



# TAI-SAW TECHNOLOGY CO., LTD.

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

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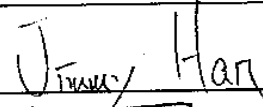
## Product Specifications Approval Sheet

Product Description: SAW Resonator 312 MHz SMD 5X5 mm

TST Part No.: TC0160A

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

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

Checked by: Jimmy Han 

Approved by: Francis Chen 

Date: 2010/07/09

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 312 MHz

MODEL NO.: TC0160A

REV. NO.: 1.0

### A. FEATURES:

1. 1-Port Resonator.

### B. MAXIMUM RATING:

1. Input Power Level: 10 dBm

2. DC voltage: 12 V

3. Operating Temperature: -40°C to +85°C

4. Storage Temperature: -40°C to +85°C

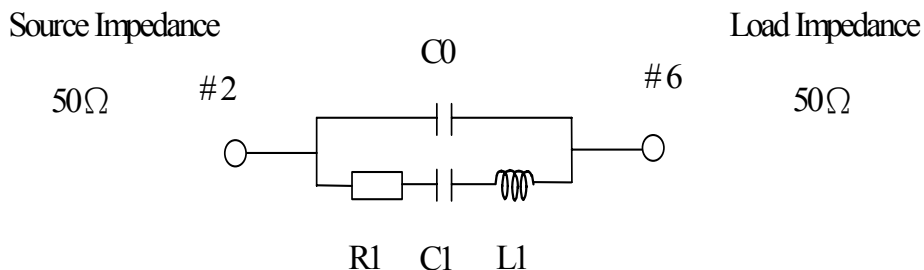
### C. ELECTRICAL CHARACTERISTICS:

Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fr</b>	<b>MHz</b>	311.925	312	312.075
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.3	2.5
Equivalent Elements				
Motional capacitance <b>C1</b>	<b>fF</b>	-	1.34	-
Motional inductance <b>L1</b>	<b>μH</b>	-	22.54	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	19.14	-
Parallel capacitance <b>Co</b>	<b>pF</b>	-	2.52	-
Temp.coeff.	<b>ppm/c*2</b>	-	0.032	-
Turnover To	<b>deg.C</b>	-	25	-
Package size		SMD 5.0X5.0X1.4mm		

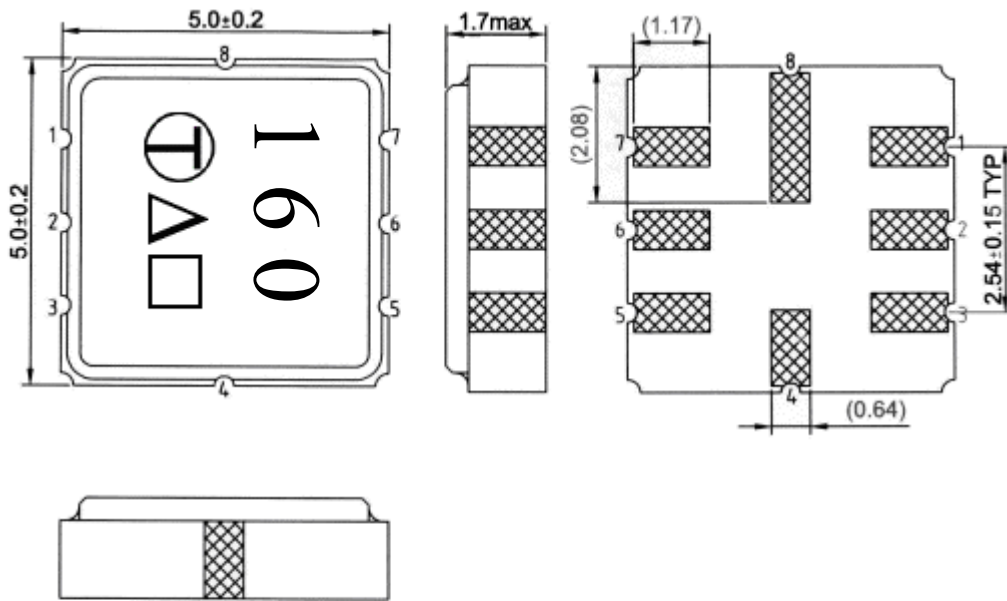
RoHS Compliant  
Lead free  
Lead-free soldering

### D. EQUIVIRENT CIRCUIT:

One-Port Resonator:



E. OUTLINE DRAWING:



Year <sup>Ⓐ</sup>	2013 2009	2014 2010	2007 2011	2008 2012
Product Code	C	c	<u>C</u>	<u>c</u>

#2 : Input or Output

#6 : Output or Input

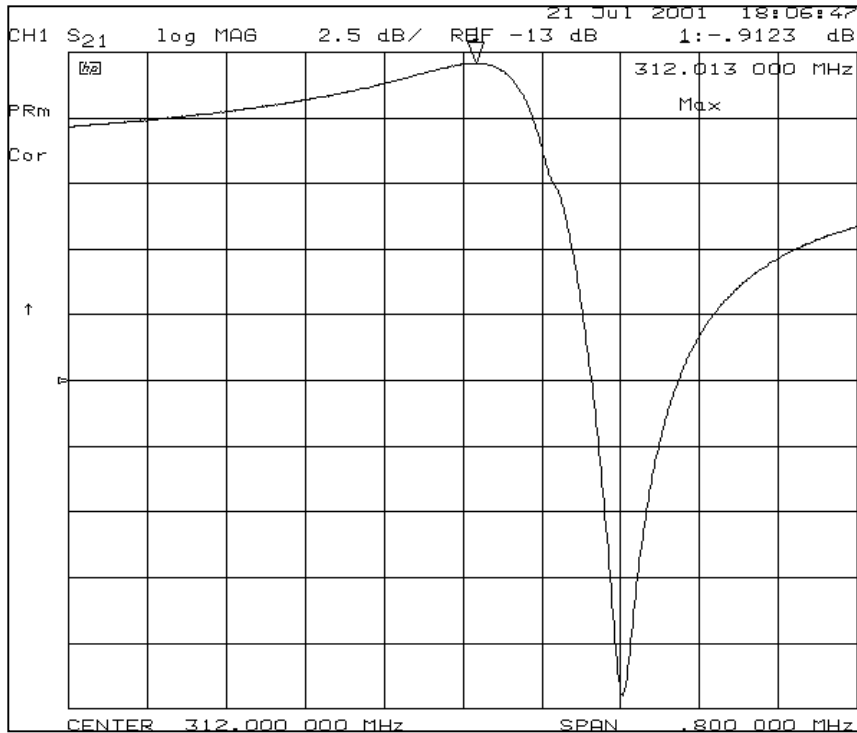
#4、8 : Case Ground

#1、3、5、7 : Ground

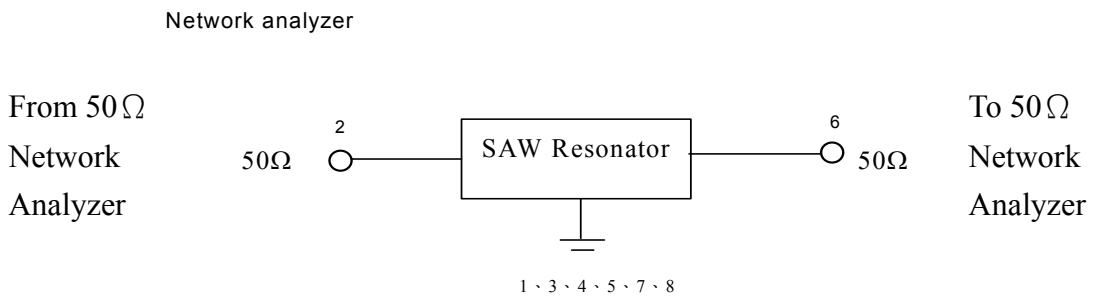
Δ : Year Code

□ : Data Code(Follow the table provided by planer each year )

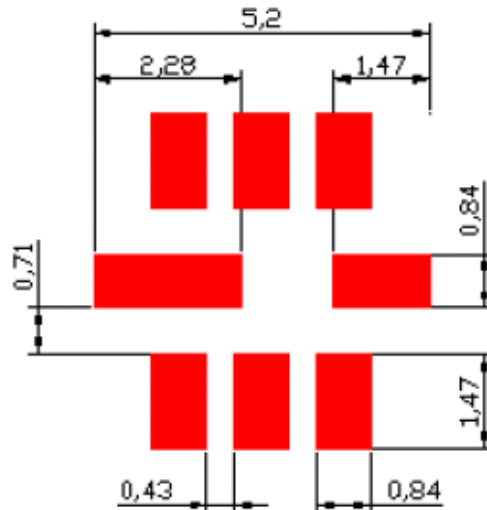
**F. FREQUENCY CHARACTERISTICS**



**G. TEST CIRCUIT:**

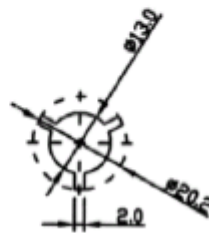
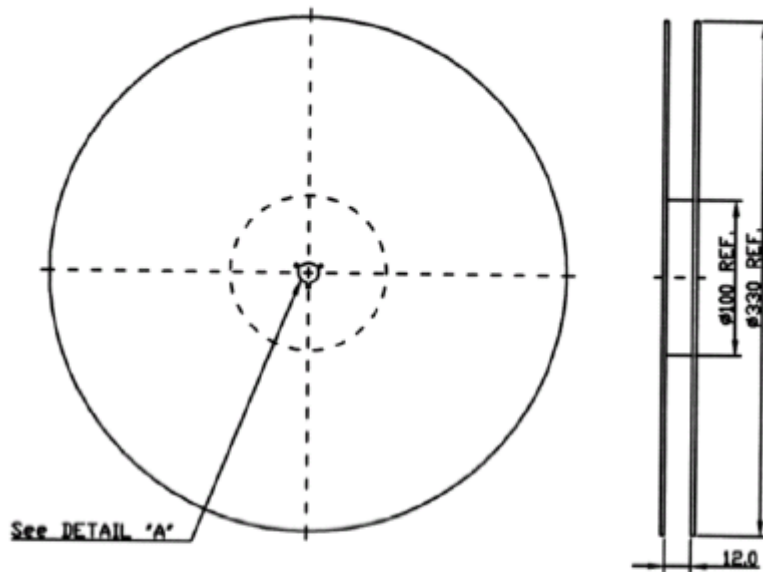


**H. LAND PATTERN:**

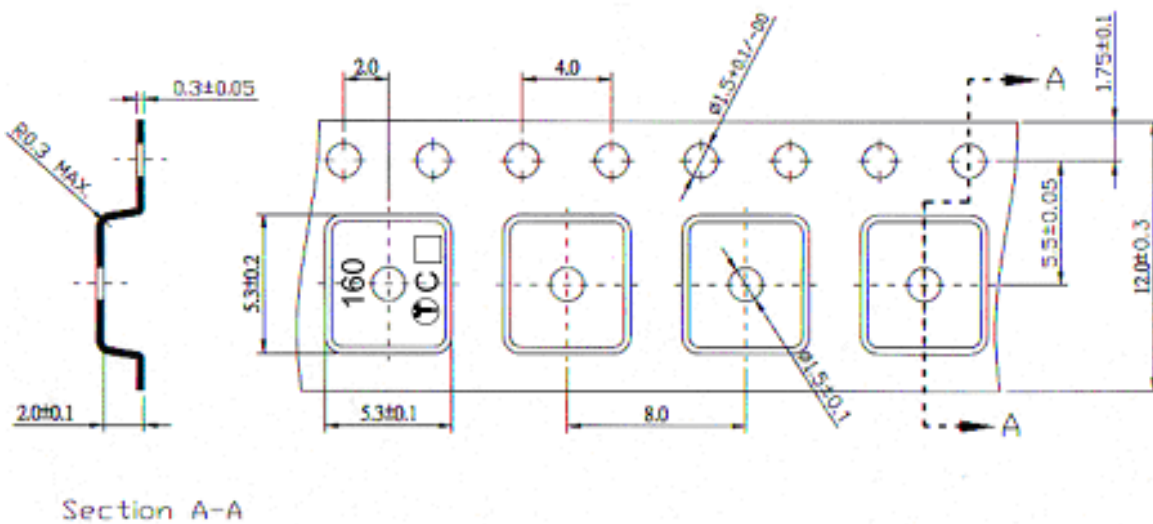


I. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



Section A-A