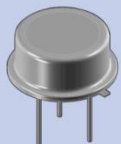


The ECS-DR2 Series are 2-port 180° SAW (Surface Acoustic Wave) resonators in a thru-hole TO39-3A package. They offer a fundamental mode, quartz frequency and are ideal for remote control and wireless security transmitters.

[Request a Sample](#)

## OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

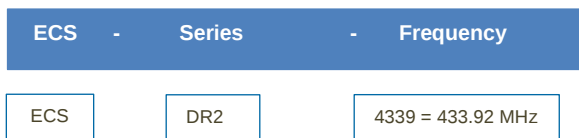
### ECS-DR2



- Quartz stability
- 180° Nominal insertion phase at resonance
- Ideal for wireless security and remote control applications
- PbFree/RoHS Compliant

| Parameters                    | Symbol/Notes       | DR2-3100  | DR2-3150    | DR2-4073  | DR2-4180    | DR2-4339     | Units    |
|-------------------------------|--------------------|-----------|-------------|-----------|-------------|--------------|----------|
| Center Frequency              | F <sub>0</sub>     | 310.0±0.1 | 315.0±0.075 | 407.3±0.1 | 418.0±0.075 | 433.92±0.075 | MHz      |
| Insertion Loss                | IL                 | 10.0      | 10.0        | 10.0      | 10.0        | 10.0         | dB Max.  |
| Unloaded Q                    |                    | 12,000    | 12,000      | 12,000    | 12,000      | 12,000       |          |
| 50 Ohms Loaded Q              |                    | 7,000     | 7,000       | 5,500     | 5,500       | 5,500        |          |
| Turnover Temperature          |                    | 15/45     | 15/45       | 15/45     | 15/45       | 15/45        | °C       |
| Freq. Temp. Coefficient       | FTC                | 0.037     | 0.037       | 0.037     | 0.037       | 0.037        | ppm/°C   |
| Frequency Aging               |                    | < ±10     | < ±10       | < ±10     | < ±10       | < ±10        | ppm/year |
| DC Insulation Resistance      | Between any 2 pins | >1        | >1          | >1        | >1          | >1           | MΩ       |
| Max. DC Voltage               | Between any 2 pins | 10        | 10          | 10        | 10          | 30           | VDC      |
| Pin 1-to-2 Static Capacitance |                    | 1.4 ±0.3  | 1.4 ±0.3    | 1.4 ±0.3  | 1.4 ±0.3    | 1.3 ±0.3     | pF       |
| Operating Temperature         | T <sub>OPR</sub>   | -40 ~ +85 | -40 ~ +85   | -40 ~ +85 | -40 ~ +85   | -40 ~ +85    | °C       |
| Storage Temperature           | T <sub>STG</sub>   | -40 ~ +85 | -40 ~ +85   | -40 ~ +85 | -40 ~ +85   | -40 ~ +85    | °C       |
| Case                          |                    | TO-39-3A  | TO-39-3A    | TO-39-3A  | TO-39-3A    | TO-39-3A     |          |

### Part Numbering Guide: Example ECS-DR2-4339



## Package Dimensions (mm)

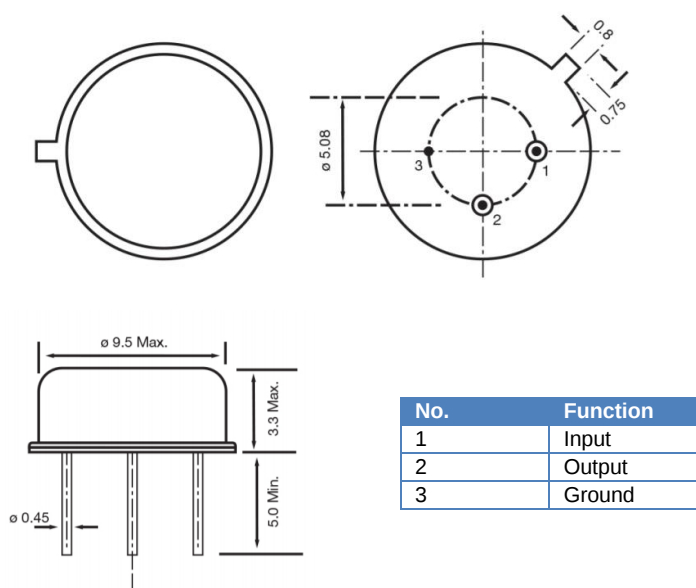


Figure 1) Top, Side, and Bottom Views

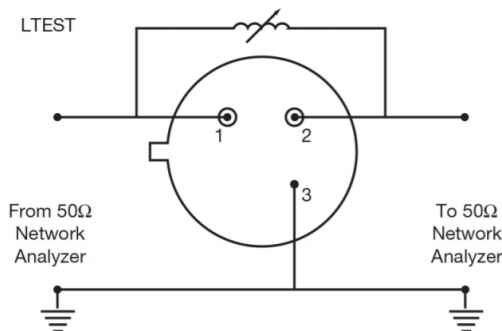


Figure 2) Test Circuit