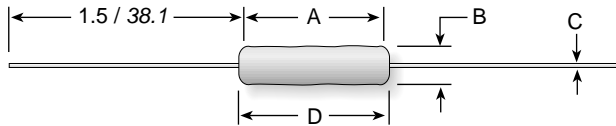


# Axiohm Series

## Centohm Coated Axial Lead Wirewound Resistors



Ohmite's Axiohm resistors are Centohm coated for maximum reliability. These all-welded units are characterized by their low temperature coefficients and resistance to thermal shock, making them ideal for a wide range of electrical and electronic applications.

### FEATURES

- Welded construction
- Inorganic and non-hygroscopic, Centohm coating seals and protects the resistance wire.
- Centohm coating is flameproof and withstands temperatures in excess of 2000°F.
- Exceeds MIL-R-26 moisture requirements
- Centohm Resistors are designed to meet and exceed performance characteristics of vitreous enamel resistors.
- Centohm is more cost effective than vitreous enamel.
- ±5% resistance tolerance

### OPTIONS

**Noninductive Resistors:** These specially designed versions are wound using the Ayrtton-Perry method.

**Controlled or Limited Inductance Resistors:** Using special single windings, these versions limit the inductance to a specified value.

**Resistance Tolerances:** Options include 5%, 1%, 0.5%, 0.25%, and 0.1% resistors.

**Lead Sizes:** Alternate lead diameters available.

**Tape and Reel:** Resistors taped for automatic insertion. Call the factory for size, quantity and ordering information

Watt Rating Form	Resistance Range (Ω)		Standard Resistance Tolerance	Dielectric Withstanding Voltage	Maximum Voltage Rating	A ±1/16"	B ±1/32"	C B&S (dia.)	D max clean lead to clean lead
	Min.	Max.							
1C	0.1	4K	±5%	500	100	5/16 ± 1/32	3/32	#24 (.020")	13/32
2C	0.1	10K	±5%	500	300	3/8	7/32	#20 (.032")	15/32
3C	0.1	20K	±5%	500	450	1/2	7/32	#20 (.032")	19/32
4C	0.1	30K	±5%	500	600	11/16	7/32	#20 (.032")	13/16
5C	0.1	40K	±5%	500	800	15/16	7/32	#20 (.032")	11/16
7C	0.1	50K	±5%	500	875	1	5/16	#20 (.032")	11/8
10C	0.1	90K	±5%	500	1600	1 9/16	5/16	#20 (.032")	1 11/16

### SPECIFICATIONS

#### Material

**Coating:** Flameproof proprietary Centohm

**Core:** Ceramic

**Element:** Copper-nickel alloy or nickel-chrome alloy depending on resistance value

**End Cap:** Stainless steel

**Leads:** Tinned Copperweld

#### Derating

Linearly from  
100% @ +25°C to  
0% @ +350°C.

#### Electrical

**Tolerance:** ±5% (Std) down to 0.1% available.

**Power rating:** Based on 25°C free air rating (other wattages available).

**Overload:** Under 5 watts: 5 times rated wattage for 5 seconds. 5 watts and over: 10 times rated wattage for 5 seconds.

#### Temperature coefficient:

0 ± 30ppm/°C above 10Ω  
0 ± 100ppm/°C 1 to 10Ω  
0 ± 200ppm/°C below 1Ω

### ENVIRONMENTAL PERFORMANCE

Test	Maximum
Temperature Coefficient	±30ppm/°C above 10Ω ±100ppm/°C 1 to 10Ω ±200ppm/°C below 1Ω
Thermal Shock	± (2% + .05Ω)ΔR
Short Time Overload	± (2% + .05Ω)ΔR
Dielectric	± (0.1% + .05Ω)ΔR
Low Temperature Storage	± (2% + .05Ω)ΔR
High Temperature Exposure	± (2% + .05Ω)ΔR
Moisture Resistance	± (2% + .05Ω)ΔR
Shock	± (2% + .05Ω)ΔR
Vibration	± (2% + .05Ω)ΔR
Load Life	± (3% + .05Ω)ΔR
Terminal Strength	± (1% + .05Ω)ΔR

ΔR values are maximums based on MIL-R-26 testing requirements at 350°C.

### ORDERING INFORMATION

