ARC3 High Voltage Precision Resistors



Designed for applications such as voltage dividers, medical and measuring equipment, electrostatic and current limiting devices where high stability, low TCR and high ohmic values are required.

- Non Inductive, Thick Film
- High Voltage to 96 kVdc
- Tolerance as low as $\pm 0.1\%$
- **RoHS** Compliant

Low TCR



Characteristics

Operating temperature: Tolerance (Code): Temperature Coefficient (Code):	± 15ppm/°C (A), ±	% (C), ± 0.5% (D), ± 1% (F), ± 2% (G), ± 5% (J), ± 10% (K) 25ppm/°C (E), ± 50ppm/°C (F), ± 100ppm/°C (S), ± 200ppm/°C (L) sure at +25°C and +85°C. For TCR outside this range, please contact ARCOL
Insulation resistance:	> 10,000Mohm	500 Volts @ 25°C, 75% relative humidity
Dielectric strength:	> 1000 Volt	25°C, 75% relative humidity
Thermal shock:	△R/R 0.25% max	
Overload:	△R/R 0.25% max	1.5 x Pnom, 5 sec (do not exceed 1.5 x V max)
Moisture resistance:	△R/R 0.25% max	
Load life:	\triangle R/R 0.5% max	1000 hours at rated load

These resistors are tailored for operation in air and not aggresive atmospheres. For special applications (i.e. oil, casting, moulding, etc) please contact ARCOL.

Electrical Specifications

	Electrical data		Resistance range available at Tolerance / TCR						
Туре	P Watt 40°C	U kV dc	± 0.1-10% 15 ppm/°C	± 0.1-10% 25 ppm/°C	± 0.5 - 10% 50 ppm/°C	± 0.5 - 10% 100 ppm/°C	± 2 - 10% 150 ppm/°C	± 2 - 10% 200 ppm/°C	
ARC3-11	11	24	50K-500M	50K-500M	500R-1G	500R-1G	500R-5G	500R-5G	
ARC3-23	23	48	100K-1G	100K-1G	700R-1G	700R-1G	700R-10G	700R-10G	
ARC3-54	54	48	100K-1G	100K-1G	2R-1G	2R-1G	2R-10G	2R-10G	
ARC3-71	71	64	100K-1G5	100K-1G5	20R-1G5	20R-1G5	20R-15G	20R-15G	
ARC3-105	105	96	150K-2G	150K-2G	80R-2G	80R-2G	80R-25G	80R-25G	

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The information contained herein does not form part of a contract and is subject to change without notice. Arcol operate a policy of continual product development, therefore, specifications may change.

It is the responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask Arcol.

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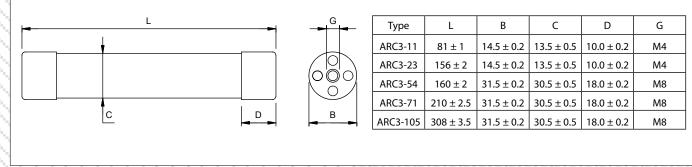
Ordering Procedure

Standard Resistor To specify standard: Series, Termination Style, Coating Type, Ohmic Value, Tolerance Code and Temperature Coefficient Code, e.g.: ARC3-23 20M D E

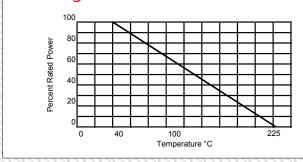
Tolerance (Code) ±0.1% (B), ±0.25% (C), ±0.5% (D), ±1% (F), $\pm 2\%$ (G), $\pm 5\%$ (J), $\pm 10\%$ (K)

Temperature Coefficient (Code) ±15ppm/°C (A), ±25ppm/°C (E), ±50ppm/°C (F), ±100ppm/°C (S), ±200ppm/°C (L)

Dimensions (mm)



Derating Curve



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Arcol:

ARC3.11 2M J A ARC3-11 P 2M J A