

# A Series



## PulsEater® 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.



\*AZ style is provided with dual terminal wires

### FEATURES

- High Surge Energy
- Non-Inductive
- Small Size

### APPLICATIONS

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

## SERIES SPECIFICATIONS

Series	Resistance <sup>1</sup> (ohms)	P avg. <sup>2</sup> (watts)	Impulse Voltage <sup>3</sup> (volts)	Energy <sup>4</sup> (joule)
AV	3.3 to 10K	2.0	1000	250
AW	4.7 to 15K	2.5	1500	400
AX	1.0 to 3.3K	3.5	1000	700
AY	2.2 to 6.8K	4.5	2000	1400
AZ	1.5 to 4.7K	5.5	2500	2800

<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

## CHARACTERISTICS

<b>Resistance Element</b>	Bulk Ceramic
<b>Terminals</b>	Radial; 100% Sn solder coated radial (60/40 solder available upon request)
<b>Coating</b>	UL94V0, solvent resistant epoxy
<b>Tolerance</b>	±10% Standard
<b>Operating Temp. Range</b>	-55°C to 150°C
<b>Derating</b>	Derates linearly from 100% @ 50°C to 0% @ 150°C
<b>Temperature Rise</b>	100°C @ 100% rated power, 50°C ambient

### Derating



### Mounting clip



Dim. (mm)

Part No.	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.

### Surface Temperature Rise vs. Applied Power



(continued)

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## DIMENSIONS



Series	P avg. 2 (watts)	L max. (mm)	D max. (mm)	H max. (mm)	S norm. (mm)	Term. wire gauge (AWG)	Weight (g)
AV	2.0	15	13	22	12.5	20	3.9
AW	2.5	20	13	22	17.5	20	5.4
AX	3.5	15	21	28	12.5	18	10
AY	4.5	25	21	28	22.5	18	19
AZ	5.5	30	26		27	18	33

## ORDERING INFORMATION

RoHS compliant

**A W 5 6 G K E**

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

## Standard Values

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	✓	5.6	56GK		33	330K	✓	220	221K	✓
1.2	12GK		6.8	68GK	✓	39	390K	✓	270	271K	
1.5	15GK		8.2	82GK		47	470K	✓	330	331K	
1.8	18GK		10	100K	✓	56	560K	✓	470	471K	✓
2.2	22GK	✓	12	120K	✓	68	680K	✓	560	561K	
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.