



TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Resonator 479.45 MHz SMD 3X3 mm

TST Parts No.: TC0238A

Customer Parts No.: _____

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

Checked by: Vincent Liu

Approval by: Francis Chen

Date: 2003/11/28



TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

SAW Resonator 479.45 MHz

MODEL NO.: TC0238A

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

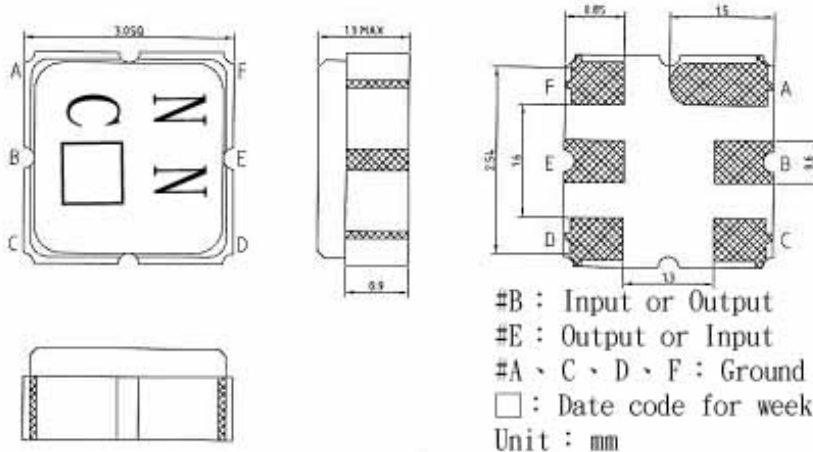
C. ELECTRICAL CHARACTERISTICS:

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

| Characteristic | Units | Minimum | Typical | Maximum |
|--|----------------|----------------|---------|---------|
| Center frequency Fc | MHz | 479.375 | 479.450 | 479.525 |
| Insertion Loss IL | dB | - | 1.41 | 2.5 |
| Unload quality factor Q_U | | 6000 | 10000 | - |
| Ageing of fc | ppm/yr | - | - | ±10 |
| Motional capacitance C1 | fF | - | 1.36 | - |
| Motional inductance L1 | μH | - | 80.9 | - |
| Motional resistance R1 | Ohm | - | 20.42 | - |
| Parallel capacitance C_o | pF | - | 2.77 | - |
| Frequency Temperature coefficient (TC _f) | ppm/c*2 | - | 0.032 | - |
| Turnover To | deg.C | 10 | 25 | 40 |
| Package size | | SMD 3X3X1.1 mm | | |

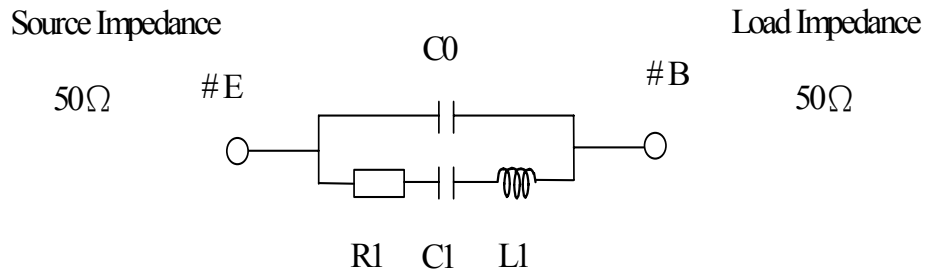
Temperature dependence of fc: $f_c(T_A)=f_c(T_O)(1+TC_f(T_A-T_O)^2)$

D. OUTLINE DRAWING:

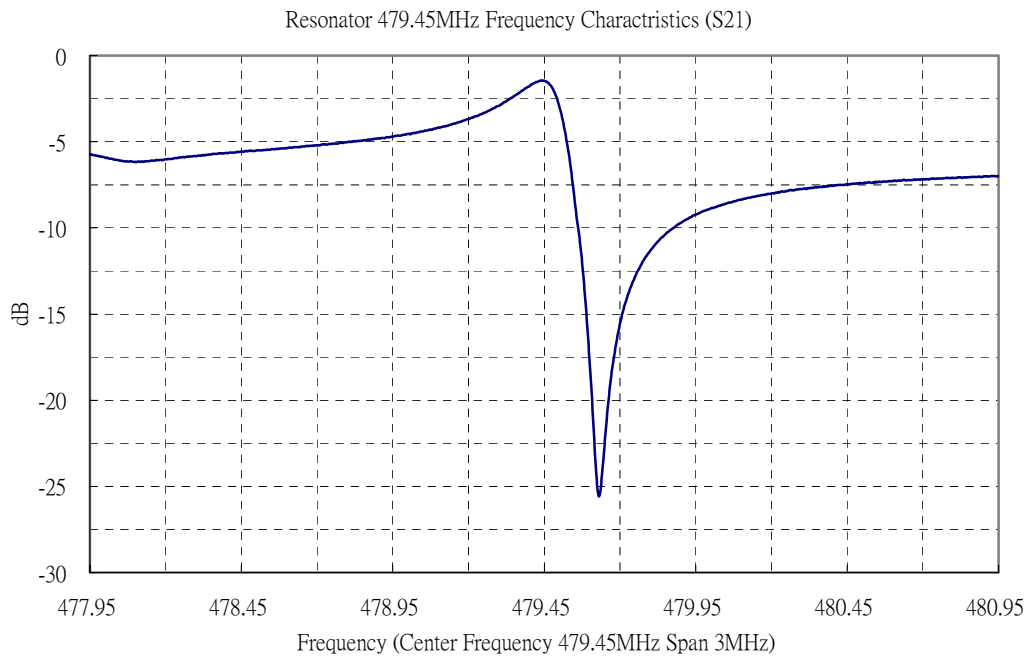


E. EQUIVALENT CIRCUIT:

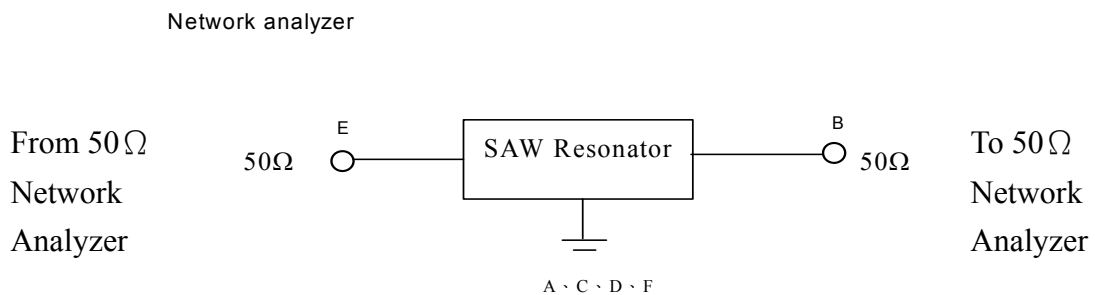
One-Port Resonator:



F. FREQUENCY CHARACTERISTICS:

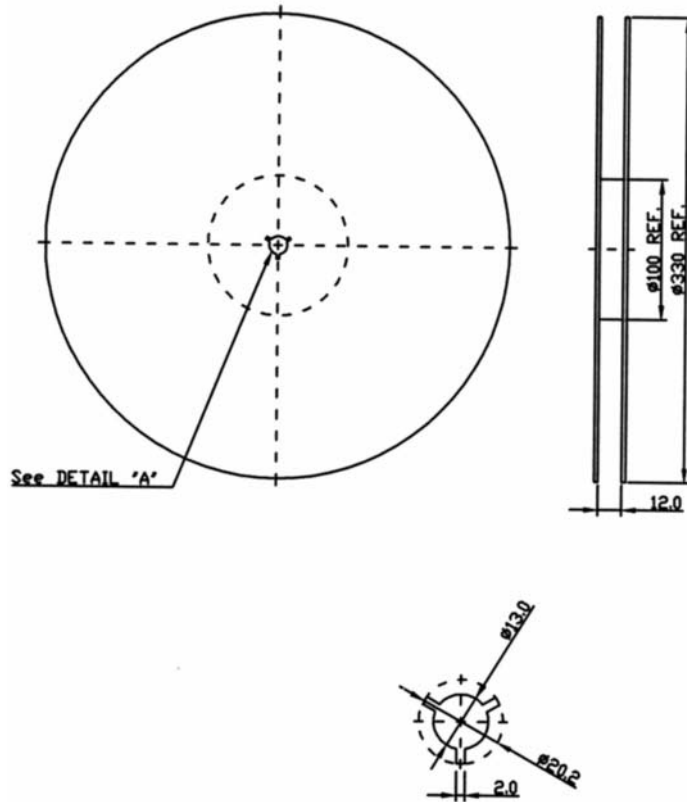


G. TEST CIRCUIT:



H. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

