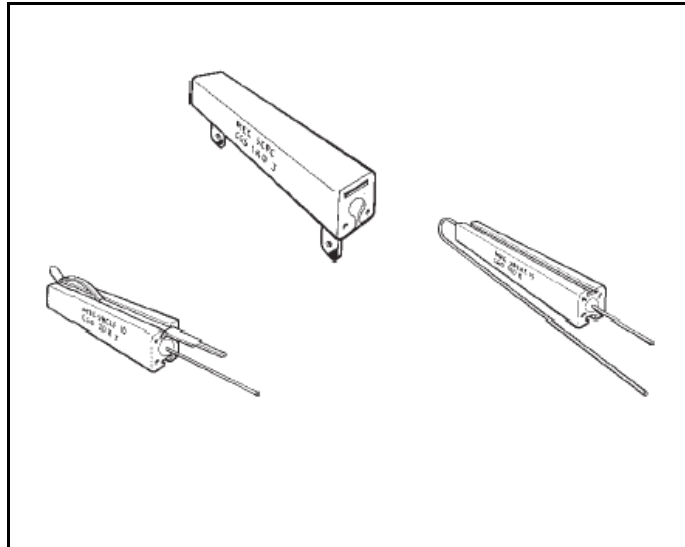


TYPE SBC (SQUARE CERAMIC) SERIES1st April 2003
ISSUE 12**High Power Resistor****TYPE SBC (SQUARE CERAMIC) SERIES**

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
- Attractively Priced
- Customer Specials Invited
- Widely Available from Distribution

STOCKISTS:

This product is stocked by RS and Farnell.

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CONSTRUCTION

A range of flame-proof wirewound resistors with excellent electrical and mechanical characteristics. The resistance wire is wound on a fiberglass or ceramic core and protected by a ceramic body. This construction combines good thermal characteristics with high insulation resistance, and gives good physical protection. Lead length allows vertical or horizontal mounting.

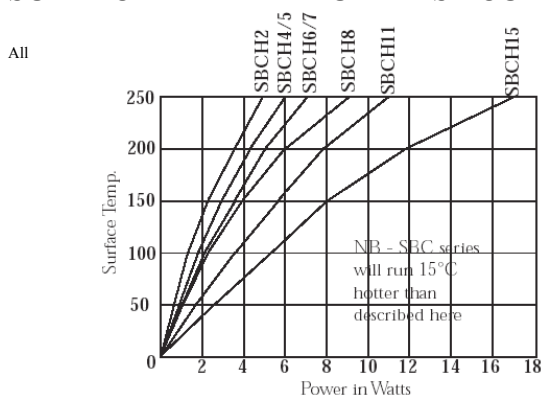
ELECTRICAL

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

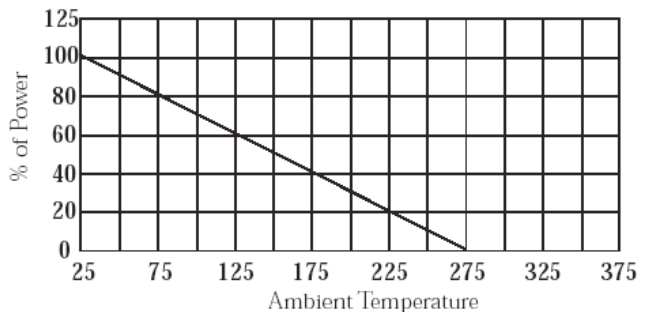
ENVIRONMENTAL & MECHANICAL

Temperature Coefficient of Resistance:	200ppm/°C (400ppm/°C below 18R)
Resistance Change due to Solder Heat:	Less than 0.2% (350°C for 2.5 seconds)
Voltage Coefficient of Resistance:	Negligible
Temperature Range:	0°C to 70°C
Load Stability:	Less than 5% (full load at 70°C for 1000 hours)
Long Term Damp Heat:	Less than 0.2% (21 days at 40°C for 93% humidity)
Shelf Life:	Less than 1.0% (per 12 months)
Insulation Resistance:	Greater than 10 ⁴ M
Dielectric Strength:	2000V RMS
Lead Material:	Steel - Solder coat
Marking:	Legend mark, Manufacturer name, type, ohmic value and tolerance.

SURFACE TEMPERATURE RISE CURVE



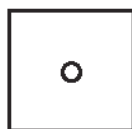
DERATING CURVE



TYPE SBC - SBCH (Axial Power Resistor)

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:-

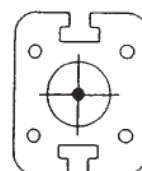
SBC Standard



SBCH 4/5/6/7

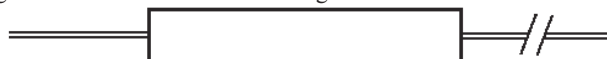


SBCH 8/11/15



TYPE SBCHE (For Vertical Mounting)

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

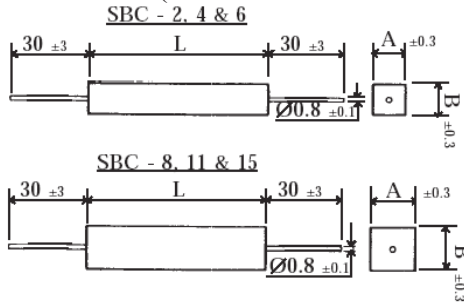


Lead Length 20mm longer than case length. Supplied with one longer lead wrapped back in flute in ceramic.

TYPE SBC (SQUARE CERAMIC) SERIES

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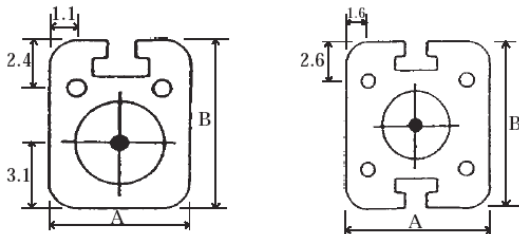
TYPE SBC - (NO FLUTES IN CERAMIC)



Model	Power Max.	Ohmic Values		Dimensions			Weight grams
		Min.	Max.	A	B	L	
SBC-2	2 W	R20	150R	6.4	6.4	20	2.3
SBC-4	4 W	R30	3K3	6.4	6.4	25	2.9
SBC-6	6 W	1R0	8K2	6.4	6.4	38	4.2
SBC-8	8 W	1R0	8K2	9	9	38	7.4
SBC-11	10 W	3R3	12K	9	9	50	10.8
SBC-15	15 W	4R7	18K	9	9	75	15.3

L = Length of Ceramic Section

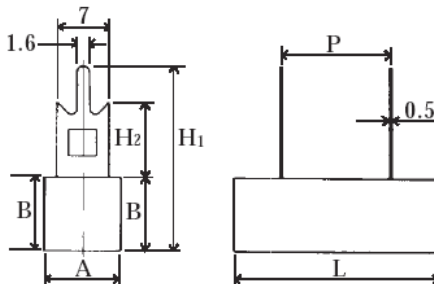
TYPE SBCH - (FLUTES IN CERAMIC)



Model	Power Max.	Ohmic Values		Dimensions			Weight grams
		Min.	Max.	A	B	L	
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	15K	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

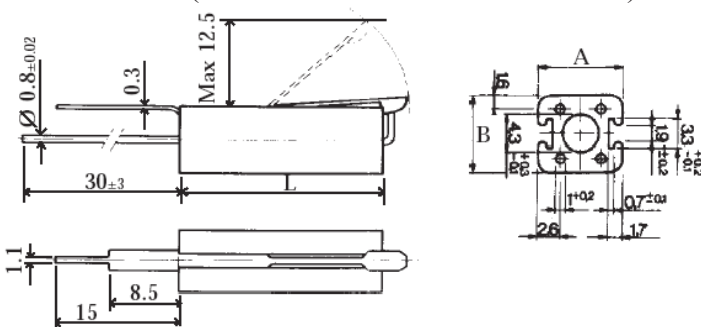
TYPE SCPC (RADIAL PLUG-IN STYLE)



Model	Power Max.	Ohmic Values		Dimensions ± 0.1mm					
		Min.	Max.	L	A	B	P	H ₁	H ₂
SCPC-3	3W	R10	330R	22	10	9	10	23	10
SCPC-5	5W	R10	1K0	27	10	9	15	25	10
SCPC-7	7W	R10	2K7	35	10	9	22.5	25	10
SCPC-10	10W	R20	8K2	50	10	9	37	25	10
SCPC-20	20W	R30	15K	63	13	12	49	43	25

L = Length of Ceramic Section

TYPE SBCLF (EXTERNALLY FUSED STYLE)

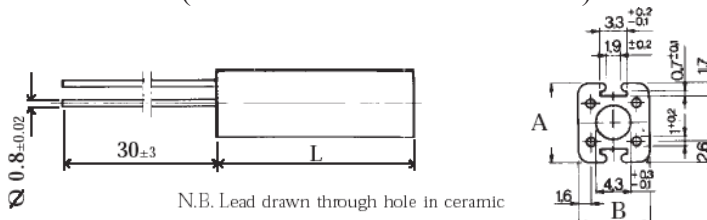


Model	Power Max.	Ohmic Values		Dimensions		
		Min.	Max.	A	B	L
SBCLF-4	4 W	2R2	2K2	10	9	25
SBCLF-5	5.5 W	2R2	5K6	10	9	38
SBCLF-7	7 W	3R3	8K2	10	9	50
SBCLF-10	10W	4R7	12K	10	9	75

Solder for fuse is SnPb 60:40

L = Length of Ceramic Section

TYPE SBCV (VERTICAL MOUNT STYLE)



N.B. Lead drawn through hole in ceramic

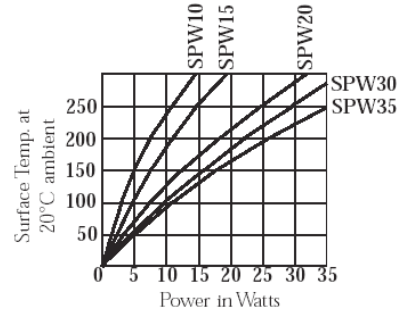
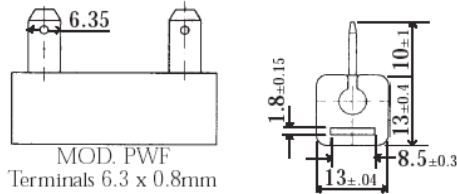
Model	Power Max.	Ohmic Values		Dimensions		
		Min.	Max.	A	B	L
SBCV-6	7W	2.2	2K2	10	9	25
SBCV-8	9 W	2.2	5K6	10	9	38
SBCV-11	11 W	3.3	8K2	10	9	50
SBCV-15	17W	4.7	12K	10	9	75

L = Length of Ceramic Section

TYPE SBC (SQUARE CERAMIC) SERIES

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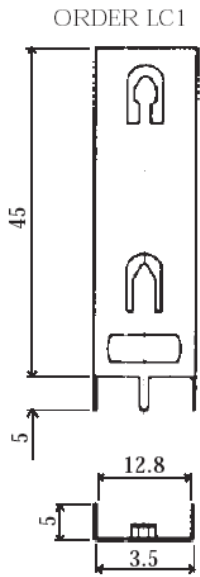
TYPE SPW (HIGH POWER FASTON STYLE)



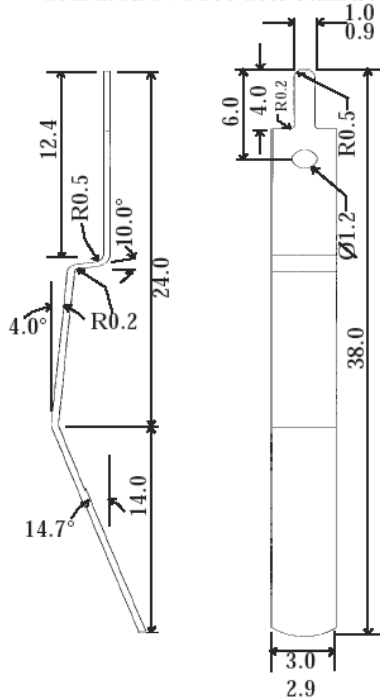
Model	Power Max.	Ohmic Values		Dimensions			Weight grams
		Min.	Max.	A	B	L	
SPW-10	10W	2R2	8K2	10	13	38	14
SPW-15	15W	3R3	10K	10	13	50	20
SPW-20	20W	4R7	15K	10	13	75	32
SPW-30	30W	6R8	18K	10	13	100	46
SPW-35	35W	8R2	22K	10	13	120	59

ACCESSORIES

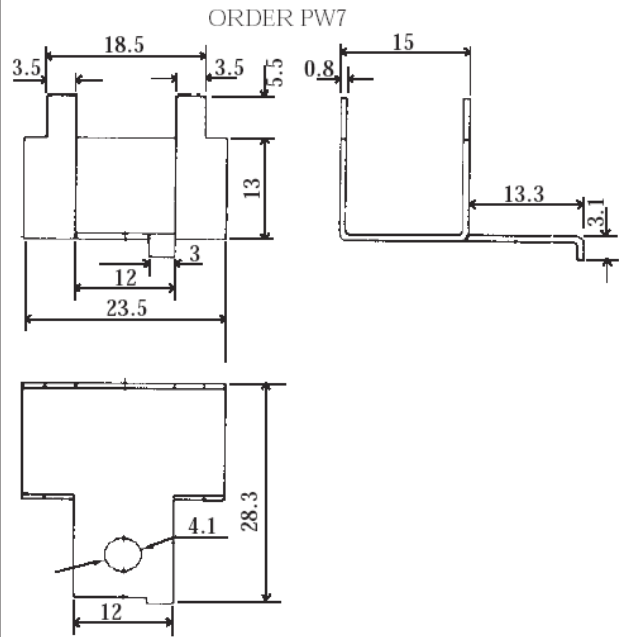
This device is used with models SBCV. ORDER LC1 SUPPORT



These can be used with SBCH/SBCV models
ORDER BCV SUPPORT PILLAR



This device is suitable for SPW Series.
order PW7 AS ACCESSORY AT THE SAME TIME AS RESISTORS



HOW TO ORDER

COMMON PART	POWER RATING (WATTS)	RESISTANCE VALUE	TOLERANCE
SBCH - Axial SBCV - Vertical SBCLF - Vertical fusible SBCHE - Axial one long lead SCPC - Radial with standoffs SPW - Lug type	6 See Relevant Table	1K0 0.1 Ohm (100 milli Ohms) R10 1 Ohm (1000 milli Ohms) 1R0 1 K Ohm (1000 Ohms) 1K0	J J - 5% K - 10%

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

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