TUBULAR HIGH-VOLTAGE RESISTORS

PHVA

Electrical ratings and dimensions

Up to 60 kV DC working voltage

Non-inductive tubular high-voltage resistors. The source specifies RoHS compliance and double polyimide coating for oil and potted applications.

Surge tested up to 325 kV with a 1.2/50 µs waveform in a potted assembly. Working-voltage limits depend on the model.



Series appearance reference

Technical specifications

PARAMETER	SPECIFICATION
Rated power by model	5.2–25 W, depending on model
Resistance range	500 Ω to 1 GΩ. Other values by request.
Tolerance	±1% to ±10%
Temperature coefficient	±100 ppm/°C from +25 °C to +85 °C. Down to ±15 ppm/°C by inquiry.
Max. working voltage	Up to 60 kV DC, depending on model
Dielectric strength	≤10 kV DC, depending on coating
Insulation resistance	≥10 GΩ at 1,000 V DC
Coating	Two polyimide coats for oil and potted applications. Other coatings by inquiry.
Lead material	Tin-plated OFHC copper
Other terminals	Threaded end caps (6/32, M4 or custom). Gold-colored leads Ø0.8 mm available.
Weight	Depends on model
Load life	1,000 h at rated power and 70 °C. |ΔR| ≤0.20%.
Load-life stability	0.20% per 1,000 h at 70 °C
Moisture resistance	MIL-STD-202 Method 106. |ΔR| ≤0.4%.
Thermal shock	MIL-STD-202 Method 107, condition A. |ΔR| ≤0.20%.

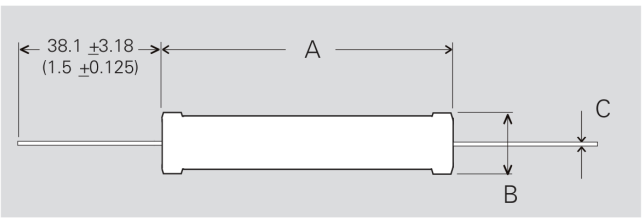
Order by model, resistance, tolerance and TCR. Example: PHVA-52 150M 10% 100 ppm.

Model specifications

MODEL	POWER (W)	MAX. DC (kV)	A mm [in]
PHVA-39	5.2	12.80	39.50 [1.555]
PHVA-52	7.2	16	52.10 [2.051]
PHVA-78	11	24	77.70 [3.059]
PHVA-103	12	32	102.90 [4.051]
PHVA-200	25	60	192.00 [7.559]

Dimensions in mm [inches]. A and B tolerance ±0.50 mm [±0.02 in], C ±0.05 mm [±0.002 in]. All models: B 8.20 [0.323], C 1.00 [0.040], resistance 500 Ω to 1 GΩ.

Outline drawing



Power derating

