

# YI J I N ELECTRONI CS CO. , LTD

# 产品承认书

# 'Rt qf wev'cempqy ngf i o gpv

**E**HS

dient客户:

**Product**产品:

Model型号:

Tabulation 制表:

"Date日期:

声表面谐振器

R418M TO-39

Production

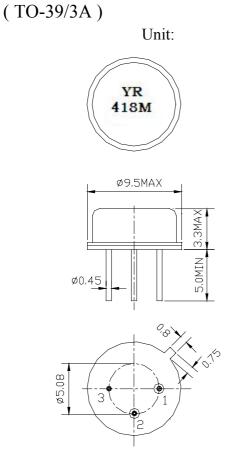
2011-5-1

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

审核:\_\_\_\_\_

(请盖公章)

1. Package Dimension



mm

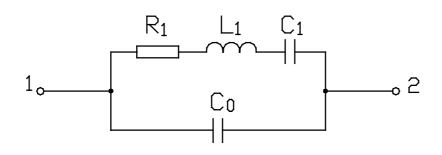
Pin No. Function

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

2. Marking

DR1

- 418.00
  - 1. Color: Black or Blue
  - 2. DR: Manufacture's logo
  - 3. 1: One-port SAW Resonator
- 4. 418.00: Center Frequency (MHz)
- 3. Equivalent LC Model



# 4. Performance

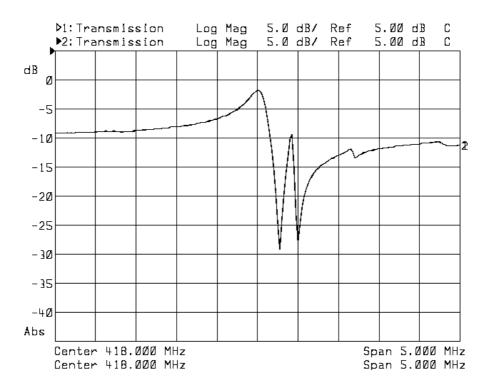
# 4.1 Maximum Rating

DC Voltage V <sub>DC</sub>	10V		
AC Voltage V <sub>PP</sub>	10V (50Hz/60Hz)		
Operation Temperature	-40 to +85		
Storage Temperature	-45 to +85		
RF Power Dissipation	0dBm		

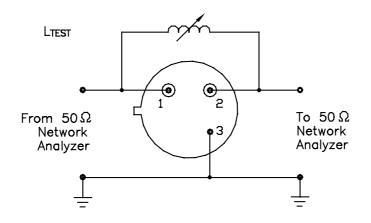
## 4.2 Electronic Characteristics

Item		Units	Minimum	Typical	Maximum
Center Frequency		MHz	417.925	418.00	418.075
Insertion Loss		dB	_	1.2	2.5
Quality Factor	Unloaded Q			12,100	_
	50 Loaded Q	_	_	2,000	
Temperature	Turnover Temperature		20	35	50
Stability	Turnover Frequency	KHz	_	fo	
	Freq. Temp. Coefficient	ppm/ <sup>2</sup>	_	0.032	—
Frequency Aging		ppm/yr		<±10	
DC Insulation Resistance		М	1.0		—
	Motional Resistance R <sub>1</sub>		_	20	26
RF Equivalent	Motional Inductance L <sub>1</sub>	μH	_	91	
RLC Model	Motional Capacitance C <sub>1</sub>	fF	_	1.6	_
	Shunt Static Capacitance Co	pF		2.0	2.3

#### 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  $10\pm1$  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.