



TS16949
Certified



RoHS
Compliant

Halogen
Free

PRODUCTS

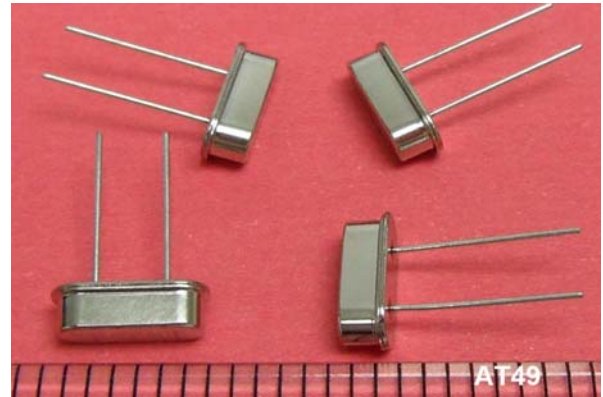
Crystal Unit (Through Hole)

For Automotive Electronics

**AT49
(AT49 Series)**

Part Number: AT49-Freq-CL

Example: AT49-4.000-18



CRYSTAL (For Automotive Electronics)

Specification		AT49
Part No.	Example	
AT49-Freq-CL	AT49-4.000-18	

Specification	AT49
Frequency Range	3.5 to 66.0MHz
Mode of Oscillation	Fundamental / 3rd Overtone
Tolerance at 25°C	±10ppm to ±50ppm
Temperature Stability	±5ppm to ±50ppm
Operating Temperature Range	-10°C to +60°C / -40°C to +85°C
Storage Temperature Range	-55°C to +125°C
Load Capacitance	10 to 32pF / Series
ESR	* See Table Below
Drive Level	100µW Max.
Aging	±5ppm/year Max.

* AT49 ESR Table

Oscillation Mode	Frequency Range (MHz)	ESR (Ohm)
Fundamental	3.5 to 3.9	200 Max.
	4.0 to 7.9	150 Max.
	8.0 to 11.9	70 Max.
	12.0 to 23.9	50 Max.
24.0 to 30.0	40 Max.	
3rd Overtone	30.0 to 66.0	80 Max.

Dimension (Unit: mm)

