



# 深圳市兆现电子有限公司

SHENZHEN ZHAOXIAN ELECTRONICS CO., LTD

O ctngv'Tgs wlt go gpv'F qewo gpv

CUSTOMER:

RTQFWEV:

"" O QF GN:

'RCTCO GVGT:

""""DATE:

\_\_\_\_\_

""声表面谐振器

TO-39-DIP

R315M

\_\_\_\_\_

## 承認後請寄回一份

PLEASE RETURN ONE COPY TO US SO THAT WE GET YOUR APPROVAL

承認結果 CONCLUSION	客戶簽名 SIGNATURE	客戶承認章 STAMP	日期 DATE	備注 REMARK
合格 ACCEPT				
不合格 REJECT				

制表： 钟先生 \_\_\_\_\_

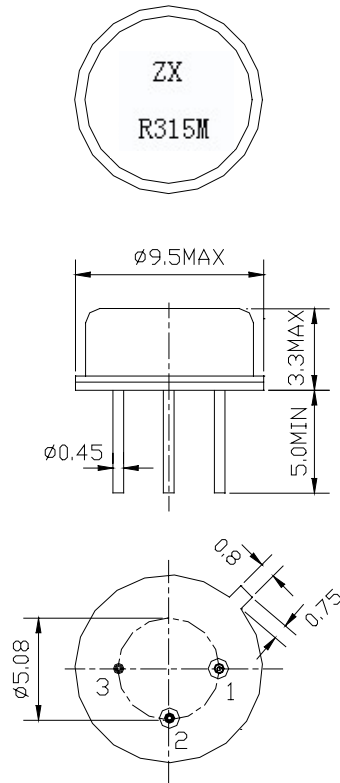
审核： \_\_\_\_\_

(公章)

尊敬的客户：请您抽出一点时间，在7-10个工作日内将承认书回签，若未回签，以视默认。谢谢合作！

1. Package Dimension  
( TO-39/3A )

Unit: mm



Pin No. Function

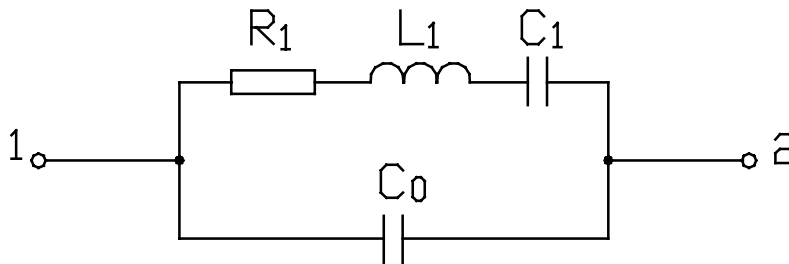
- 1. Input
- 2. Output
- 3. Ground

2. Marking

Z X  
R315.00

- 1. Color: Black or Blue
- 2. DR: Manufacture's logo
- 3. 1: One-port SAW Resonator
- 4. 315.00: Center Frequency ( MHz)

3. Equivalent LC Model



## 4. Performance

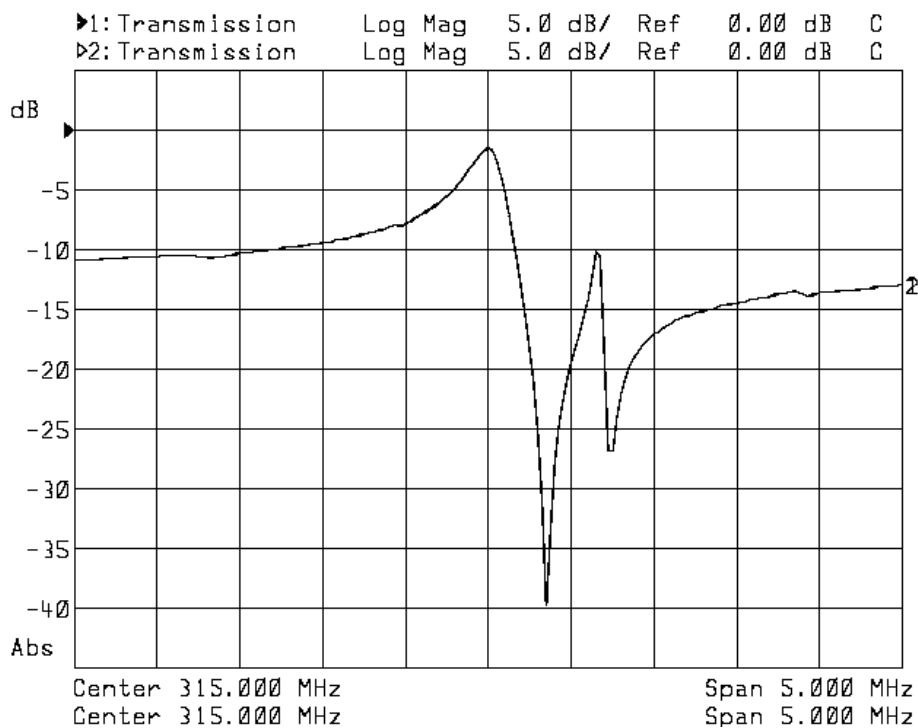
### 4.1 Maximum Rating

DC Voltage $V_{DC}$	10V	
AC Voltage $V_{PP}$	10V	(50Hz/60Hz)
Operation Temperature	-40	to +85
Storage Temperature	-45	to +85
RF Power Dissipation	0dBm	

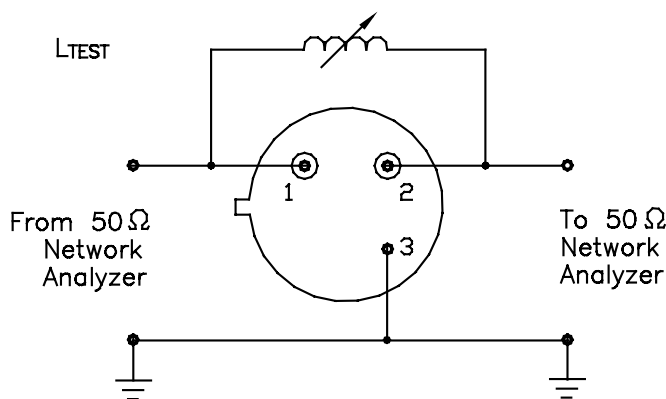
### 4.2 Electronic Characteristics

Item		Units	Minimum	Typical	Maximum
Center Frequency		MHz	314.925	315	315.075
Insertion Loss		dB	—	1.3	2.5
Quality Factor	Unloaded Q	—	—	12,000	—
	50 Loaded Q	—	—	1,900	—
Temperature	Turnover Temperature		10	25	40
Stability	Turnover Frequency	KHz	—	fo	—
	Freq. Temp. Coefficient	ppm/°C <sup>2</sup>	—	0.037	—
Frequency Aging		ppm/yr	—	<±10	—
DC Insulation Resistance		M	1.0	—	—
RF Equivalent RLC Model	Motional Resistance $R_1$		—	23	29
	Motional Inductance $L_1$	μH	—	115.2	—
RLC Model	Motional Capacitance $C_1$	fF	—	2.2	—
	Shunt Static Capacitance $C_0$	pF	2.1	2.4	2.7

### 4.3 Frequency Characteristics



### 4.4 Test Circuit



Note: Reference temperature shall be  $25 \pm 2$  . However, the measurement may be carried out at 5 to 35 unless there is a dispute.

## 5. Reliability

5.1 Mechanical Shock: The components shall remain within the electrical specifications after 1000 shocks, acceleration  $392 \text{ m/s}^2$ , duration 6 milliseconds.

5.2 Vibration Fatigue: The components shall remain within the electrical specifications after loaded vibration at 20 Hz, amplitude 1.5 mm, for 2 hours.

5.3 Terminal Strength: The components shall remain within the electrical specifications after pulled 2 kgs weight for 10 seconds towards an axis of each terminal.

5.4 High Temperature Storage: The components shall remain within the electrical specifications after being kept at the  $85 \pm 2$  for 48 hours, then kept at room temperature for 2 hours.

5.5 Low Temperature Storage: The components shall remain within the electrical specifications after being kept at the  $-25 \pm 2$  for 48 hours, then kept at room temperature for 2 hours.

5.6 Temperature Cycle: The components shall remain within the electrical specifications after 5 cycles of high and low temperature testing ( one cycle:  $80$  for 30 minutes  $25$  for 5 minutes  $-25$  for 30 minutes )than kept at room temperature for 2 hours.

5.7 Solder-heat Resistance: The components shall remain within the electrical specifications after dipped in the solder at  $260$  for  $10 \pm 1$  seconds, then kept at room temperature for 2 hours. (Terminal must be dipped leaving 1.5 mm from the case).

5.8 Solder Ability: Solder ability of terminal shall be kept at more than 80% after dipped in the solder flux at  $230 \pm 5$  for  $5 \pm 1$  seconds.

## 6. Remarks

### 6.1 Static voltage

Static voltage between signal load & ground may cause deterioration & destruction of the component. Please avoid static voltage.

### 6.2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning.

### 6.3 Soldering

Only leads of component may be soldered. Please avoid soldering another part of component.