

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

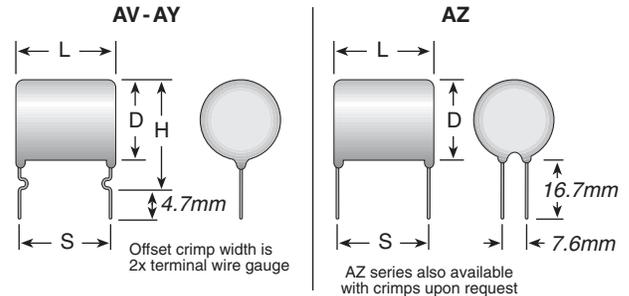
**Derating:** Derates linearly from 100% @ 50°C to 0% @ 150°C

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



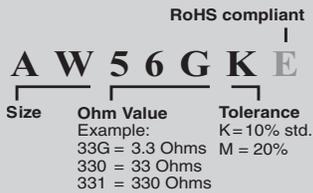
# A Series

**PulsEater® Ceramic Composition Available in E12 Ohmic values**



\*AZ style is provided with dual terminal wires

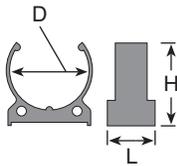
## ORDERING INFORMATION



Series	P Resistance <sup>1</sup> (ohms)	L max. (mm)	D max. (mm)	H max. (mm)	S norm. (mm)	Impulse Voltage <sup>3</sup> (volts)	Term. wire Energy <sup>4</sup> (joule)	gauge (AWG)	Weight (g)
AV xxx	3.3 to 10K	2.0	15	13	22	12.5	1000	250	3.9
AW xxx	4.7 to 15K	2.5	20	13	19	17.5	1500	400	5.4
AX xxx	1.0 to 3.3K	3.5	15	21	26	12.5	1000	700	10
AY xxx	2.2 to 6.8K	4.5	25	21	26	22.5	2000	1400	19
AZ xxx	1.5 to 4.7K	5.5	30	26	27	2500	2800	18	33

<sup>1</sup>E12 Standard Values ±10%; <sup>2</sup>Free Air 40°C Ambient; <sup>3</sup>In Air; <sup>4</sup>Single 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 <b>AW</b> and <b>AX</b> sizes; 650VDC for <b>AY</b> and <b>AZ</b> 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			1000 — 102K		
4.7 — 47GK			27 — 270K			150 — 151K					
						180 — 181K					

Check product availability at [www.ohmite.com](http://www.ohmite.com) ✓ = Standard values Non-standard values subject to a minimum handling charge per item.