

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

- 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

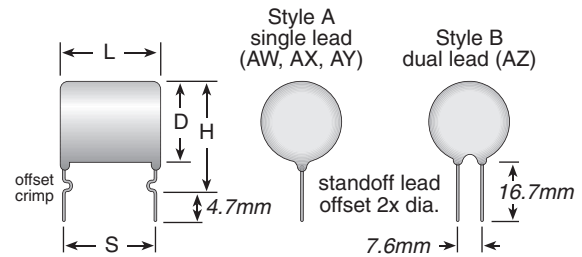
Tolerance: ±10% Standard; ±5% Special Order

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

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

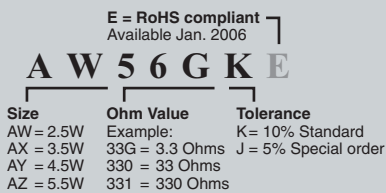
A Series

PulsEaters® Ceramic Composition Resistors Available in E12 Ohmic values



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

ORDERING INFORMATION



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

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

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	Ohmic value	Part No. Prefix Suffix	Series	Ohmic value	Part No. Prefix Suffix	Series	Ohmic value	Part No. Prefix Suffix	Series
1.0	10GK	AW ✓	5.6	56GK	AW ✓	33	330K	AW ✓	220	221K	AW ✓
1.2	12GK	AX ✓	6.8	68GK	AX ✓	39	390K	AX ✓	270	271K	AX ✓
1.5	15GK	AY ✓	8.2	82GK	AY ✓	47	470K	AY ✓	330	331K	AY ✓
1.8	18GK	AZ ✓	10	100K	AZ ✓	56	560K	AZ ✓	390	391K	AZ ✓
2.2	22GK	AW ✓	12	120K	AW ✓	68	680K	AW ✓	470	471K	AW ✓
2.7	27GK	AX ✓	15	150K	AX ✓	82	820K	AX ✓	560	561K	AX ✓
3.3	33GK	AY ✓	18	180K	AY ✓	100	101K	AY ✓	680	681K	AY ✓
3.9	39GK	AZ ✓	22	220K	AZ ✓	120	121K	AZ ✓	820	821K	AZ ✓
4.7	47GK	AW ✓	27	270K	AW ✓	150	151K	AW ✓	1000	102K	AW ✓
						180	181K				

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