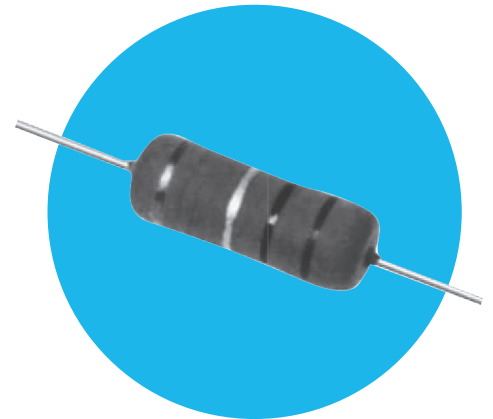



# Commercial Grade Power Axial Wirewound Resistor

## CCW Series

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



 All parts are Pb-free and comply with EU Directive 2011/65/EU (RoHS2)

## 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) 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

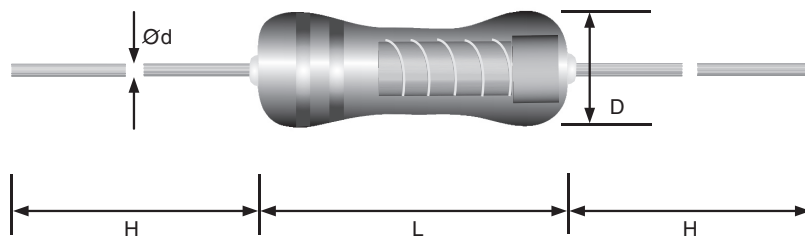
Short-time overload	$\Delta R/R \leq (\pm 2\% + 0.05\Omega)$ , 2.5 Nominal power for 5 seconds
Dielectric withstanding voltage	1000V
Resistance to Soldering heat	$\Delta R/R \leq (\pm 1\% + 0.05\Omega)$
Operating temperature range	-55°C to 275°C

### General Note

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

CCW Series

Physical Data



Dimensions (mm)

IRC Type	D (±1)	L (max.)	d (±0.02)	H (±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

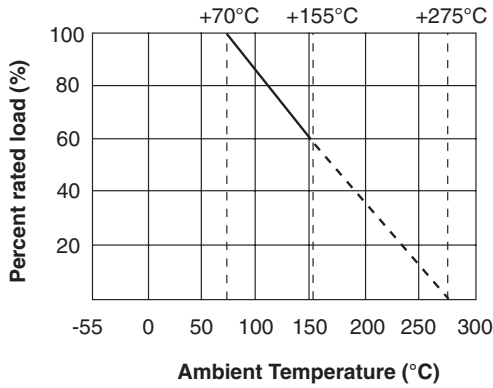
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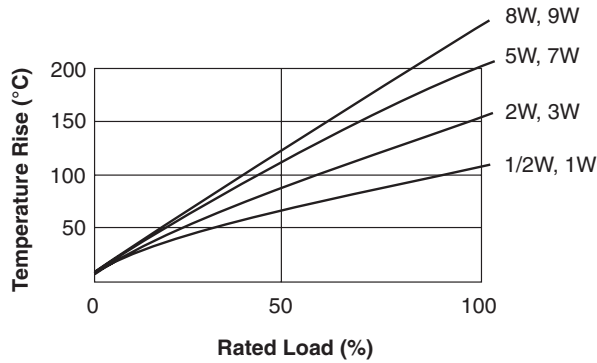
CCW Series

## 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)** .....  
(≥100Ω - First 3 significant digits plus 4th digit multiplier)  
Example: 100Ω = 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

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