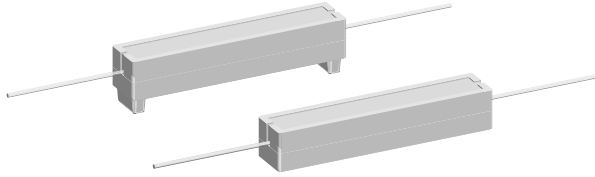


Wirewound Resistors, Commercial Power, Axial Lead, Low Value



FEATURES

- High power to size ratio
- Low inductance
- Ceramic cases are available with circuit board stand-offs (designated with a -3 model ending)
- Superior surge capability
- Extremely low resistance values
- Complete welded construction
- Special inorganic potting compound and ceramic case provide high thermal conductivity in a fireproof package

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{40^{\circ}\text{C}}$ W	RESISTANCE RANGE* Ω $\pm 5\%$ Standard**	WEIGHT (Typical) g
CPL-3	3	0.01-0.10	3.4
CPL-3-3	3	0.01-0.10	3.6
CPL-5	5	0.01-0.10	4.8
CPL-5-3	5	0.01-0.10	5.0
CPL-7	7	0.01-0.10	6.8
CPL-7-3	7	0.01-0.10	7.0
CPL-10	10	0.01-0.10	9.5
CPL-10-3	10	0.01-0.10	9.9
CPL-15	15	0.01-0.10	16.8
CPL-15-3	15	0.01-0.10	17.4

*Resistance is measured 3/8" [9.52mm] from resistor body.

** $\pm 1\%$ and $\pm 3\%$ available.

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CPL RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/ $^{\circ}\text{C}$	± 300
Short Time Overload	-	5 x rated power for 5 seconds
Maximum Working Voltage	V	$(P \times R)^{1/2}$
Operating Temperature Range	$^{\circ}\text{C}$	- 65/+ 275
Terminal Strength	lb	10 minimum
Dielectric Withstanding Voltage	V _{AC}	1000

ORDERING INFORMATION

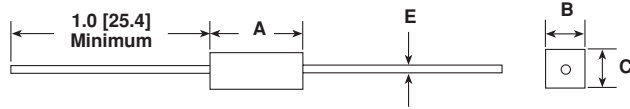
CPL-10-3
MODEL

0.01 Ω
RESISTANCE
 Ω

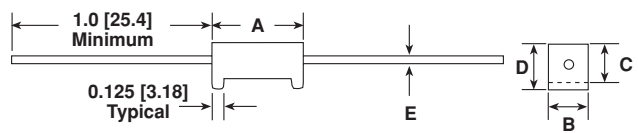
5%
TOLERANCE
 $\pm \%$

DIMENSIONS

CPL-x



CPL-x-3



MODEL	DIMENSIONS in inches [millimeters]				
	A ± 0.031 [0.794]	B ± 0.031 [0.794]	C ± 0.031 [0.794]	D ± 0.031 [0.794]	E ± 0.001 [0.025]
CPL-3	0.875 [22.22]	0.313 [7.94]	0.313 [7.94]	—	0.032 [0.813]
CPL-3-3	0.875 [22.22]	0.313 [7.94]	0.313 [7.94]	0.375 [9.52]	0.032 [0.813]
CPL-5	0.875 [22.22]	0.375 [9.52]	0.344 [8.73]	—	0.032 [0.813]
CPL-5-3	0.875 [22.22]	0.375 [9.52]	0.344 [8.73]	0.406 [10.32]	0.032 [0.813]
CPL-7	1.391 [35.32]	0.375 [9.52]	0.344 [8.73]	—	0.032 [0.813]
CPL-7-3	1.391 [35.32]	0.375 [9.52]	0.344 [8.73]	0.469 [11.91]	0.032 [0.813]
CPL-10	1.875 [47.62]	0.375 [9.52]	0.344 [8.73]	—	0.032 [0.813]
CPL-10-3	1.875 [47.62]	0.375 [9.52]	0.344 [8.73]	0.469 [11.91]	0.032 [0.813]
CPL-15	1.875 [47.62]	0.500 [12.70]	0.500 [12.70]	—	0.032 [0.813]
CPL-15-3	1.875 [47.62]	0.500 [12.70]	0.500 [12.70]	0.625 [15.87]	0.032 [0.813]

*Potting compound may extend outside of ceramic case up to 0.060 [1.52] maximum per side.

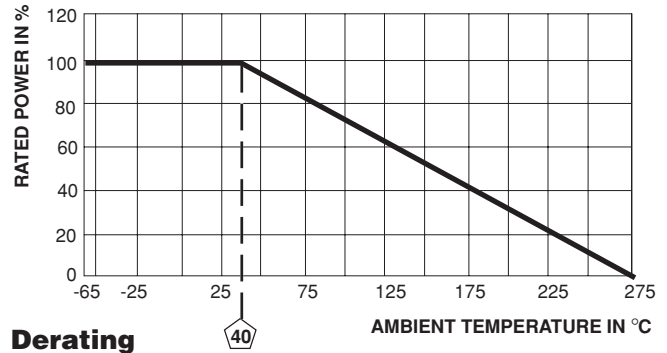
MATERIAL SPECIFICATIONS

Element: Self-supporting copper-nickel alloy or nickel-chrome alloy, depending on resistance value

Body: Steatite ceramic case with inorganic potting compound

Terminals: Tinned copper

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



PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS (EIA RS-344)
Thermal Shock	- 55°C to + 275°C, 5 cycles, 30 minute dwell time	±(5.0% + 0.05Ω)ΔR
Short Time Overload	5 x rated power for 5 seconds	±(4.0% + 0.05Ω)ΔR
Dielectric Withstanding Voltage	1000V _{rms} for one minute	±(2.0% + 0.05Ω)ΔR
Low Temperature Operation	- 65°C, full rated working voltage for 45 minutes	±(3.0% + 0.05Ω)ΔR
Bias Humidity	75°C, 90%-100% RH, 240 hours	±(5.0% + 0.05Ω)ΔR
Load Life	1000 hours at rated power, + 40°C, 1.5 hours "ON", 0.5 hours "OFF"	±(5.0% + 0.05Ω)ΔR
Terminal Strength	5 to 10 second 10 pound pull test, torsion test - 3 alternating directions, 360° each	±(1.0% + 0.05Ω)ΔR
Resistance to Solder Heat	Terminal immersed 3.5 seconds in molten solder at 1/8" to 3/16" from body	±(1.0% + 0.05Ω)ΔR