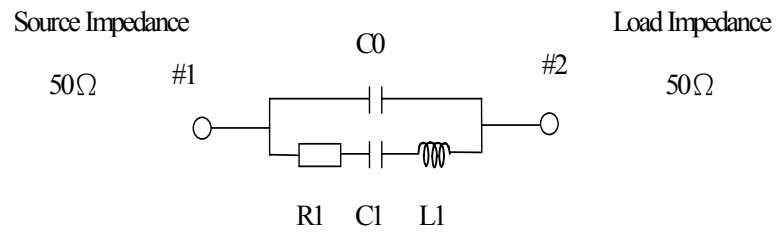
| Characteristic                 | Units                     | Minimum | Typical | Maximum |
|--------------------------------|---------------------------|---------|---------|---------|
| Center frequency <b>Fr</b>     | <b>MHz</b>                | 315.425 | 315.500 | 315.575 |
| Insertion Loss <b>IL</b>       | <b>dB</b>                 | -       | 1.6     | 2.5     |
| Unloaded Quality factor, $Q_U$ |                           | -       | 7800    | -       |
| Loaded Quality factor, $Q_L$   |                           | -       | 1300    | -       |
| Motional capacitance <b>C1</b> | <b>fF</b>                 | -       | 3.18    | -       |
| Motional inductance <b>L1</b>  | <b><math>\mu</math> H</b> | -       | 80.36   | -       |
| Motional resistance <b>R1</b>  | <b>Ohm</b>                | -       | 24.50   | -       |
| Parallel capacitance <b>Co</b> | <b>pF</b>                 | -       | 4.76    | -       |
| Temp.coeff.                    | <b>ppm/c*2</b>            | -       | 0.032   | -       |
| Turnover To                    | <b>deg.C</b>              | -       | 25      | -       |
| Package size                   |                           | TO-39   |         |         |

### D. OUTLINE DRAWING:

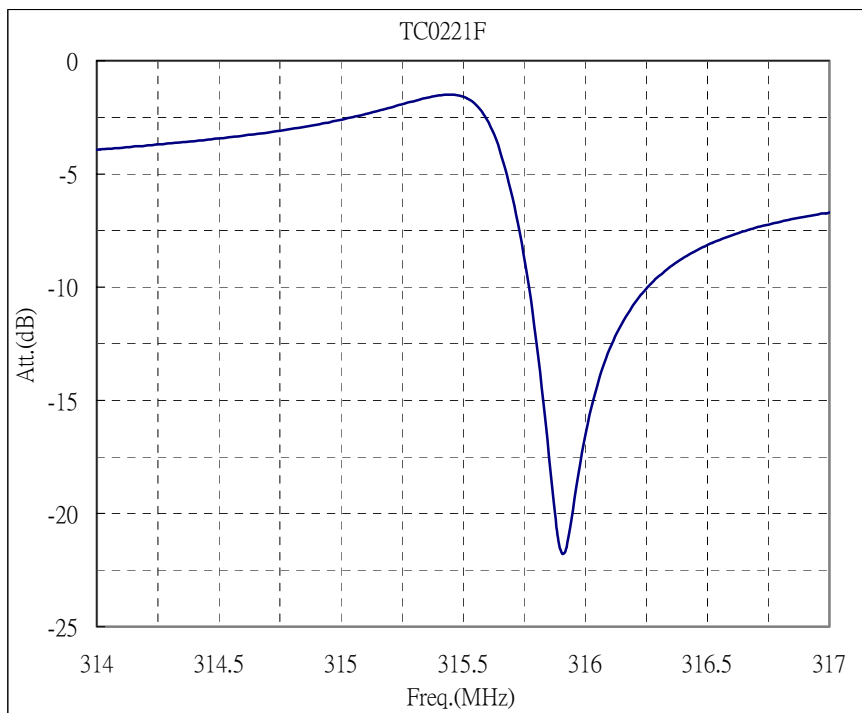


### E. EQUIVALENT CIRCUIT:

One-Port Resonator:



### F. FREQUENCY CHARACTERISTICS:



### G. TEST CIRCUIT:

