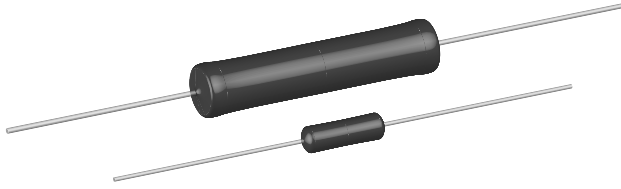


Wirewound Resistors, Commercial Power, Silicone Coated, Axial Lead


DESIGN SUPPORT TOOLS
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FEATURES

- High performance for low cost
- High temperature silicone coating
- Complete welded construction
- Excellent stability in operation
- High power to size ratio
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS*
Available

HALOGEN FREE
Available

GREEN
(5-2008)
Available

Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING ⁽¹⁾ P _{25 °C} W CHARACTERISTIC U +250 °C	POWER RATING ⁽¹⁾ P _{25 °C} W CHARACTERISTIC V +350 °C	RESISTANCE RANGE Ω	TOLERANCE ± % ⁽²⁾	WEIGHT (max.) g
CW1/2	CW-1/2	0.5	-	0.1 to 1.77K	5, 10	0.21
CW001	CW-1	1.0	-	0.1 to 6.37K	5, 10	0.34
CW01M	CW-1M	1.0	-	0.1 to 3.3K	5, 10	0.3
CW002	CW-2	4.0	5.5	0.1 to 28.7K	5, 10	2.1
CW02M	CW-2M	3.0	3.75	0.1 to 12K	5, 10	0.65
CW02B	CW-2B	3.0	3.75	0.1 to 15K	5, 10	0.7
CW02B...13	CW-2B-13	4.0	6.0	0.1 to 10.89K ⁽³⁾	5, 10	0.9
CW02C	CW-2C	2.5	3.25	0.1 to 19.9K	5, 10	1.8
CW02C...14	CW-2C-14	2.5	3.25	0.1 to 19.9K	5, 10	1.2
CW005	CW-5	5.0	6.5	0.1 to 58.5K	5, 10	4.2
CW005...2	CW-5-2	4.0	5.0	0.1 to 40.3K	5, 10	4.2
CW005...3	CW-5-3	5.0	6.5	0.1 to 58.5K	5, 10	4.2
CW007	CW-7	7.0	9.0	0.1 to 95.2K	5, 10	4.7
CW010	CW-10	10.0	13.0	0.1 to 167K	5, 10	9.0
CW010...3	CW-10-3	10.0	13.0	0.1 to 167K	5, 10	9.0

Notes

- ⁽¹⁾ Vishay Dale CW models have two power ratings, depending on operating temperature and stability requirements
- ⁽²⁾ 3 % tolerance available
- ⁽³⁾ Higher values available on request

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CW RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 30 for 10 Ω and above, ± 50 for 1.0 Ω to 9.9 Ω, ± 90 for 0.5 Ω to 0.99 Ω
Dielectric Withstanding Voltage	V _{AC}	1000
Short Time Overload	-	5 x rated power for 5 s for 3.75 W size and smaller, 10 x rated power for 5 s for 4 W size and greater
Terminal Strength	lb	10 minimum
Maximum Working Voltage	V	(P x R) ^{1/2}
Operating Temperature Range	°C	Characteristic U = -65 to +250, characteristic V = -65 to +350
Power Rating	-	Characteristic U = +250 °C max. hot spot temperature, ± 0.5 % max. ΔR in 2000 h load life Characteristic V = +350 °C max. hot spot temperature, ± 3.0 % max. ΔR in 2000 h load life

GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: CW02C10K00JB1214

C	W	0	2	C	1	0	K	0	0	J	B	1	2	1	4	
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GLOBAL MODEL	VALUE	TOLERANCE	PACKAGING	SPECIAL
(see Standard Electrical Specifications Global Model column for options)	R = decimal K = thousand 1R500 = 1.5 Ω 1K500 = 1.5 kΩ	H = ± 3.0 % J = ± 5.0 % K = ± 10.0 %	E70 = lead (Pb)-free, tape / reel, 1K pcs (smaller than CW005) E73 = lead (Pb)-free, tape/reel, 500 pcs E12 = lead (Pb)-free, bulk D18 = lead (Pb)-free, R1R80 tape/reel CW02B...13 pack code for Europe use only S70 = tin / lead, tape / reel, 1K pcs (smaller than CW005) S73 = tin / lead, tape / reel, 500 pcs B12 = tin / lead, bulk	(dash number) (up to 3 digits) from 1 to 999 as applicable

Historical Part Numbering example: CW-2C-14 10 kΩ 5 % B12

CW-2C-14 HISTORICAL MODEL	10 kΩ RESISTANCE VALUE	5 % TOLERANCE CODE	B12 PACKAGING
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