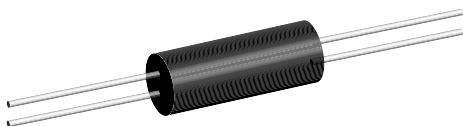


Wirewound Resistors, Molded Style, Current Shunts, Very Low Value, Four Terminal



FEATURES

- Molded four-terminal resistors for specialized applications
- Extremely low resistance values for current sensing applications
- Precision resistance tolerance
- Low temperature coefficients
- Complete welded construction

STANDARD ELECTRICAL SPECIFICATIONS

| MODEL | POWER RATING * $P_{25^{\circ}\text{C}}$ W | RESISTANCE RANGE Ω $\pm 1\%$ | WEIGHT (Typical) g |
|--------|---|---|--------------------------|
| SPU-50 | 1 | 0.001 - 0.060 | 2.5 |
| SPU-51 | 2 | 0.001 - 0.060 | 3.7 |
| SPU-52 | 4 | 0.001 - 0.200 | 4.8 |
| SPU-53 | 5 | 0.010 - 0.500 | 10.8 |

• Resistance tolerance available is 0.1%, 0.25%, 0.5%, 1.0%, 3.0% and 5.0% depending on resistor physical design and resistance value.

*Wattage rating is limited to 25 amperes maximum.

TECHNICAL SPECIFICATIONS

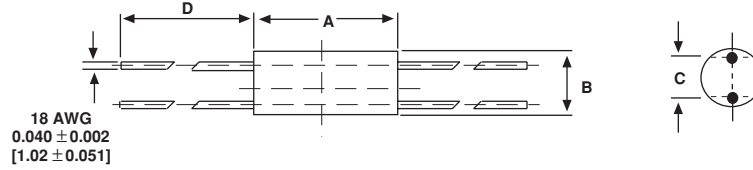
| PARAMETER | UNIT | SPU MOLDED STYLE RESISTOR CHARACTERISTICS |
|---------------------------------|-------------------------|---|
| Temperature Coefficient | ppm/ $^{\circ}\text{C}$ | - 100 (- 10 $^{\circ}\text{C}$ to + 80 $^{\circ}\text{C}$) |
| Dielectric Withstanding Voltage | V_{AC} | 500 minimum |
| Short Time Overload | - | 5 x power for 5 seconds, limited to 25 amperes maximum |
| Maximum Working Voltage | V | $(P \times R)^{1/2}$ |
| Insulation Resistance | Ω | 10,000 Megohm minimum dry |

ORDERING INFORMATION

| | | |
|-----------------|--|-----------------------------|
| SPU-52 MODEL | 0.100 Ω RESISTANCE Ω | 5% TOLERANCE $\pm \%$ |
|-----------------|--|-----------------------------|



DIMENSIONS



| MODEL | DIMENSIONS in inches [millimeters] | | | |
|--------|------------------------------------|---------------------------------|--------------------------------|---|
| | A | B | C | D |
| SPU-50 | 0.660 ± 0.010 [16.76 ± 0.25] | 0.312 ± 0.010 [7.92 ± 0.25] | 0.200 ± 0.015 [5.08 ± 0.38] | 1.000 + 0.25 - 0.125 [25.40 + 6.35 - 3.17] |
| SPU-51 | 0.790 ± 0.010 [20.06 ± 0.25] | 0.375 ± 0.010 [9.52 ± 0.25] | 0.200 ± 0.015 [5.08 ± 0.38] | 1.000 + 0.25 - 0.125 [25.40 + 6.35 - 3.17] |
| SPU-52 | 1.000 ± 0.010 [25.40 ± 0.25] | 0.375 ± 0.010 [9.52 ± 0.25] | 0.125 ± 0.015 [3.17 ± 0.38] | 1.000 Minimum [25.40 Minimum] |
| SPU-53 | 1.870 ± 0.010 [47.50 ± 0.25] | 0.437 ± 0.010 [11.10 ± 0.25] | 0.125 ± 0.015 [3.17 ± 0.38] | 1.000 Minimum [25.40 Minimum] |

* Limited to 25 amperes maximum.

MATERIAL SPECIFICATIONS

Element: Nickel-chromium alloy or copper-manganese alloy, depending on resistance value

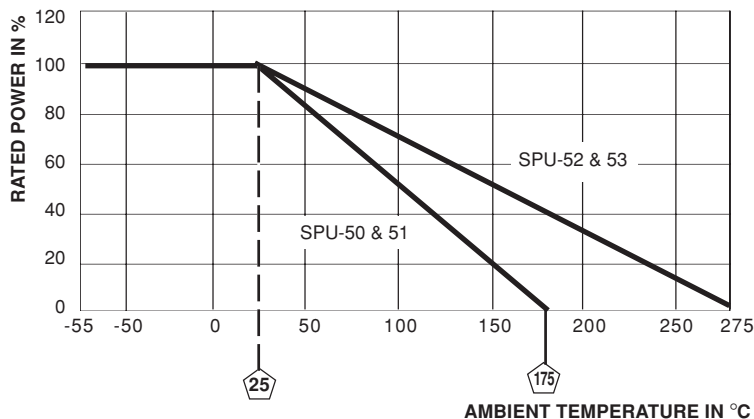
Molding Material: SPU-50/51 thermo-set epoxy
SPU-52/53 thermo-set silicone

Terminals: SPU-50/51 tinned copperweld®
SPU-52/53 tinned copper

Part Marking: DALE, Model, Wattage, Value, Tolerance, Date Code

AMBIENT TEMPERATURE DERATING

Derating is required for ambient temperature above 25°C per the following graph



Derating