



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

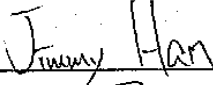
Product Specifications Approval Sheet


Product Description: SAW Resonator 433.92 MHz SMD 3.0X3.0 mm

TST Part No.: TC0244A

Customer Part No.: _____

| |
|-----------------------------|
| Customer signature required |
| Company: _____ |
| Division: _____ |
| Approved by : _____ |
| Date: _____ |

Checked by: _____ Jimmy Han 

Approved by: _____ Francis Chen 

Date: _____ 2011/03/02

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.



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 433.92 MHz

MODEL NO.: TC0244A

REV. NO.:2

A. FEATURES:

1. 1-Port Resonator.

RoHS Compliant
Lead free
Lead-free soldering

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:

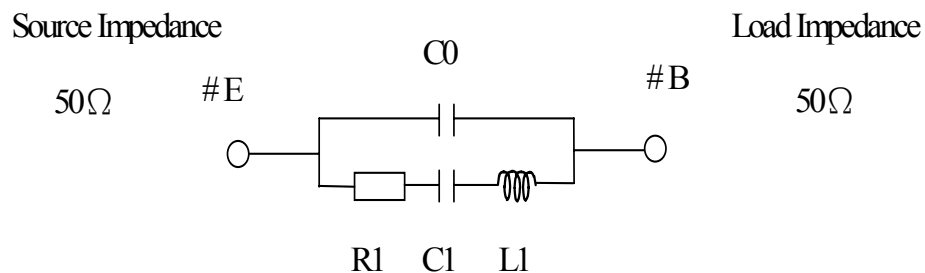
Reference Temperature $T_A=25^\circ\text{C}$

| Characteristic | Units | Minimum | Typical | Maximum |
|---|----------------|----------------|---------|---------|
| Center frequency Fc | MHz | 433.845 | 433.920 | 433.995 |
| Insertion Loss IL | dB | - | 0.9 | 2.0 |
| Unload quality factor Q_U | | 6000 | 8000 | - |
| Ageing of fc | ppm/yr | - | - | ±10 |
| Motional capacitance C1 | fF | - | 3.57 | - |
| Motional inductance L1 | μH | - | 37.68 | - |
| Motional resistance R1 | Ohm | - | 12.95 | - |
| Parallel capacitance C_o | pF | - | 4.77 | - |
| Frequency Temperature coefficient C_f) | ppm/c*2 | - | 0.032 | - |
| Turnover T_o | deg.C | 10 | 25 | 40 |
| Package size | | SMD 3X3X1.1 mm | | |

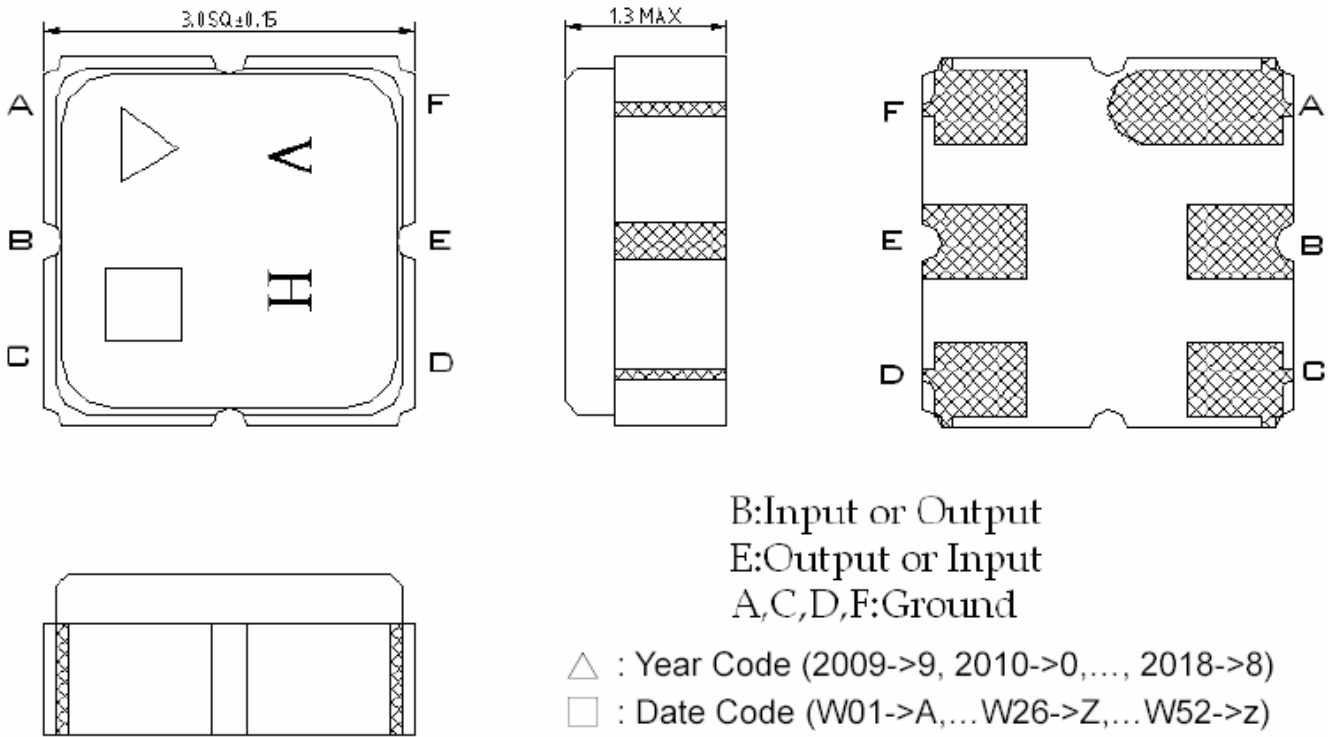
Temperature dependence of fc: $fc(T_A)=fc(T_O)(1+TC_f(T_A-T_O)^2)$

D. EQUIVRENT CIRCUIT:

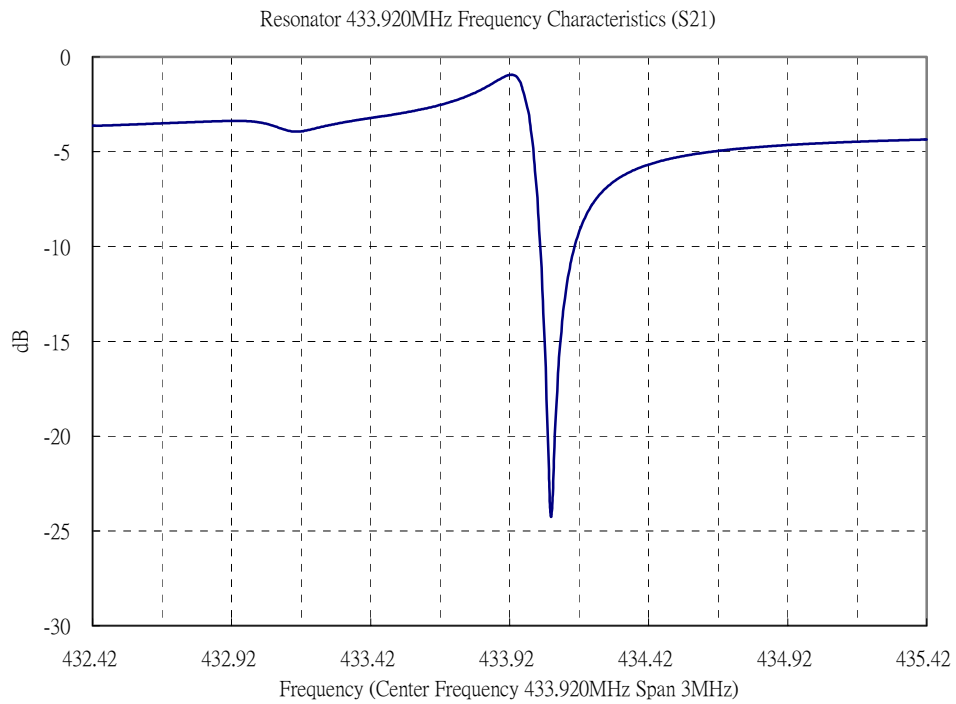
One-Port Resonator:



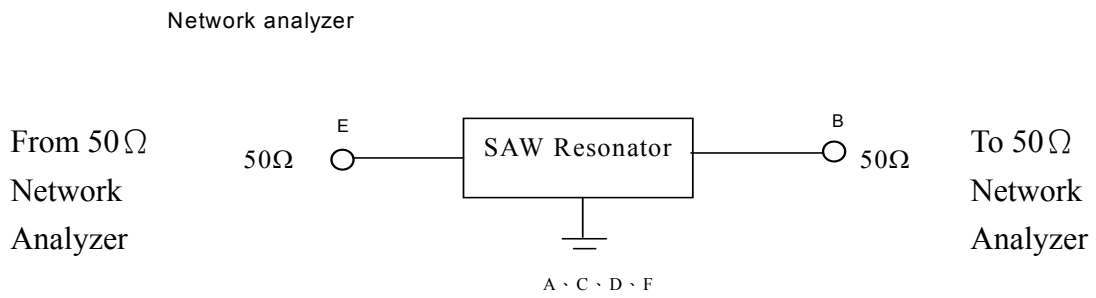
E. OUTLINE DRAWING:



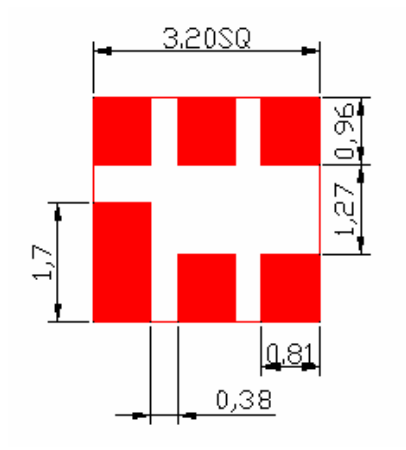
F. FREQUENCY CHARACTERISTICS:



G. TEST CIRCUIT:

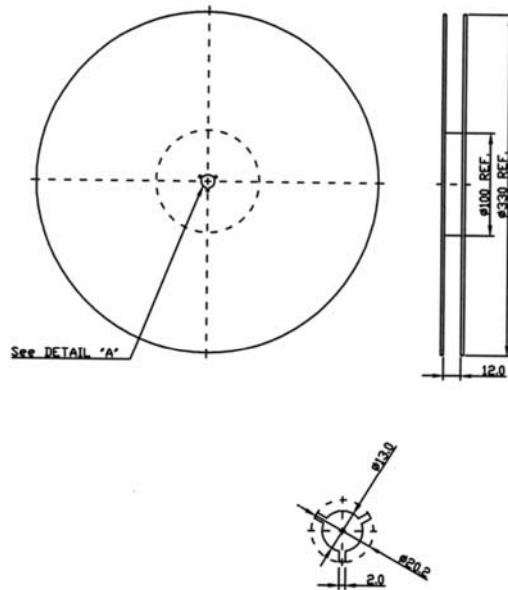


H. PCB Foot Print:



I. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

