



# 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

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## Product Specifications Approval Sheet

Product Description: SAW Resonator 303.825 MHz SMD 5.0X3.5 mm

TST Part No.: TC0541A

Customer Part No.: \_\_\_\_\_

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

Checked by: Paul Ni *Paul Ni*

Approved by: Francis Chen *[Signature]*

Date: 2009/10/26

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 303.825 MHz

MODEL NO.: TC0541A

REV. NO.: 1.0

### A. FEATURES:

- 1-Port Resonator.

### B. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC voltage: 5 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

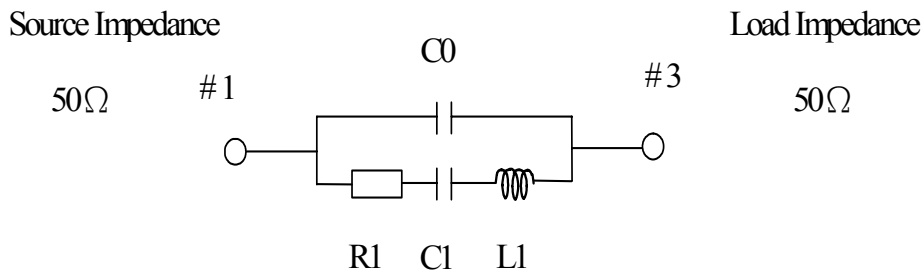
RoHS Compliant  
Lead free  
Lead-free soldering

### C. ELECTRICAL CHARACTERISTICS:

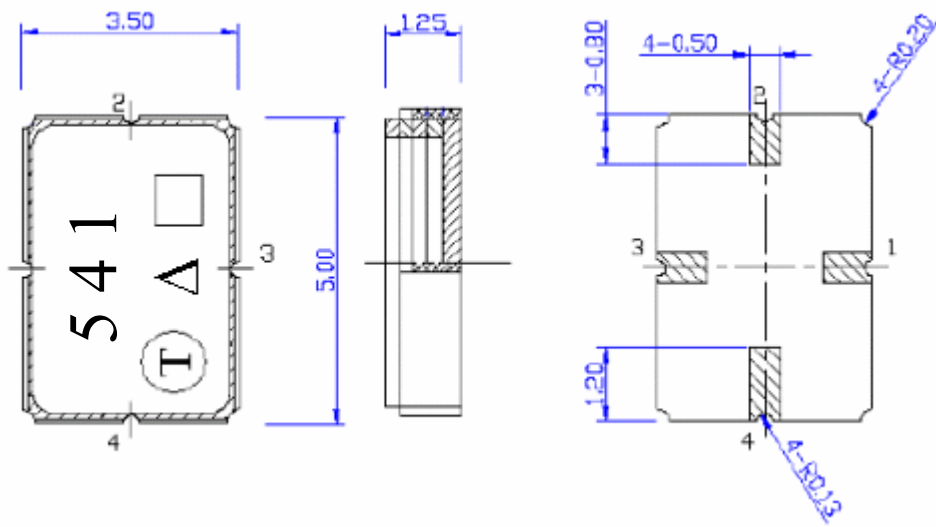
| Characteristic                 | Units          | Minimum           | Typical | Maximum |
|--------------------------------|----------------|-------------------|---------|---------|
| Center frequency <b>Fr</b>     | <b>MHz</b>     | 303.750           | 303.825 | 303.900 |
| Insertion Loss <b>IL</b>       | <b>dB</b>      | -                 | 1.23    | 2.0     |
| Equivalent Elements            |                |                   |         |         |
| Motional capacitance <b>C1</b> | <b>fF</b>      | -                 | 2.82    | -       |
| Motional inductance <b>L1</b>  | <b>μH</b>      | -                 | 97.3    | -       |
| Motional resistance <b>R1</b>  | <b>Ohm</b>     | -                 | 13.79   | -       |
| Parallel capacitance <b>Co</b> | <b>pF</b>      | -                 | 4.4     | -       |
| Temp.coeff.                    | <b>ppm/c*2</b> | -                 | 0.032   | -       |
| Turnover To                    | <b>deg.C</b>   | -                 | 25      | -       |
| Package size                   |                | SMD 5.0X3.5X1.4mm |         |         |

### D. EQUIVIRENT CIRCUIT:

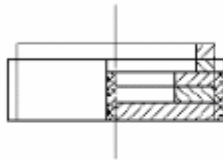
One-Port Resonator:



E. OUTLINE DRAWING:



**Pin 1 : Input**  
**Pin 3 : Output**  
**Pin 2,4 : Ground**

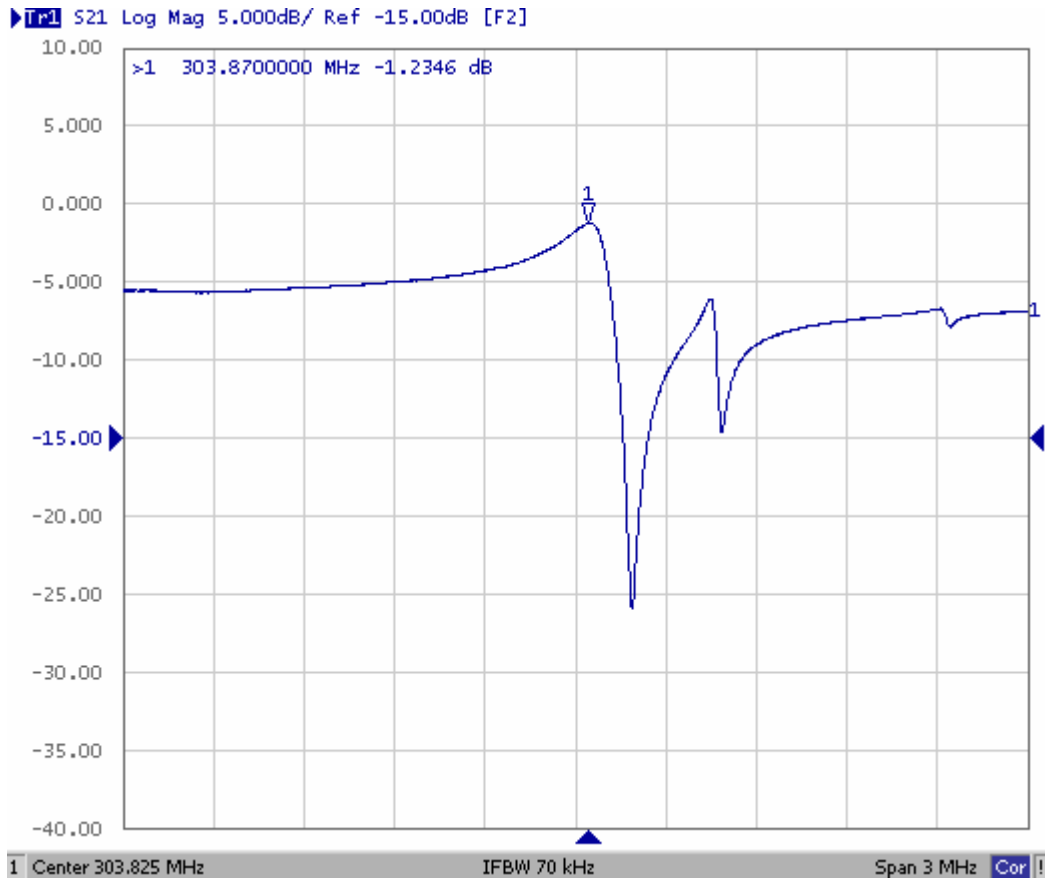


|           |              |              |
|-----------|--------------|--------------|
| Year      | 2009<br>2011 | 2010<br>2012 |
| Year Code | C            | c            |

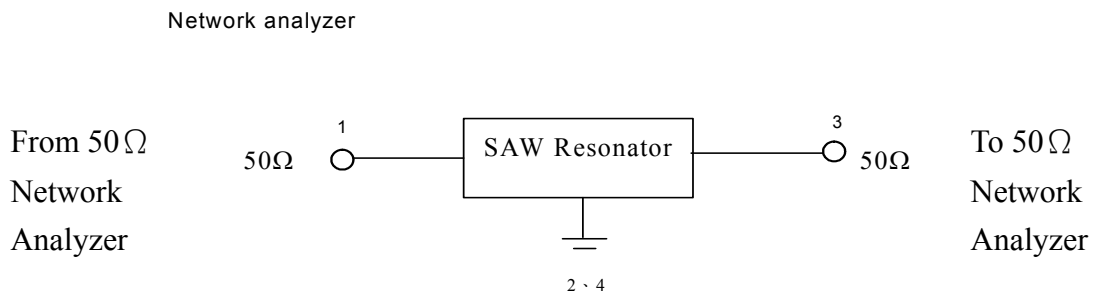
Δ : Year Code

□ : Data Code( provided by planer each year )

**F. FREQUENCY CHARACTERISTICS**

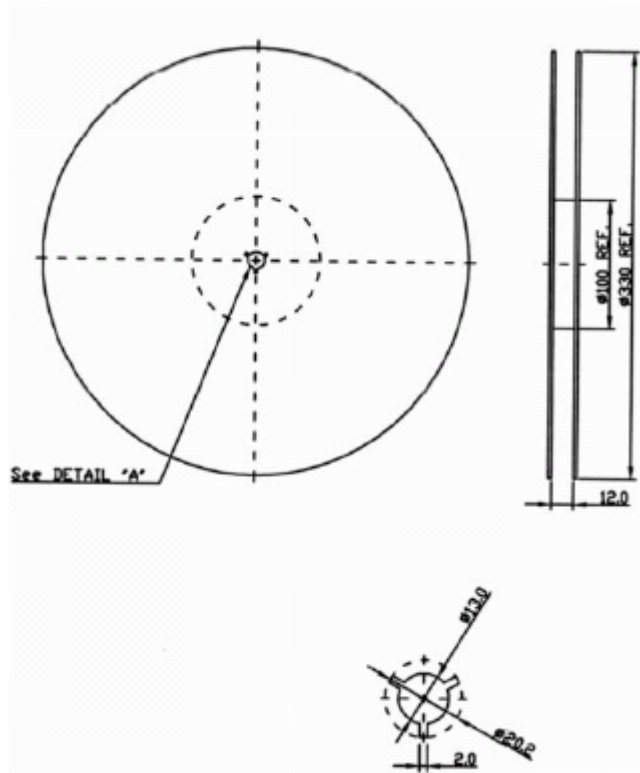


**G. TEST CIRCUIT:**

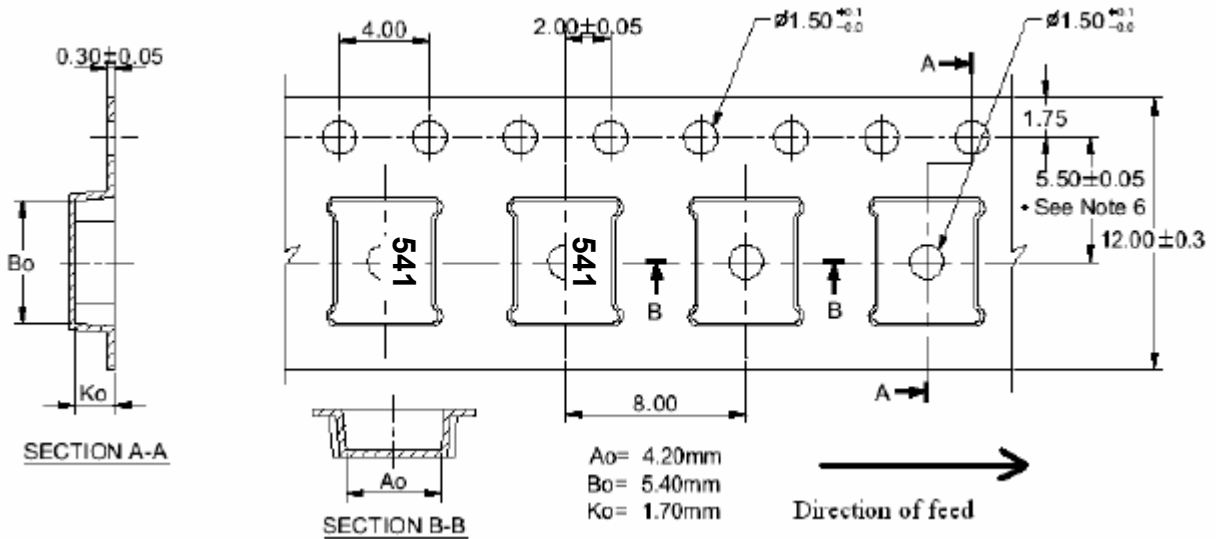


H. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



**I. RECOMMENDED REFLOW PROFILE:**

