# **ACS** Axial Coated Silicon Resistors



The design of the ACS resistor provides a good balance of power density, stability and resistance to environment for a broad range of industrial power applications, such as drives and controls.

- Good ratio between power capability and physical size
- Wound to maximise high pulse capability
- Low inductive versions available
- Available on tape and reel or bulk
- RoHS Compliant



#### Characteristics

Tolerance (Code): A  $(\pm 0.05\%)$ , B  $(\pm 0.1\%)$ , F  $(\pm 1\%)$ , G  $(\pm 2\%)$ , J  $(\pm 5\%)$  and K  $(\pm 10\%)$  Temperature coefficient:  $<1R \pm 90$ ppm/°C,  $1R-10R \pm 50$ ppm/°C,  $>10R \pm 20$ ppm/°C

Insulation resistance: 1, 000M ohms minimum dry, 100M ohms minimum after moiture test

Dielectric withstand voltage: 500V AC

MIL types: Available upon request.

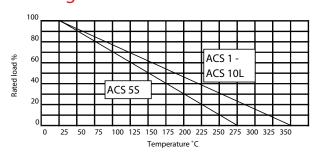
#### **Electrical Specifications**

Туре	Wattage	Max working voltage (V)	Resistance range	
			Inductive (W)	Non Induc- tive (N)
ACS 1	1	20	R1 - 3K	R1 - 1.5K
ACS 2	2	100	R1 - 10K	R1 - 4K
ACS 3	3	200	R1 - 18K	R1 - 9K
ACS 5S	5	157	R05 - 30K	N/A
ACS 5L	5	400	R1 - 35K	R1 - 17K
ACS 7	7	450	R1 - 50K	R1 - 25K
ACS 10S	10	700	R1 - 70K	R1 - 35K
ACS 10L	10	800	R1 - 100K	R1 - 50K

#### **Typical Inductance**

Туре	<50 ohms	>50 ohms				
ACS 1 - ACS2	0.2μΗ	0.37μΗ				
ACS 3 - ACS5L	0.3μΗ	0.6μΗ				
ACS 7 - ACS 10L	0.65μH	1.2μΗ				
As specified by MIL-R-39007. Max series inductance at 0.5MHz.						

## **Derating Curve**



## **Ordering Procedure**

<u>Standard Resistor</u> To specify standard: Series, Wattage Rating, Winding Type, Resistance and Tolerance Code,

e.g.: ACS3 W 18K F

Tolerance (Code) ±0.05% (A), ±0.1% (B), ±1% (F), ±2% (G),

±5% (J), ±10% (K)

ARCOL UK Limited,

Threemilestone Ind. Estate,

Truro, Cornwall, TR4 9LG, UK.

T +44 (0) 1872 277431

F +44 (0) 1872 222002

E sales@arcolresistors.com

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.

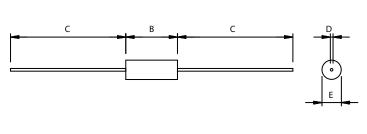
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## Dimensions (mm)



Type	B ± 1.5	C ± 1.0	D ± 0.02	E ± 0.8
ACS 1	10.0	37.0	0.7	3.3
ACS 2	13.8	35.0	0.8	4.7
ACS 3	15.7	35.0	0.8	5.9
ACS 5S	12.7	35.0	0.8	4.78
ACS 5L	22.5	44.0	1.0	8.52
ACS 7	24.5	44.0	1.0	8.52
ACS 10S	44.2	35.0	1.0	8.52
ACS 10L	46.2	33.0	1.0	10.5

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