

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.

### FEATURES

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



### PART NUMBERING GUIDE

ECS SERIES	FREQUENCY (433.92 MHz)
ECS-DR2	4339

### OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

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 to +85	-40 to +85	-40 to +85	-40 to +85	-40 to +85	°C
STORAGE TEMPERATURE	T <sub>STG</sub>	-40 to +85	-40 to +85	-40 to +85	-40 to +85	-40 to +85	°C
CASE		TO-39-3A	TO-39-3A	TO-39-3A	TO-39-3A	TO-39-3A	

### PACKAGE DIMENSIONS (mm)

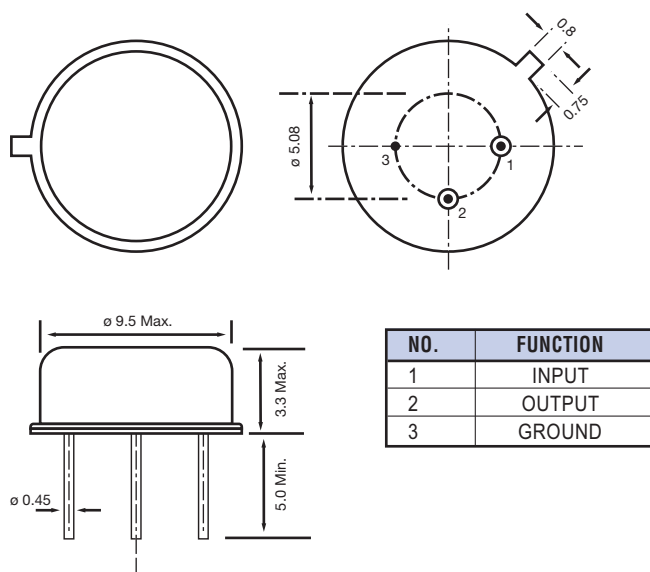


Figure 1) ECS-DR2 - Top, Side and Bottom views

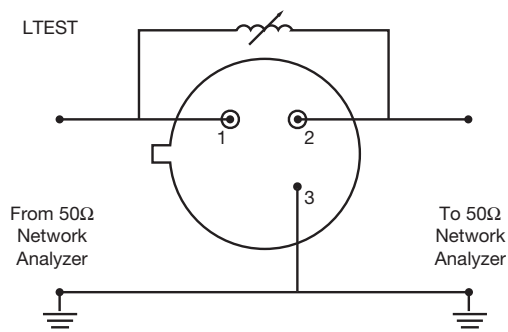


Figure 2) Test Circuit