

High Power Resistor



Type SBC (Square Ceramic) Series



This range of Power Wirewound Resistors are wound on continuous glass fibre elements or have a ceramic core depending on resistance value. The element is housed in a ceramic case and sealed with an inorganic silica filler. Their construction gives a resistor with high insulation resistance and low surface temperature, capable of withstanding high overload currents. These resistors are ideally suited to a variety of applications within industrial and commercial environments, where performance and reliability are of prime importance. Applications include fan force ovens, cooker hoods, power supplies and triac based speed controls. Custom Design Variants in value and style are welcomed.

Key Features

Up to 17 Watts

- Fusible Styles
- Vertical or Axial
- Non Flammable
- Special Solvent Resistance
- Customer Specials Invited
- Widely Available from Distribution

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Characteristics -

Electrical

Resistance Values:	Series E24 5% E12 10% (see tables for value limits per style)
Resistance Tolerance:	±5% ±10%
Maximum Continuous Voltage:	√P x R
Load Life:	∆R <±3% 1000 hours at 70°C
Power Rating:	See Surface Temperature Curve (below)

Characteristics -

Environmental and Mechanical	
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Temperature Coefficient of Resistance:	200ppm/°C (400ppm/°C below 18R)
Resistance to Solder Heat:	$\Delta R < 0.2\%$ (350°C for 2.5 seconds)
Voltage Coefficient of Resistance:	Negligible
Temperature Range:	0°C to 70°C
Load Stability:	$\Delta R < 5\%$ (full load at 70°C for 1000 hours)
Long Term Damp Heat:	ΔR < 0.2% (21 days at 40°C for 93% humidity)
Shelf Life:	$\Delta R < 1.0\%$ (per 12 months)
Insulation Resistance:	> 10000M
Dielectric Strength:	2000V RMS
Lead Material:	Steel - Solder coat
Marking:	Legend mark, Manufacturer name, type, ohmic value and tolerance.

Surface Temperature **Rise Curve**

250

200 Temperature

Surface 100

50

0

2 4 6 8 10 12

SCBH2 SBCH4/5 SBCH6/7

SBCH8 SBCH11





Type SBC - SBCH (Axial Power Resistor)

Power in Watts

We offer three ceramic profiles for the main wattage sizes. These are for additional heat dissipation and vertical mounting of resistors. The suffix for each style is as follows:-

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SBC Standard

SBCH 8/11/15



SBCH 4/5/6/7



Type SBCHE (For Vertical Mounting)

We offer SBCHE Styles with one lengthened lead for vertical mounting. See additional hardware on last page.



One Lead Length 20mm longer than case length. Supplied with one longer lead wrapped back in flute in ceramic.



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Type SBC - (No Flutes in Ceramic)



Type SBCH - (Flutes in Ceramic)



Model	Power	Ohmic Values		Di	mensi	Weight	
	Max	Min	Max	Α	В	L	Grams
SBCH-4	4 W	R20	6K8	7	8	20	2.2
SBCH-5	5 W	R30	10K	7	8	25	3.5
SBCH-6	7 W	R47	22K	7	8	38	5.0
SBCH-7	7 W	R33	10K	9	10	25	6.0
SBCH-8	9 W	1R0	8K2	9	10	38	8.0
SBCH-11	11 W	1R0	22K	9	10	50	10.0
SBCH-15	17 W	1R0	22K	9	10	75	15.0

L = Length of Ceramic Section



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Medel	Power	Ohmic	Values	Di	Dimensions		
Model	Max	Min	Max	Α	В	L	
SBCLF-4	4 W	2R2	2K2	10	9	25	
SBCLF-5	5.5 W	2R2	5K6	10	9	38	
SBCLF-7	7 W	3R3	8K2	10	9	50	
SBCLF-10	10 W	4R7	12K	10	9	75	

Type SBCV - (Vertical Mount Style)



Madal	Power	Ohmic	Values	Dimensions		
Model	Max	Min	Max	Α	В	L
SBCV-6	7 W	R47	22K	10	9	25
SBCV-8	9 W	1R0	8K2	10	9	38
SBCV-11	11 W	1R0	22K	10	9	50
SBCV-15	17 W	1R0	22K	10	9	75

Lead drawn through hole in ceramic

Dimensions are in millimetres unless otherwise specified.

Specifications subject to change.

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Type SPW - (High Power Faston Style)





Model Power		Ohmic Values			Weight		
wouer	Max	Min	Max	Α	В	L	Grams
SPW-10	10 W	2R2	8K2	10	13	38	14
SPW-15	15 W	3R3	10K	10	13	50	20
SPW-20	20 W	4R7	15K	10	13	75	32
SPW-30	30 W	6R8	18K	10	13	100	46
SPW-35	35 W	8R2	22K	10	13	120	59

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L = Length of Ceramic Section

Accessories



N.B. All resistors are supplied with arklone proof seal

Dimensions are in millimetres unless otherwise specified.

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