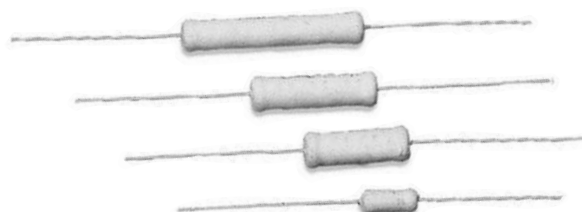


Centohm Coated Axial Terminal Wirewound



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 (Ω) Min. Max.	Standard Resistance Tolerance	Dielectric Withstanding Voltage	Maximum Voltage Rating
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

Coating	Flameproof proprietary Centohm
Core	Ceramic
Element	Copper-nickel alloy or nickel-chrome alloy depending on resistance value
End Cap	Stainless steel
Terminals	Tinned Copper weld. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu
Derating	Linearly from 100% @ +25°C to 0% @ +350°C.
Tolerance	$\pm 5\%$ (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	$\pm 30\text{ppm}/^\circ\text{C}$ above 10 Ω $\pm 100\text{ppm}/^\circ\text{C}$ 1 to 10 Ω $\pm 200\text{ppm}/^\circ\text{C}$ below 1 Ω

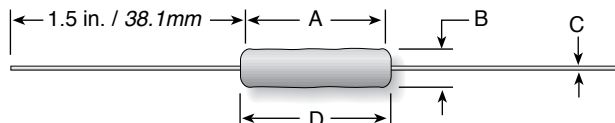
(continued)

Axiohm

Centohm Coated Axial Terminal Wirewound

DIMENSIONS

(in./mm)



Watt Rating Form	A $\pm .063'' / \pm 1.60\text{mm}$	B $\pm .031'' / 0.79\text{mm}$	C Wire Gauge (dia.)	D max. clean term. to clean term. in./mm
1C	0.313 $\pm$.031 / 7.95 $\pm$.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	$\pm 30\text{ppm}/^\circ\text{C}$ above 10Ω $\pm 100\text{ppm}/^\circ\text{C}$ 1 to 10Ω $\pm 200\text{ppm}/^\circ\text{C}$ below 1Ω
Thermal Shock	$\pm (2\% + .05\Omega)\Delta R$
Short Time Overload	$\pm (2\% + .05\Omega)\Delta R$
Dielectric	$\pm (0.1\% + .05\Omega)\Delta R$
Low Temperature Storage	$\pm (2\% + .05\Omega)\Delta R$
High Temperature Exposure	$\pm (2\% + .05\Omega)\Delta R$
Moisture Resistance	$\pm (2\% + .05\Omega)\Delta R$
Shock	$\pm (2\% + .05\Omega)\Delta R$
Vibration	$\pm (2\% + .05\Omega)\Delta R$
Load Life	$\pm (3\% + .05\Omega)\Delta R$
Terminal Strength	$\pm (1\% + .05\Omega)\Delta R$

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

ORDERING INFORMATION

Non-Inductive Option (Add N)			E = RoHS compliant			
5	N	C	J	10	K	E
Wattage	Coating "C" for Centohm	Tolerance J = 5% (standard) H = 3% F = 1% D = .5% Q = .25% B = 1%		Resistance (Ω) use "K" for 1000 multiplier; use "R" for decimal point		

Example:
Std 3 watt,
10K ± 5% = 3CJ10K

Example:
Std 3 watt,
 $10K \pm 5\% = 3CJ10K$

Mouser Electronics

Authorized Distributor

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[Ohmite:](#)

[3CJR50](#) [3CJ2R0](#) [3CJ2R4](#) [7NCF8R0E](#) [7NCF16RE](#)