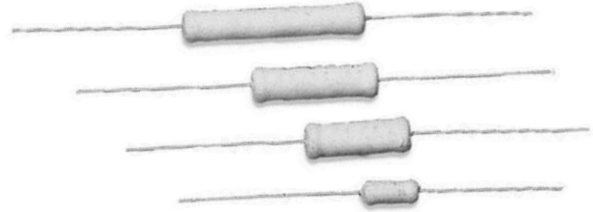


## Centohm Coated Axial Terminal Wirewound



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.
- 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.
- $\pm 5\%$  resistance tolerance

### OPTIONS

**Noninductive:** This specially designed version is wound using the Ayrton-Perry method.

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

**Terminal Sizes:** Alternate terminal diameters available.

**Tape and Reel:** Resistors taped for automatic insertion. Contact Ohmite for size, quantity and ordering information

### SERIES SPECIFICATIONS

Watt Rating Form	Resistance Range ( $\Omega$ )		Standard Resistance Tolerance	Dielectric Withstanding Voltage	Maximum Voltage Rating
	Min.	Max.			
1C	0.1	4K	$\pm 5\%$	500	100
2C	0.1	10K	$\pm 5\%$	500	300
3C	0.1	20K	$\pm 5\%$	500	450
4C	0.1	30K	$\pm 5\%$	500	600
5C	0.1	40K	$\pm 5\%$	500	800
7C	0.1	50K	$\pm 5\%$	500	875
10C	0.1	90K	$\pm 5\%$	500	1600

### CHARACTERISTICS

<b>Coating</b>	Flameproof proprietary Centohm
<b>Core</b>	Ceramic
<b>Element</b>	Copper-nickel alloy or nickel-chrome alloy depending on resistance value
<b>End Cap</b>	Stainless steel
<b>Terminals</b>	Tinned Copper weld. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu
<b>Derating</b>	Linearly from 100% @ +25°C to 0% @ +350°C.
<b>Tolerance</b>	$\pm 5\%$ (Std) down to 0.1% available.
<b>Power rating</b>	Based on 25°C free air rating (other wattages available).
<b>Overload</b>	Under 5 watts: 5 times rated wattage for 5 seconds. 5 watts and over: 10 times rated wattage for 5 seconds.
<b>Temperature coefficient</b>	$\pm 30\text{ppm}/^\circ\text{C}$ above 10 $\Omega$ $\pm 100\text{ppm}/^\circ\text{C}$ 1 to 10 $\Omega$ $\pm 200\text{ppm}/^\circ\text{C}$ below 1 $\Omega$

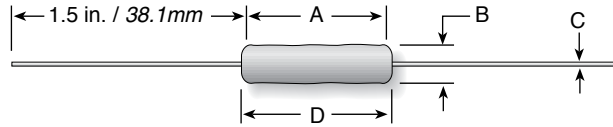
(continued)

# Axiohm

## Centohm Coated Axial Terminal Wirewound

### DIMENSIONS

(in./mm)



Watt Rating Form	A ±.063"/±1.60mm	B ±.031"/0.79mm	C Wire Gauge (dia.)	D max. clean term. to clean term. in./mm
1C	0.313±.031 / 7.95±.79	0.094 / 2.39	#24 (.020")	0.406 / 10.31
2C	0.375 / 9.53	0.219 / 5.56	#20 (.032")	0.469 / 11.91
3C	0.5 / 12.7	0.219 / 5.56	#20 (.032")	0.594 / 15.09
4C	0.688 / 17.48	0.219 / 5.56	#20 (.032")	0.813 / 20.65
5C	0.938 / 23.83	0.219 / 5.56	#20 (.032")	1.063 / 27.00
7C	1 / 25.4	0.313 / 7.95	#20 (.032")	1.125 / 28.58
10C	1.563 / 39.7	0.313 / 7.95	#20 (.032")	1.688 / 42.67

### PERFORMANCE DATA

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

