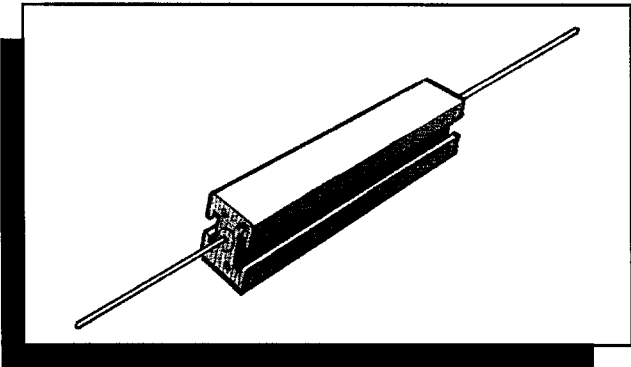


MEC CGS

**HIGH VOLTAGE RESISTORS
HIGH VALUE RESISTORS
HIGH POWER RESISTORS
ALUMINIUM CLAD RESISTORS
CURRENT SENSE RESISTORS**

High Power Resistor

TYPE SBC (SQUARE CERAMIC) SERIES



This range of Power Wirewound Resistors are wound on continuous glass fibre elements.

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.

This range was previously sold as the Holsworthy SC Types. Custom Design Variants in value and style are welcomed.

MEC CGS KEY FEATURES

- UP TO 17 WATTS
 - FUSIBLE STYLES
 - VERTICAL OR AXIAL
 - NON FLAMMABLE
 - SPECIAL SOLVENT RESISTANCE
 - ATTRACTIVELY PRICED
 - CUSTOMER SPECIALS INVITED
-

SPECIFICATION

TYPE SBC SERIES

CONSTRUCTION

A range of flame-proof wirewound resistors with excellent electrical and mechanical characteristics. The resistance wire is wound on a fibreglass 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. If arklone cleaners are used then special sealant is used.

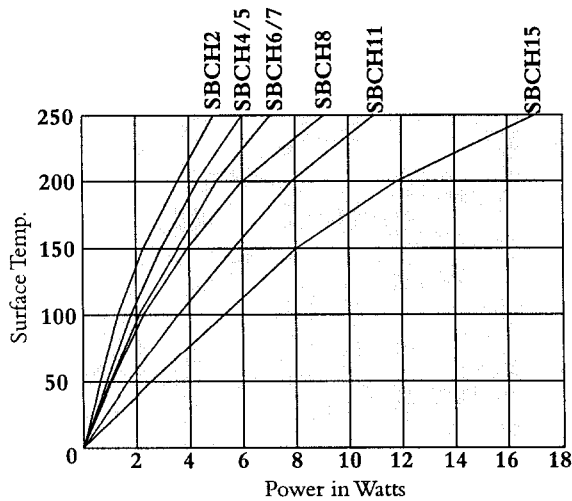
ELECTRICAL

| | |
|--------------------------|---|
| Resistor Values: | Series E24 5% E12 10% (see tables for value limits per style) |
| Resistor Tolerance: | ±5% ± 10% |
| Max. Continuous Voltage: | $\sqrt{PN \times R}$ |
| Load Life: | ±3% 1000 hrs at 70°C |
| Power Rating: | See Surface Temperature Curve (below) |

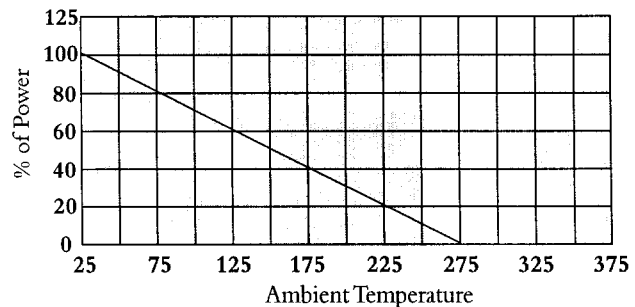
ENVIRONMENTAL & MECHANICAL

| | |
|--|--|
| Temperature Coefficient of Resistance: | 200ppm°C (400 ppm °C below 18R) |
| Resistance Change due to Solder Heat: | Less than 0.2% (350°C for 2.5 secs) |
| Voltage Coefficient of Resistance: | Negligible |
| Temperature Range: | 0°C to 70°C |
| Load Stability: | Less than 5% (full load at 70°C for 1000hrs) |
| 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



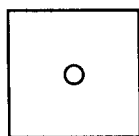
POWER DERATING CURVE



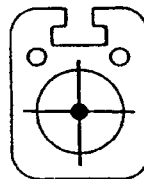
TYPE SBC - SBCH (Axial Power Resistor)

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:-

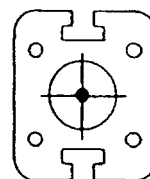
SBC Standard



SBCH 4/5/6/7

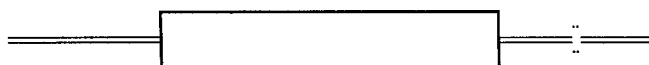


SBCH 8/11/15



TYPE SBCHE (For Vertical Mounting)

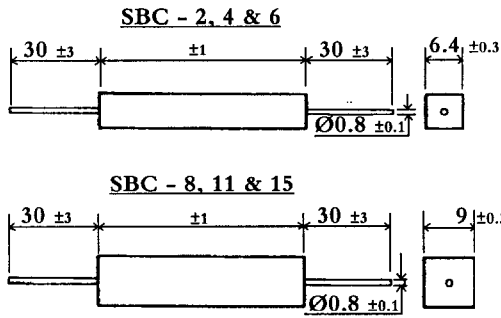
We offer SBCHE Styles with one lengthened lead for vertical mounting. See additional hardware overpage.



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

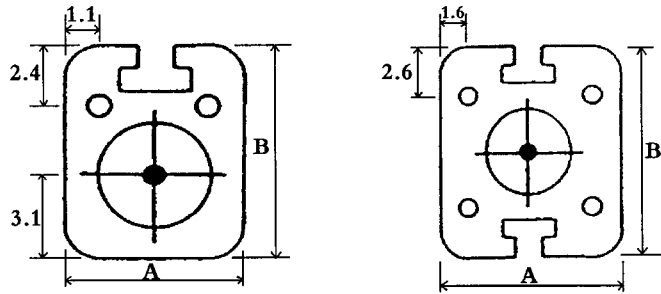
SPECIFICATION (Continued)

TYPE SBC - (NO FLUTES IN CERAMIC)



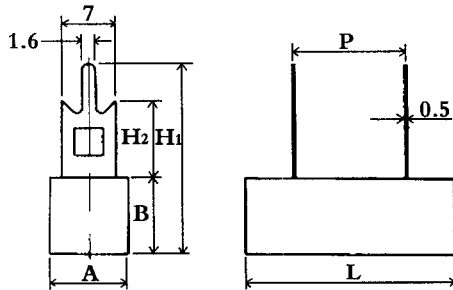
| Model | Power Max. | Ohmic Values | | Dimensions mm | Weight grams |
|--------|---------------|--------------|------|------------------|-----------------|
| | | Min. | Max. | | |
| SBC-2 | 4 W | R2 | 0.1K | 6.4x6.4x20 | 2.3 |
| SBC-4 | 5 W | R3 | 3K3 | 6.4x6.4x25 | 2.9 |
| SBC-6 | 7 W | 1R0 | 8K2 | 6.4x6.4x38 | 4.2 |
| SBC-8 | 9 W | 1R0 | 8K2 | 9x9x38 | 7.4 |
| SBC-11 | 11 W | 3R3 | 12K | 9x9x50 | 10.8 |
| SBC-15 | 17 W | 4R7 | 18K | 9x9x75 | 15.3 |

TYPE SBCH



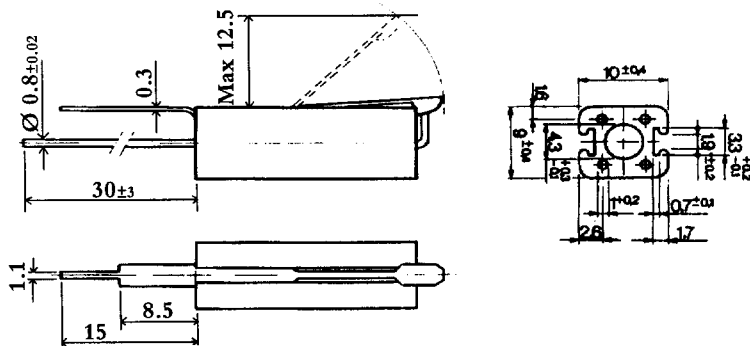
| Model | Power Max. | Ohmic Values | | Dimensions | | | Weight grams |
|---------|---------------|--------------|------|------------|----|----|-----------------|
| | | Min. | Max. | A | A | A | |
| SBCH-4 | 4 W | R2 | 6K8 | 7 | 8 | 20 | 2.2 |
| SBCH-5 | 5 W | R3 | 10K | 7 | 8 | 25 | 3.5 |
| SBCH-6 | 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 |

TYPE SCPC (RADIAL PLUG-IN STYLE)



| Model | Power Max. | Dimensions ± 1mm | | | | | | Ohmic Values | |
|---------|---------------|------------------|----|----|------|----|----|--------------|------|
| | | L | A | B | P | H | H | Min. | Max. |
| SCPC-3 | 3 | 22 | 10 | 9 | 10 | 23 | 10 | OR1 | 330R |
| SCPC-5 | 5 | 27 | 10 | 9 | 15 | 25 | 10 | OR1 | 1K |
| SCPC-7 | 7 | 35 | 10 | 9 | 22.5 | 25 | 10 | OR1 | 2K7 |
| SCPC-10 | 10 | 50 | 10 | 9 | 37 | 25 | 10 | OR2 | 8K2 |
| SCPC-20 | 20 | 63 | 13 | 12 | 49 | 43 | 25 | OR3 | 15K |

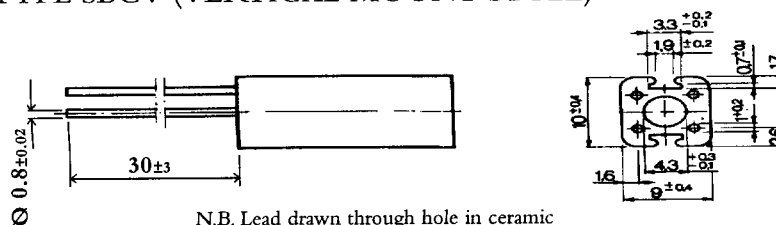
TYPE SBCLF (EXTERNALLY FUSED STYLE)



| Model | Power Max. | Ohmic Values | | Dimensions mm |
|----------|---------------|--------------|-----|------------------|
| | | Min | Max | |
| SBCLF-4 | 4 W | 2R2 | 2K2 | 10x9x25 |
| SBCLF-5 | 5.5 W | 2R2 | 5K6 | 10x9x38 |
| SBCLF-7 | 7 W | 3R3 | 8K2 | 10x9x50 |
| SBCLF-10 | 10 W | 4R7 | 12K | 10x9x75 |

Solder for fuse is SnPb 60:40

TYPE SBCV (VERTICAL MOUNT STYLE)



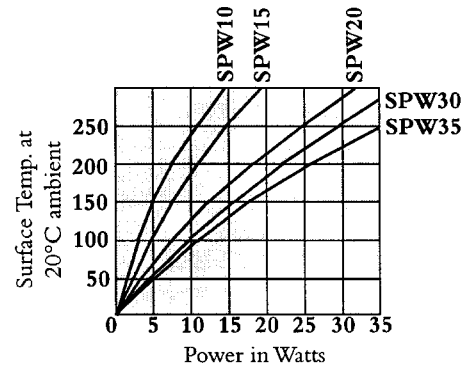
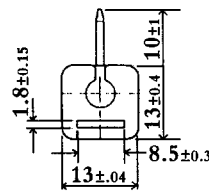
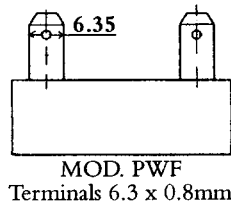
N.B. Lead drawn through hole in ceramic

| Model | Power Max. | Ohmic Values | | Dimensions mm |
|---------|---------------|--------------|-------|------------------|
| | | Min | Max | |
| SBCV-6 | 7 W | 2.2 | 2200 | 10x9x25 |
| SBCV-8 | 9 W | 2.2 | 5600 | 10x9x38 |
| SBCV-11 | 11 W | 3.3 | 8200 | 10x9x50 |
| SBCV-15 | 17 W | 4.7 | 12000 | 10x9x75 |

SPECIFICATION (Continued)

SBC SERIES

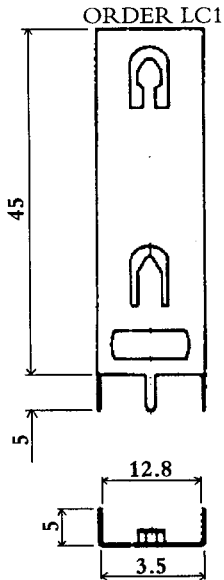
TYPE SPW (HIGH POWER FASTON STYLE)



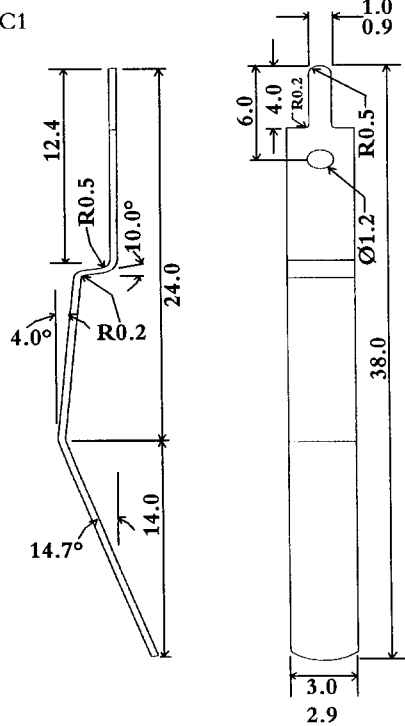
| Model | Power Max | Ohmic Values | | Dimensions mm | Weight grms |
|--------|-----------|--------------|------|---------------|-------------|
| | | Min. | max. | | |
| SPW-10 | 10W | 2R2 | | 13x13x38 | 14 |
| SPW-15 | 15W | 3R3 | | 13x13x50 | 20 |
| SPW-20 | 20W | 4R7 | | 13x13x75 | 32 |
| SPW-30 | 30W | 6R8 | | 13x13x100 | 46 |
| SPW-35 | 35W | 8R2 | | 13x13x120 | 59 |

ACCESSORIES

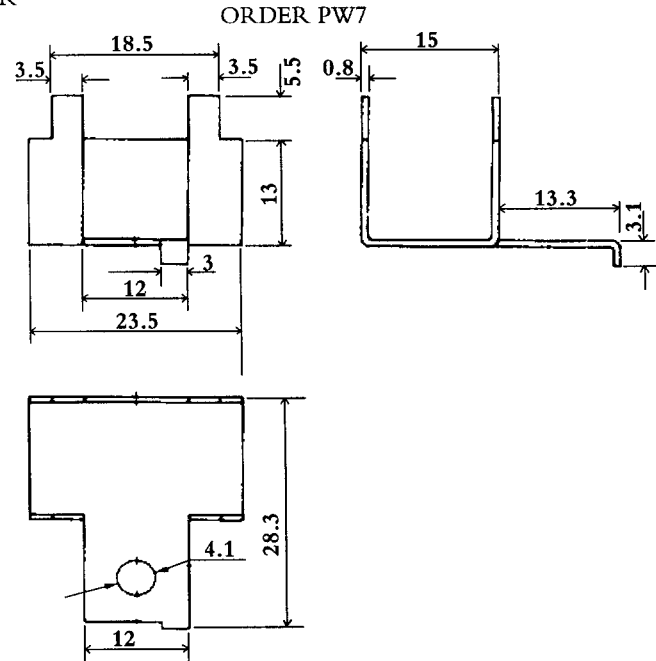
This device is used with models SBCV. ORDER LC1 SUPPORT



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

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

| COMMON PART | POWER RATING (WATTS) | RESISTOR VALUE | TOLERANCE |
|---|----------------------|--|-------------------|
| SBCH - Axial SBCV-Vertical SBCLF- Vertical fusible SBCHE- Axial one long lead SCPC- Radial with standoffs SPW-Lug type | SEE RELEVANT TABLE | 0.1 Ohm (100 mille Ohms) R10 1 Ohm (1000 mille Ohms) 1R0 1 K Ohm (1000 Ohms) 1K0 | J = 5% K = 10% |