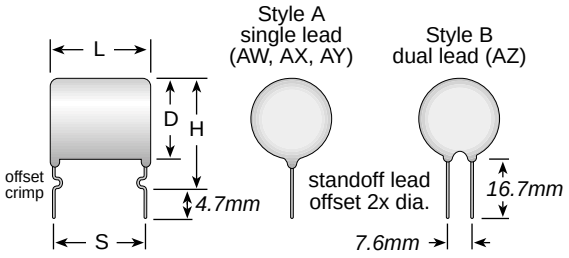
A Series

PulsEaters® Ceramic Composition Resistors Available in E12 Ohmic values



Lead Gauge:
AW = 20AWG
AX = 18AWG
AY = 18AWG
AZ = 18AWG

AZ style is provided with dual leads

The "A" Series of 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.

FEATURES

- High Surge Energy
- Non-Inductive
- Small Size

APPLICATIONS

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

SPECIFICATIONS

Material

Resistance Element: Bulk Ceramic

Terminals: Solder coated radial leads (axial lead version available upon request)

Coating: UL94V0, solvent resistant epoxy

Electrical

Tolerance: ± 10% Standard; ±5% Special Order

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

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

Series	Resistance[1] (Ohms)	P avg.[2]	L max. (mm)	D max. (mm)	H max. (mm)	S norm. (mm)	Impulse Voltage[3] (Volts)	Energy[4] (Joule)
AW xxx	4.7 to 15K	2.5	20	13	22	17.5	1500	400
AX xxx	1.0 to 3.3K	3.5	15	21	31	12.5	1000	700
AY xxx	2.2 to 6.8K	4.5	25	21	31	22.5	2000	1400
AZ xxx	1.5 to 4.7K	5.5	30	26	36	27	2500	2800

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

ORDERING INFORMATION

A W 5 6 G K

Size	Ohm Value	Tolerance
AW = 2.5W	Example:	K = 10% Standard
AX = 3.5W	33G = 3.3 Ohms	J = 5% Special order
AY = 4.5W	330 = 33 Ohms	
AZ = 5.5W	331 = 330 Ohms	

STANDARD SPECIFICATIONS

Parameter	Maximum 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 seconds ON, 5 seconds 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.

A SERIES STOCK VALUES

Ohmic value	Part No. Prefix ➤ Suffix ▼	Series 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	✔	✔	✔	✔
390	391K	✔	✔	✔	✔
470	471K	✔		✔	
560	561K	✔		✔	
680	681K	✔		✔	
820	821K	✔		✔	
1000	102K	✔	✔	✔	✔

✔ = Stock values

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

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