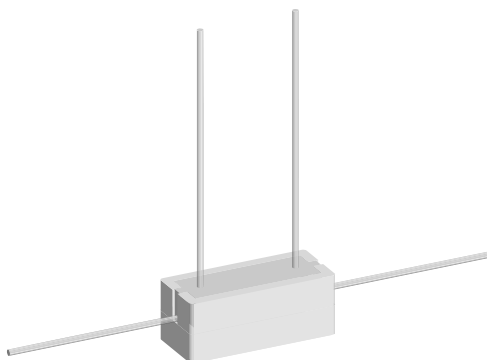


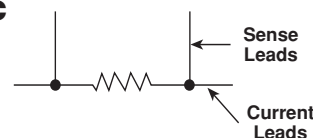
## Wirewound Resistors, Commercial Power, Four Terminal, Low Value



### FEATURES

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

### SCHEMATIC



### STANDARD ELECTRICAL SPECIFICATIONS

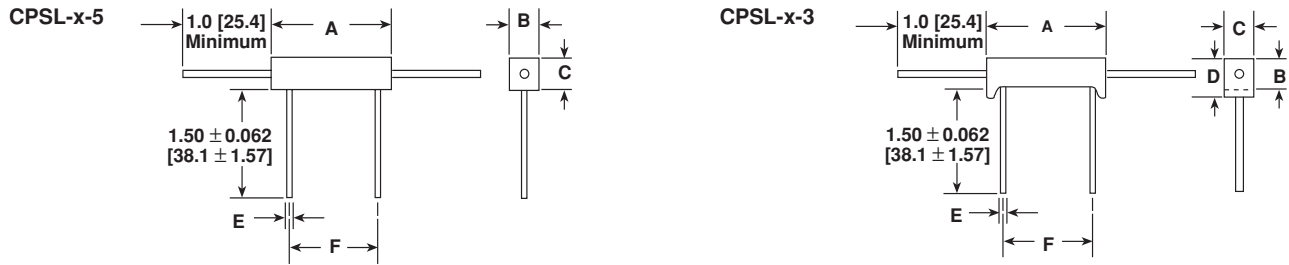
MODEL	POWER RATING P <sub>40°C</sub> W	RESISTANCE RANGE Ω ± 5% Standard, ± 3% Available	WEIGHT (Typical) g
CPSL-3-5	3	0.01 - 0.10	4.0
CPSL-3-3	3	0.01 - 0.10	4.2
CPSL-5-5	5	0.01 - 0.10	5.2
CPSL-5-3	5	0.01 - 0.10	5.4
CPSL-7-5	7	0.01 - 0.10	7.6
CPSL-10-5	10	0.01 - 0.10	10.2
CPSL-15-5	15	0.01 - 0.10	18.9

### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CPSL RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 100 maximum
Short Time Overload	-	5 x rated power for 5 seconds
Maximum Working Voltage	V	(P x R) <sup>1/2</sup>
Operating Temperature Range	°C	- 65/+ 275
Terminal Strength	lb	10 minimum
Dielectric Withstanding Voltage	V <sub>AC</sub>	1000

### ORDERING INFORMATION

CPSL-10-5 MODEL	100Ω RESISTANCE Ω	10% TOLERANCE ± %
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**DIMENSIONS**


MODEL	DIMENSIONS in inches [millimeters]					
	A*	B	C	D	E	F
	± 0.031 [0.794]	± 0.031 [0.794]	± 0.031 [0.794]	± 0.031 [0.794]	± 0.001 [0.025]	± 0.063 [1.59]
CPSL-3-5	0.875 [22.22]	0.313 [7.94]	0.313 [7.94]	-	0.036 [0.914]	0.563 [14.30]
CPSL-3-3	0.875 [22.22]	0.313 [7.94]	0.313 [7.94]	0.375 [9.52]	0.036 [0.914]	0.563 [14.30]
CPSL-5-5	0.875 [22.22]	0.375 [9.52]	0.344 [8.73]	-	0.036 [0.914]	0.563 [14.30]
CPSL-5-3	0.875 [22.22]	0.375 [9.52]	0.344 [8.73]	0.438 [11.11]	0.036 [0.914]	0.563 [14.30]
CPSL-7-5	1.391 [35.32]	0.375 [9.52]	0.344 [8.73]	-	0.036 [0.914]	1.000 [25.40]
CPSL-10-5	1.875 [47.62]	0.375 [9.52]	0.344 [8.73]	-	0.036 [0.914]	1.375 [34.93]
CPSL-15-5	1.875 [47.62]	0.500 [12.70]	0.500 [12.70]	-	0.036 [0.914]	1.375 [34.93]

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

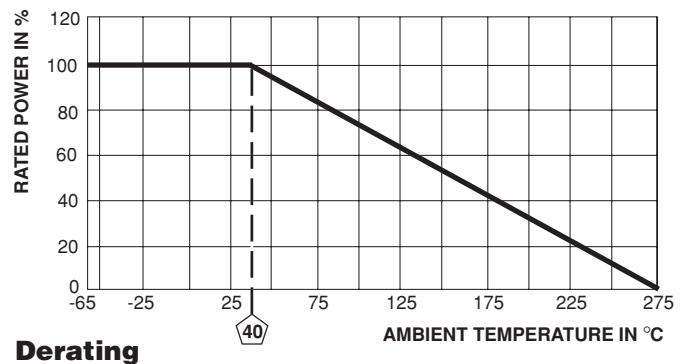
**MATERIAL SPECIFICATIONS**

**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
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 <sub>rms</sub> 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

This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.