



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 Name: SAW Resonator 315 MHz SMD 3X3 mm

TST Parts No.: TC0274E

Customer Parts No.: _____

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

Checked by: Cleven Jiang 

Approval by: Bob Chau 

Date: 05/16/2014

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.



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SAW Resonator 315 MHz

MODEL NO.: TC0274E

REV. NO.:1

A. FEATURES:

- 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:

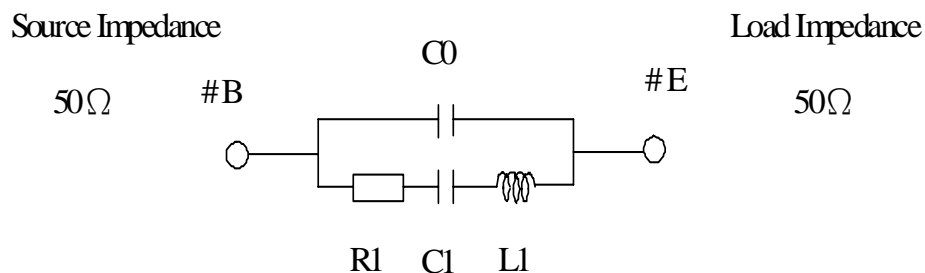
Reference Temperature $T_A=25^\circ\text{C}$

| Characteristic | Units | Minimum | Typical | Maximum |
|--|----------------|----------------|---------|---------|
| Center frequency F_c | MHz | 314.9 | | 315.0 |
| Insertion Loss IL | dB | - | 1.5 | 2.5 |
| Unload quality factor Q_U | | - | 8000 | - |
| Ageing of f _c | ppm/yr | - | - | ±10 |
| Motional capacitance C1 | fF | - | 2.89 | - |
| Motional inductance L1 | μH | - | 87.5 | - |
| Motional resistance R1 | Ohm | - | 20.2 | - |
| Parallel capacitance C_o | pF | - | 4.14 | - |
| Frequency Temperature coefficient (TC _f) | ppm/c*2 | - | 0.032 | - |
| Turnover To | deg.C | - | 25 | - |
| Package size | | SMD 3X3X1.1 mm | | |

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

D. EQUIVALENT CIRCUIT:

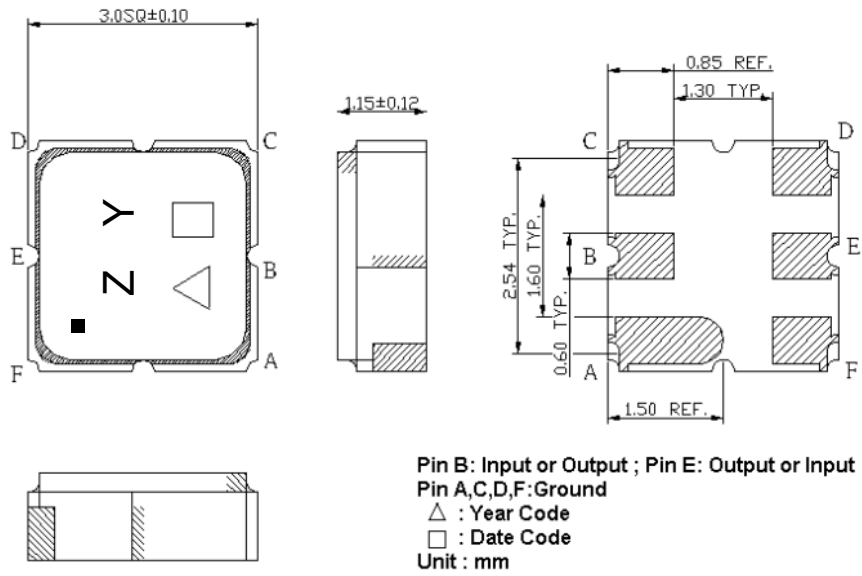
One-Port Resonator:



RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

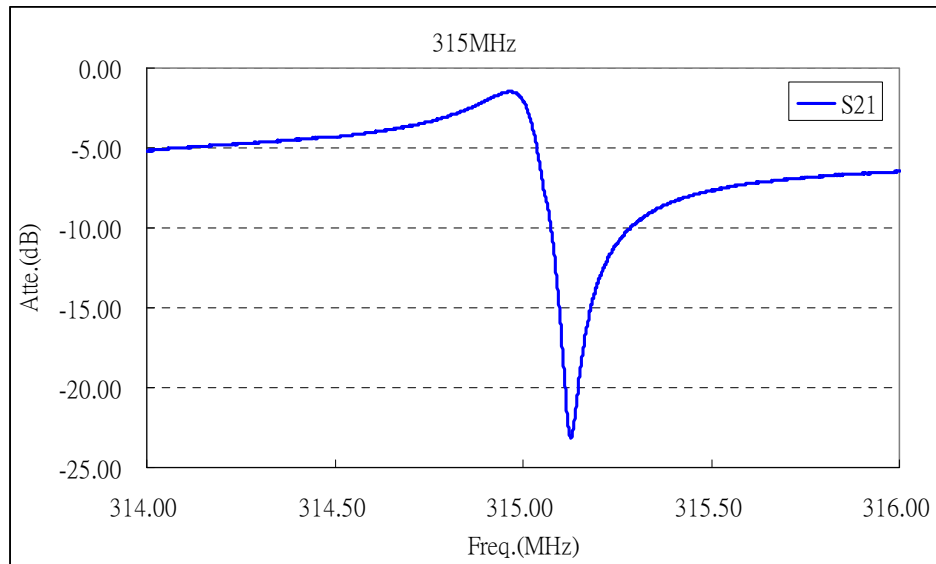
E. OUTLINE DRAWING:



Date code: Provided by planer each year

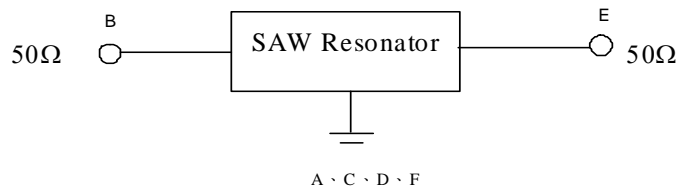
Year code: 3 for 2013, 4 for 2014, 5 for 2015,...

F. FREQUENCY CHARACTERISTICS:

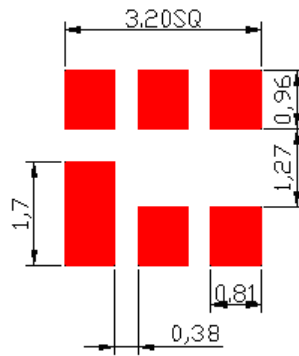


G. TEST CIRCUIT:

Network analyzer



H. PCB Foot Print:



I. PACKING:

1. REEL DIMENSION

