MINIATURE WIREWOUND RESISTORS
1 WATT to 10 WATT
200 SERIES

Term.W is RoHS compliant & 260°C compatible

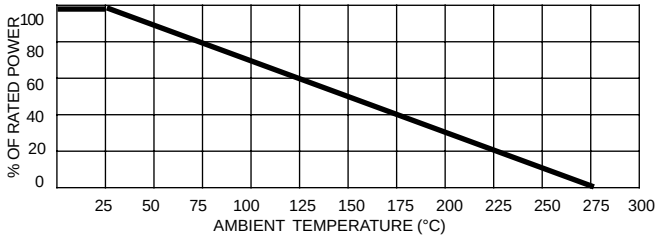
- ❒ Significant space savings!
- ❒ Tolerance to ±0.01%, TCR to 5ppm/°C
- ❒ Wide resistance range: 0.005Ω to 250K
- ❒ **Available on exclusive *SWIFT*™ delivery program**
- ❒ All sizes available on Tape & Reel

OPTIONS

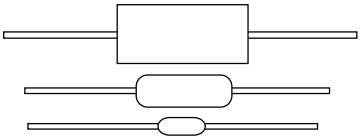
- ❒ Option X: Low Inductance
- ❒ Option P: Increased Pulse Capability
- ❒ Option F: Flameproof Coating
- ❒ Option ER: 100-Hour Burn-In
- ❒ Also available: low thermal emf (opt.E), matched sets, cut & formed leads, special marking, 4-terminal, hi-rel screening, hermetic seal, non-standard values, increased voltage, etc. Customized components are an RCD speciality!

Typically half the size of conventional resistors! Type 202 is world's smallest wirewound resistor! Series 200 resistors offer the same MIL-grade construction as Series 100 resistors except utilize proprietary materials and processing, enabling significant size reductions. Series 200 resistors are ideal when PCB real estate is at a premium! Highest grade materials enable excellent stability and environmental performance.

DERATING: Power resistors reach elevated temperatures when operated near full wattage, and therefore should be mounted off the PCB and derated according to required stability levels.



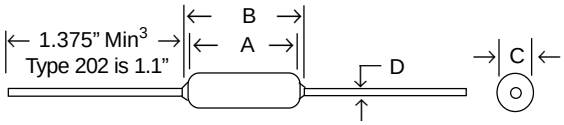
TYPICAL SIZE COMPARISON



2W carbon composition

2W wirewound (standard)

2W wirewound (type 210)



RCD Type	Wattage Rating	Maximum Voltage [1]	Resistance Range	DIMENSIONS Inch [mm]				
				A	B (Max)	C[2]	D (Nominal Diameter)	
							Standard	Optional
202	1.0W	30V	.01Ω to 2K	.150 ±.032 [3.81 ± .8]	.200 [5.08]	.064 ±.02 [1.63 ± .5]	.020 [0.5]	N/A
210	2.0W	40V	.01Ω to 10K	.250 ±.040 [6.35 ±1]	.300 [7.62]	.093 ±.025 [2.36 ± .6]	.020 [0.5]	.024 (Opt."22") [0.6]
232	3.0W	60V	.005Ω to 20K	.350 ±.040 [8.9 ±1]	.480 [12.2]	.140 ±.032 [3.56 ± .8]	.031 [0.8]	N/A
235	5.0W	157V	.005Ω to 40K	.500 ±.040 [12.7 ±1]	.595 [15.1]	.188 ±.032 [4.78 ± .8]	.031 [0.8]	.040 (Opt."18") [1.0]
255	7.0W	210V	.005Ω to 80K	.625 ±.040 [15.9 ±1]	.765 [19.4]	.232 ±.032 [5.89 ± .8]	.040 [1.0]	N/A
272	10W	600V	.005Ω to 250K	1.040 ±.048 [26.4 ±1.2]	1.125 [28.6]	.350 ±.032 [8.89 ± .8]	.040 [1.0]	N/A

[1] Volt rating determined by E =√(PR), E not to exceed max. rating. Increased ratings available. Multiply by 0.7 for Opt. X
[2] Allow .032" additional for Option X and values below 1.0Ω
[3] Lead length applies to bulk packaged parts units, parts supplied on tape may be shorter (refer to taping specification)

SPECIFICATIONS:

Temperature Coefficient typ. (Consult factory for TC on opt. P)	.005 - .0099Ω: 600ppm std (200, 300ppm opt.) .01 - .049Ω: 300ppm std (100, 200ppm opt.) .05 - .099Ω 200ppm std (50, 100ppm opt.) .1 - .99Ω: 90ppm std(10, 20, 30, 50ppm opt) 1 - 9.9Ω: 50ppm std (10, 20, 30ppm opt.) 10Ω & above: 20ppm std (5, 10ppm opt.)
Inductance, Standard Inductance, Opt.X (levels as low as 20nH avail.)	1 to 50µH typical, depends on size & resistance value. Specify Opt. X for non-inductive performance (see below). ≤ 50Ω > 50Ω Type 202X-235X: 0.2µH Max 0.37µH Max Type 255X: 0.3µH Max 0.6µH Max Type 272X: 0.6µH Max 1.0µH Max
Dielectric Strength	500V (300V Type 202), 1KV available (Opt. 33)
Overload, 5 Sec.	5X rated W 202-235, 10X rated W 255-272

P/N DESIGNATION:

210 ☐ - 1001 - F B ☐ W

RCD Type

Options: X, P, F, ER, E, 22, 18 (leave blank if standard)

Resis. Code: ≤1%: 3 signif. figures & multiplier, e.g. R100= 0.1Ω, 1R00= 1Ω,1000= 100Ω, 1001= 1KΩ.
Resis. Code 2% - 10%: 2 signif. figures & multiplier, e.g. R10= 0.1Ω, 1R0= 1Ω,100= 10Ω, 101=100Ω, 102= 1KΩ. Use extra digits as needed: e.g. R005, R0075, R012

Tolerance: K=10%, J=5%, H=3%,F=1%, D=0.5%, C=0.25%, B=0.1%, A=0.05%, Q=0.02%, T=0.01%

Packaging: B = Bulk, T = T&R

Optional TC: 5= 5ppm, 10= 10ppm, etc., if 100ppm & above use 3-digit code: 101 = 100ppm, 201= 200ppm, etc. (leave blank if standard)

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable, in which case RCD will select based on lowest price and quickest delivery

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