A Series

PulseEater® Ceramic Composition
Available in E12 Ohmic values

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

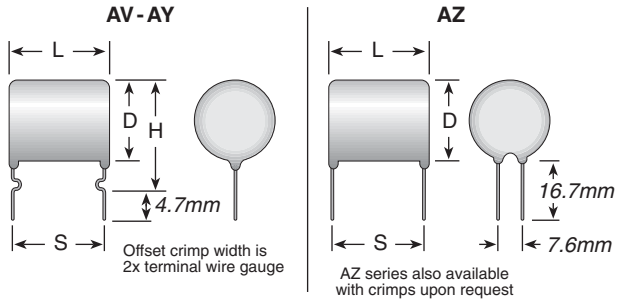
Electrical

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



*AZ style is provided with dual terminal wires

ORDERING INFORMATION

RoHS compliant

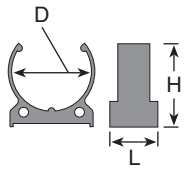
A W 5 6 G K E

Size | **Ohm Value** Example: 33G = 3.3 Ohms, 330 = 33 Ohms, 331 = 330 Ohms | **Tolerance** K = 10% std., M = 20%

Series	Resistance[1] (ohms)	P avg.[2] (watts)	L max. (mm)	D max. (mm)	H max. (mm)	S norm. (mm)	Impulse Voltage[3] (volts)	Term. wire Energy[4] (joule)	Term. wire gauge (AWG)	Weight (g)
AV xxx	3.3 to 10K	2.0	15	13	22	12.5	1000	250	20	3.9
AW xxx	4.7 to 15K	2.5	20	13	19	17.5	1500	400	20	5.4
AX xxx	1.0 to 3.3K	3.5	15	21	26	12.5	1000	700	18	10
AY xxx	2.2 to 6.8K	4.5	25	21	26	22.5	2000	1400	18	19
AZ xxx	1.5 to 4.7K	5.5	30	26		27	2500	2800	18	33

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

MOUNTING CLIP



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

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.

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 ▼	AV	AW	AX	AY	AZ
1.0	10GK			✔		
1.2	12GK					
1.5	15GK					✔
1.8	18GK					
2.2	22GK			✔	✔	
2.7	27GK					
3.3	33GK	✔		✔	✔	✔
3.9	39GK			✔		✔
4.7	47GK	✔	✔		✔	
5.6	56GK					
6.8	68GK		✔			
8.2	82GK				✔	
10	100K	✔	✔	✔	✔	✔
12	120K					
15	150K	✔	✔		✔	
18	180K					
22	220K	✔	✔	✔	✔	✔
27	270K		✔			
33	330K		✔	✔	✔	✔
39	390K	✔	✔		✔	✔
47	470K	✔	✔		✔	
56	560K		✔		✔	
68	680K		✔		✔	✔
82	820K				✔	
100	101K	✔	✔	✔	✔	✔
120	121K					
150	151K	✔	✔		✔	
180	181K					
220	221K	✔	✔			✔
270	271K					
330	331K			✔	✔	✔
470	471K	✔	✔		✔	
560	561K					
680	681K		✔		✔	
820	821K		✔		✔	
1000	102K	✔	✔	✔	✔	✔

Check product availability at **www.ohmite.com**

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