

# ECONOMY WIREWOUND RESISTORS

## 1 WATT to 10 WATT

# RW SERIES



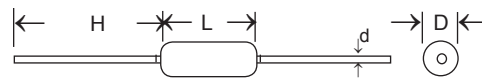
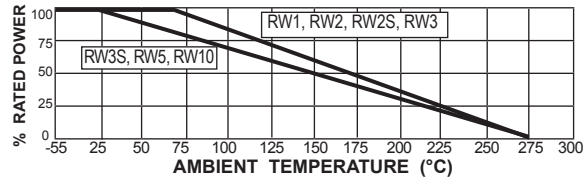
- Excellent performance at economy prices
- Wide resistance range: 0.01Ω to 25KΩ
- Standard tolerance is 5% (1%, 2% and 10% available)
- Available on exclusive **SWIFT™** delivery program
- Choice of standard bulk pack, horizontally taped (all sizes), or vertically taped (1W/2W/3W sizes only)

### OPTIONS

- Option X: Low Inductance
- Option P: Increased Pulse Capability
- Option FF: Flameproof Fusible (see application guide below)
- Option E: Low Thermal EMF
- Option F: Flameproof Coating
- Also available: cut & formed leads (horizontal and vertical), increased voltage, special marking, etc. Customized components are an RCD specialty!

RCD's RW Series are manufactured on an exclusive automated system, resulting in significant cost savings. The all-welded ceramic core design results in excellent performance levels, especially in regards to overload capability, TCR, noise characteristics, and load life stability. Coating is flame resistant and offers excellent moisture and solvent resistance.

### DERATING



### SPECIFICATIONS

RCD Type	Wattage	Voltage Rating	Resistance Range	L (Max. Body Length)	D <sup>1</sup> ±.032 [.8]	d ±.005 [.13]	H Min. <sup>2</sup>
RW1	1W @ 70°C	60V	0.01Ω-2.4K	.390 [9.9]	.140 [3.56] <sup>1</sup>	.027 [.69]	0.96 [24]
RW2	2W @ 70°C	100V	0.01Ω-10K	.500 [12.7]	.180 [4.6] <sup>1</sup>	.028 [.71]	1.16 [30]
RW2S	2W @ 70°C	100V	0.01Ω-9.1K	.457 [11.6]	.170 [4.32] <sup>1</sup>	.028 [.71]	1.16 [30]
RW3	3W @ 70°C	140V	0.01Ω-20K	.638 [16.2]	.220 [5.6] <sup>1</sup>	.031 [.8] <sup>3</sup>	1.16 [30]
RW3S	3W @ 20°C	120V	0.01Ω-10K	.500 [12.7]	.180 [4.6] <sup>1</sup>	.028 [.71]	1.16 [30]
RW5	5W @ 20°C	210V	0.05Ω-25K	.74 [18.8]	.256 [6.5] <sup>1</sup>	.031 [.8] <sup>3</sup>	1.25 [32]
RW10	10W @ 20°C	700V	0.1Ω-25K	1.7 [43.2]	.325 [8.26] <sup>1</sup>	.031 [.8] <sup>3</sup>	1.25 [32]

<sup>1</sup> Allow .032[0.8mm] additional for Opt.X or values <1Ω    <sup>2</sup> The lead length of parts supplied on tape may be shorter    <sup>3</sup> 0.040" [1mm] lead dia. available, specify option "18"

### TYPICAL PERFORMANCE CHARACTERISTICS

Temperature Range	-55°C to +275°C
Temperature Coef-ficient	1Ω and above: 100ppm/°C 0.05 to 0.99Ω : 300ppm/°C Below 0.05Ω : 600ppm/°C
Insulation Resistance	1000 Megohms
Marking	Color band or digitally marked with res. value & tol as min
Moisture Resistance	± 2% Δ R
Thermal Shock	± 1% Δ R
Dielectric Strength	RW1=300V, RW2 to RW10=500V
Load Life	RW1,RW2,RW3= 2% ΔR RW2S,RW3S,RW5,RW10= 3%ΔR Option FF= 3% ΔR
Overload	5 x rated W, 5 Sec. (Option FF = 2xW, 5S)

### OPTION FF FUSE RESISTOR APPLICATION GUIDE

- Opt. FF fusible version is available from 0.1Ω - 2.4K (RW1FF=1.2K max)
- Fault level must be suitable to safely open the resistor. Option FF parts ≥1Ω are designed to blow within 20S at 15x rated power, 20x if <1Ω (preferable if fault level is double this level to ensure quick fusing time).
- Maximum fault must not exceed 200x W rating, or voltage rating, whichever is less (increased levels avail).
- For customized fusing, complete RCD's fuse questionnaire, or advise the desired fusing wattage/current, min/max blow times, continuous power, surge reqts, ambient temp, physical constraints, fault voltage, inductance, etc.
- Fuse types shouldn't be mounted in contact with other components or PCB.
- Residual resistance is ≥100x initial value after fusing.
- Verify selection by evaluating under the full range of fault conditions. Place resistors inside a protective case when testing under overload.

### P/N DESIGNATION:

