

The "A" Series non-inductive, ceramic composite resistors are designed for a variety of applications where high energy handling capabilities are crucial. These resistors are ideal for any application which is subject to surges, high peak power, or impulse energy.

Their unique design allows uniform distribution of energy throughout their structure which results in low thermal stress. The high-temperature, solvent-resistant epoxy coating carries a UL94V0 flammability rating which is suitable for almost any environment.

APPLICATIONS

- Motor Drives
- Power Supplies, UPS
- Power Conversion
- In-Rush Current Limiting

FEATURES

- High Surge Energy
- Non-Inductive
- Small Size

SPECIFICATIONS

Material

Resistance Element: Bulk Ceramic

Terminals: Radial; 100% Sn solder coated radial (60/40 solder available upon request)

Coating: UL94V0, solvent resistant epoxy

Electrical

Tolerance: ±10% Standard

Operating Temp. Range: -55°C to 150°C

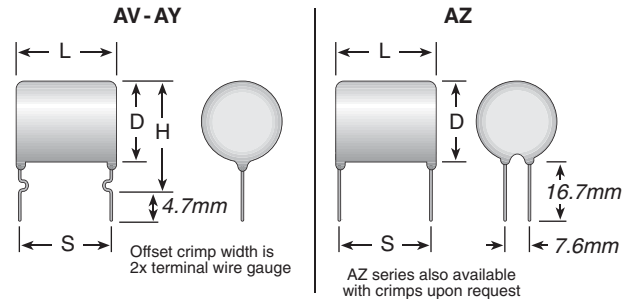
Derating: Derates linearly from 100% @ 50°C to 0% @ 150°C

Temperature Rise: 100°C @ 100% rated power, 50°C ambient



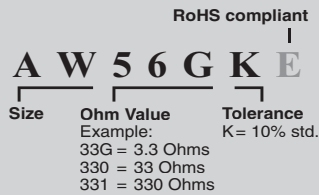
A Series

PulsEater® Ceramic Composition
Available in E12 Ohmic values



*AZ style is provided with dual terminal wires

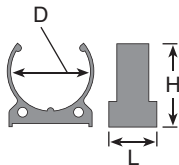
ORDERING INFORMATION



Series	P Resistance ¹ avg. ² (ohms)	L max. (mm)	D max. (mm)	H max. (mm)	S norm. (mm)	Impulse Voltage ³ (volts)	Term. wire Energy ⁴ (joule)	gauge (AWG)	Weight (g)
AV xxx	3.3 to 10K	2.0	15	22	12.5	1000	250	20	3.9
AW xxx	4.7 to 15K	2.5	20	13	17.5	1500	400	20	5.4
AX xxx	1.0 to 3.3K	3.5	15	21	26	1000	700	18	10
AY xxx	2.2 to 6.8K	4.5	25	21	26	2000	1400	18	19
AZ xxx	1.5 to 4.7K	5.5	30	26	27	2500	2800	18	33

¹E12 Standard Values ±10%; ²Free Air 40°C Ambient; ³In Air; ⁴Single Impulse

MOUNTING CLIP



This saddle clip conforms to the configuration of Ohmite's A Series resistor to provide secure mounting. Made of a durable thermoplastic polyester, the saddle clip is designed to secure the A Series in place while safely withstanding its operating temperatures. Use (2) saddle clips per resistor for extra stability.

Part No.	Dim. (mm)	for Series	Color
	D H L		
5911E	20 23 13	AX and AY	White
5910E	25 26 15	AZ	Black

STANDARD SPECIFICATIONS

Parameter	Max. ΔR	Test Method
Life Test	+5%	MIL-STD-202F, method 108A, except 50°C, 1000 hrs. @ rated power; 1.5 hrs. ON, 0.5 hrs. OFF
Single Pulse Energy	±1.5%	Single pulse, capacitor discharge at Rated Energy; 350VDC for AW and AX sizes; 650VDC for AY and AZ sizes.
Repetitive HV Pulsing	±2.0%	10 joules @ 5.0KV, 10,000 cycles
Short-time Overload	±1.5%	10x rated power, 5 sec. ON, 5 sec. OFF, 5 cycles
Short-term High Temp	±1.5%	250°C for 30 seconds
Long-term High Temp	±2.0%	1000 hours @ 150°C
Thermal Shock Cycle	±2.0%	MIL-STD-202F, method 107D, -55°C to +125°C, 5 cycles
Moisture Resistance	±1.0%	90% to 95% rh @ 40°C, 1000 hrs.

STANDARD VALUES FOR A SERIES

Ohmic value	Part No. Prefix Suffix	Series	Ohmic value	Part No. Prefix Suffix	Series	Ohmic value	Part No. Prefix Suffix	Series	Ohmic value	Part No. Prefix Suffix	Series
1.0 — 10GK	AV	✓	5.6 — 56GK	AV	✓	33 — 330K	AV	✓	220 — 221K	AV	✓
1.2 — 12GK	AW	✓	6.8 — 68GK	AW	✓	39 — 390K	AW	✓	270 — 271K	AW	✓
1.5 — 15GK	AX	✓	8.2 — 82GK	AX	✓	47 — 470K	AX	✓	330 — 331K	AX	✓
1.8 — 18GK	AY	✓	10 — 100K	AY	✓	56 — 560K	AY	✓	470 — 471K	AY	✓
2.2 — 22GK	AZ	✓	12 — 120K	AZ	✓	68 — 680K	AZ	✓	560 — 561K	AZ	✓
2.7 — 27GK		✓	15 — 150K		✓	82 — 820K		✓	680 — 681K		✓
3.3 — 33GK		✓	18 — 180K		✓	100 — 101K		✓	820 — 821K		✓
3.9 — 39GK		✓	22 — 220K		✓	120 — 121K		✓	820 — 821K		✓
4.7 — 47GK		✓	27 — 270K		✓	150 — 151K		✓	1000 — 102K		✓
						180 — 181K					

Check product availability at www.ohmite.com

✓ = Standard values Non-standard values subject to a minimum handling charge per item.