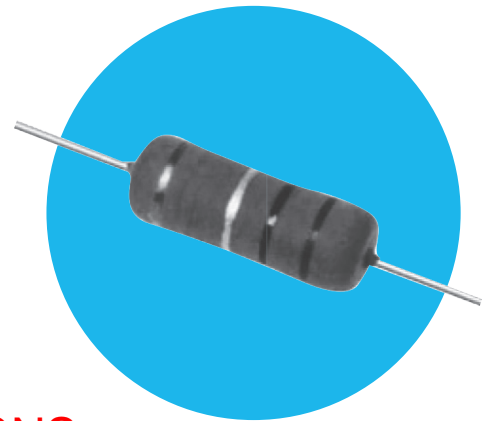



Commercial Grade Power Axial Wirewound Resistor

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



NOT RECOMMENDED FOR NEW DESIGNS

 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

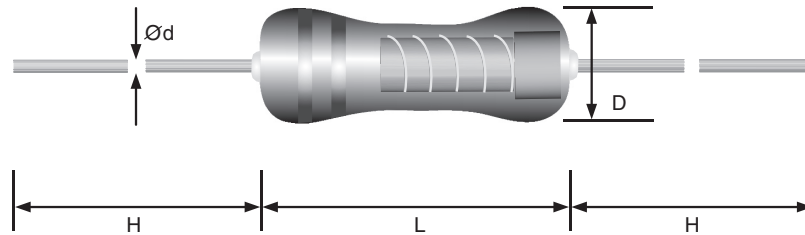
Short-time overload	$\Delta R/R \leq (\pm 2\% + 0.05\Omega)$, 2.5 Nominal power for 5 seconds
Dielectric withstanding voltage	1000V
Resistance to Soldering heat	$\Delta R/R \leq (\pm 1\% + 0.05\Omega)$
Operating temperature range	-55°C to 275°C

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 **NOT RECOMMENDED FOR NEW DESIGNS**

Physical Data



Dimensions (mm)

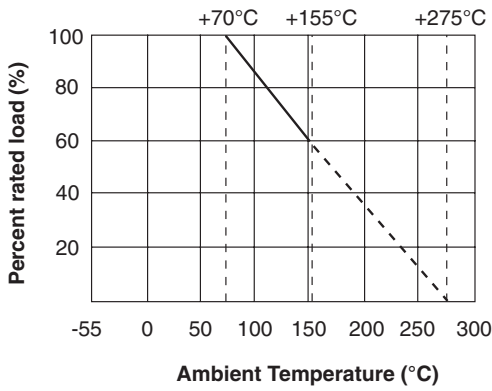
IRC Type	D (± 1)	L (max.)	d (± 0.02)	H (± 3)
CCW - 1/2	4.0	10.0	0.7	28
CCW - 1	5.0	12.0	0.7	28
CCW - 2	5.5	16.0	0.8	28
CCW - 3	6.5	17.5	0.8	28
CCW - 5	8.5	26.0	0.8	38
CCW - 7	8.5	32.0	0.8	38
CCW - 8	8.5	41.0	0.8	38
CCW - 9	8.5	54.0	0.8	38

General Note

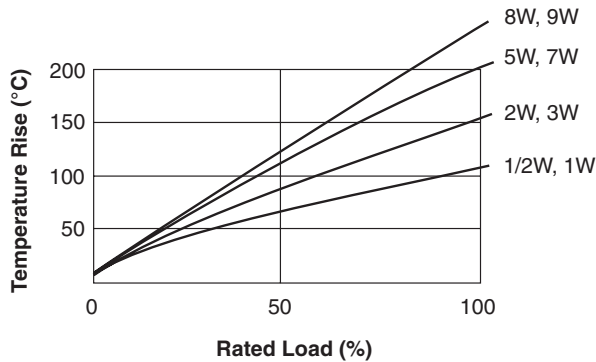
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Performance Curves

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
(>100Ω - "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

General Note

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