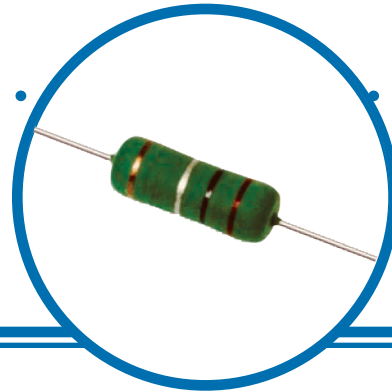


# Commercial Grade Power Axial Wirewound Resistor

## CCW Series

- Power ratings from 1/2W to 9W
- Non-inductive windings available
- Ceramic core wirewound resistor
- Resistance range from 0.1Ω to 1.5Ω
- Welded construction, conformal coating



## Electrical Data

| IRC Type  | Power rating at 70°C (W) | Resistance Range* (Ohms) | Tolerance (±%) | Temperature Coefficient of Resistance (±ppm/°C) |
|-----------|--------------------------|--------------------------|----------------|-------------------------------------------------|
| CCW - 1/2 | 0.5                      | 0.1 - 39                 | 2, 5, 10       | 300 (≥20Ω)<br>400 (<20Ω)                        |
| CCW - 1   | 1                        | 0.1 - 50                 | 2, 5, 10       |                                                 |
| CCW - 2   | 2                        | 0.1 - 120                | 2, 5, 10       |                                                 |
| CCW - 3   | 3                        | 0.1 - 200                | 2, 5, 10       |                                                 |
| CCW - 5   | 5                        | 0.5 - 470                | 2, 5, 10       |                                                 |
| CCW - 7   | 7                        | 0.5 - 470                | 2, 5, 10       |                                                 |
| CCW - 8   | 8                        | 1 - 1.5K                 | 2, 5, 10       |                                                 |
| CCW - 9   | 9                        | 1 - 1.5K                 | 2, 5, 10       |                                                 |

\*For resistance values outside these ranges, contact factory.

## Environmental Data

|                                 |                                                                            |
|---------------------------------|----------------------------------------------------------------------------|
| Short-time overload             | $\Delta R/R \leq (\pm 2\% + 0.05\Omega)$ , 2.5 Nominal power for 5 seconds |
| Dielectric withstanding voltage | 1000V                                                                      |
| Resistance to Soldering heat    | $\Delta R/R \leq (\pm 1\% + 0.05\Omega)$                                   |
| Operating temperature range     | -55°C to 275°C                                                             |

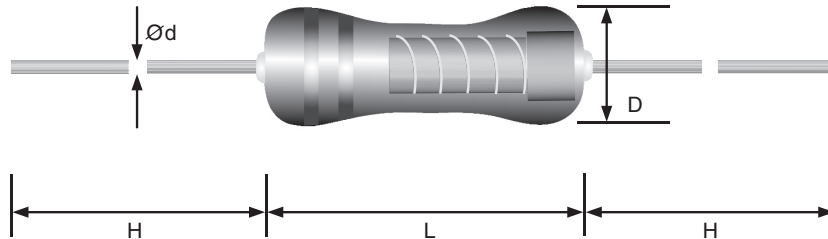
### General Note

IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

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# Commercial Grade Power Axial Wirewound Resistor

## Physical Data



Dimensions (mm)

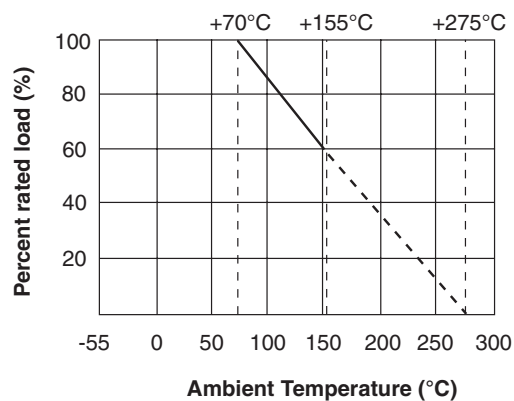
| IRC Type  | D ( $\pm 1$ ) | L (max.) | d ( $\pm 0.02$ ) | H ( $\pm 3$ ) |
|-----------|---------------|----------|------------------|---------------|
| CCW - 1/2 | 4.0           | 10.0     | 0.7              | 28            |
| CCW - 1   | 5.0           | 12.0     | 0.7              | 28            |
| CCW - 2   | 5.5           | 16.0     | 0.8              | 28            |
| CCW - 3   | 6.5           | 17.5     | 0.8              | 28            |
| CCW - 5   | 8.5           | 26.0     | 0.8              | 38            |
| CCW - 7   | 8.5           | 32.0     | 0.8              | 38            |
| CCW - 8   | 8.5           | 41.0     | 0.8              | 38            |
| CCW - 9   | 8.5           | 54.0     | 0.8              | 38            |

# Commercial Grade Power Axial Wirewound Resistor

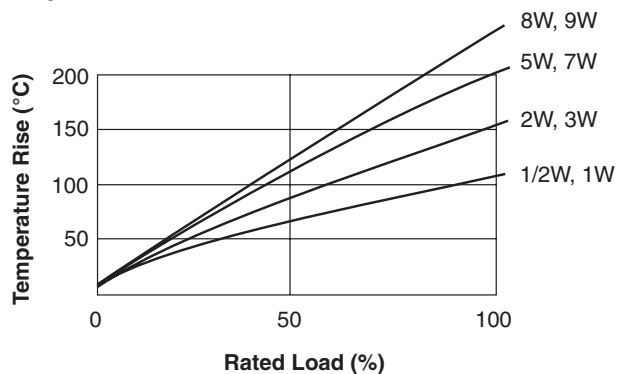


## Performance Curves

### Derating Curve



### Temperature Rise Chart



## Ordering Data

Specify type, resistance, tolerance, RoHS-Compliance and packaging.  
This example is for a Power Axial Wirewound, 2-watt, 1000Ω resistor.

Sample Part No. .... **CCW** **2** **1001** **J** **LF** **BLK**

**IRC Type** .....  
CCW - Power Axial Wirewound

**Power rating** .....  
(see specs table)

**Resistance Value (EIA 4-digit code)** .....  
(≥1000Ω - First 3 significant digits plus 4th digit multiplier)  
Example: 1000Ω = 1000; 1000Ω = 1001  
(>1000Ω - "R" is used to designate decimal)  
Example: 10Ω = 10R0; 1Ω = 1R00; 0.25Ω = R250

**Tolerance (EIA format)** .....  
G = ±2%  
J = ±5%  
K = ±10%

**RoHS - Compliance** .....  
LF = RoHS compliant construction

**Packaging** .....  
BLK = bulk packaging