



深圳康比电子有限公司

KANGBI TECHNOLOGY INDUSTRY CO.,LTD.

产品规格书

SAMPLE APPROVAL SHEET

CUSTOMER客户:

SIZE UP规格:

TO-39

MODEL型号:

R315M

NUMBER数量:

DATE日期:

Customer's Approval Certificate

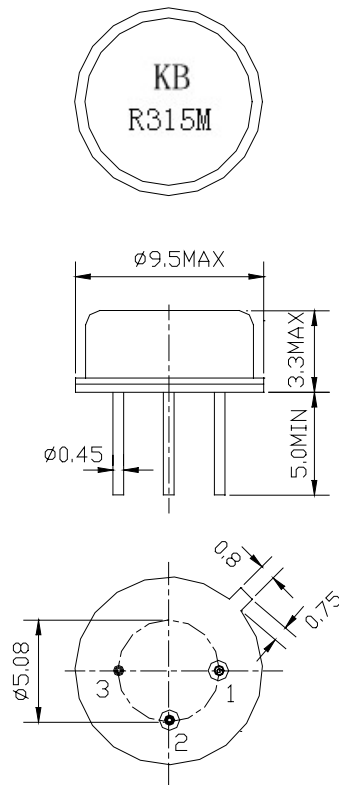
Please return this copy as a certification of
Your approval

Checked & Approval by:

Date:

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

Unit: mm



Pin No. Function

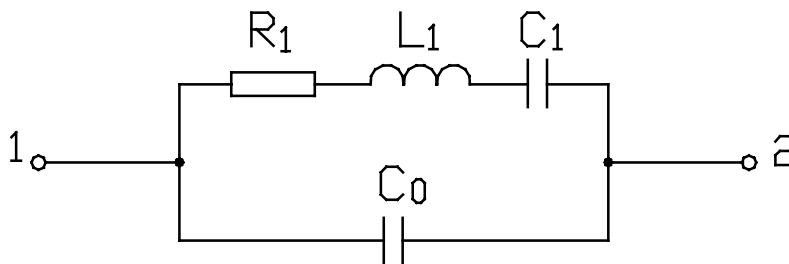
- 1. Input
- 2. Output
- 3. Ground

2. Marking

KB
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

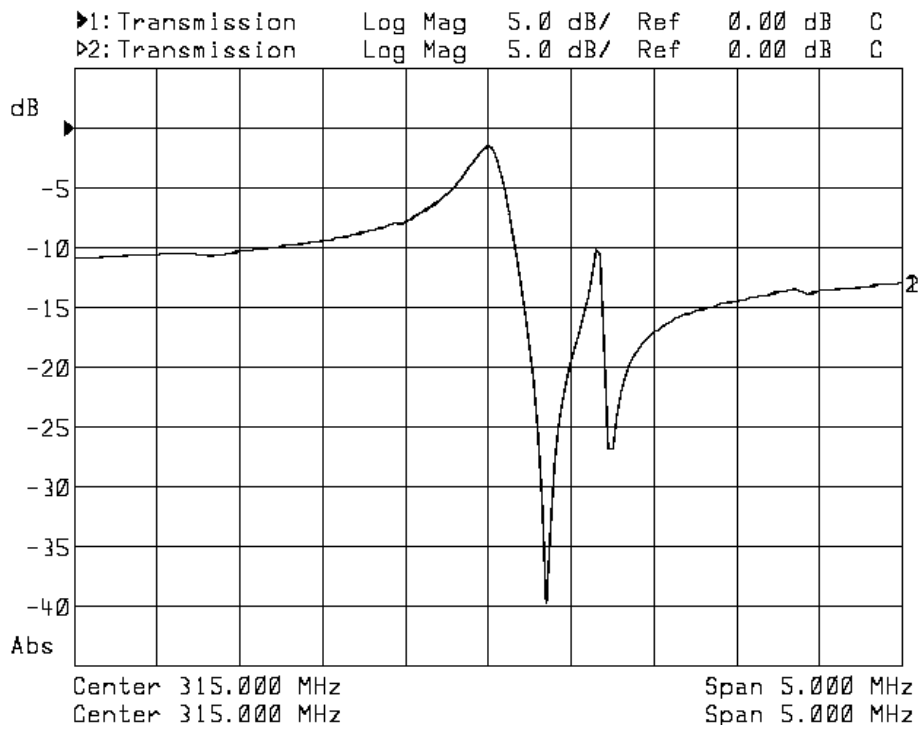
4.1 Maximum Rating

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

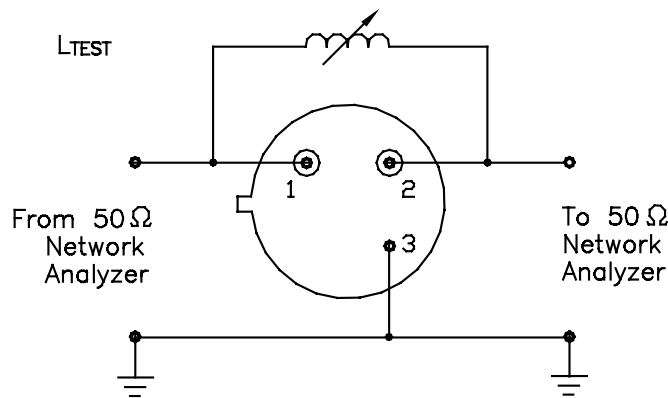
4.2 Electronic Characteristics

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 Ω Loaded Q	—	—	1,900	—
Temperature	Turnover Temperature	°C	10	25	40
Stability	Turnover Frequency	KHz	—	fo	—
	Freq. Temp. Coefficient	ppm/°C ²	—	0.037	—
Frequency Aging		ppm/yr	—	< \pm 10	—
DC Insulation Resistance		M Ω	1.0	—	—
RF Equivalent RLC Model	Motional Resistance R_1	Ω	—	23	29
	Motional Inductance L_1	μ H	—	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 $25 \pm 2^\circ\text{C}$. However, the measurement may be carried out at 5°C to 35°C unless there is a dispute.

5. Reliability

5.1 Mechanical Shock: The components shall remain within the electrical specifications after 1000 shocks, acceleration 392 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 $85^\circ\text{C} \pm 2^\circ\text{C}$ 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 $-25^\circ\text{C} \pm 2^\circ\text{C}$ 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°C for 30 minutes 25°C for 5 minutes -25°C 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°C for 10 ± 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 $230^\circ\text{C} \pm 5^\circ\text{C}$ for 5 ± 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.