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!

SPECIFICATIONS

<table>
<thead>
<tr>
<th>RCD Type</th>
<th>Wattage</th>
<th>Voltage Rating</th>
<th>Resistance Range</th>
<th>L (Max. Body Length)</th>
<th>D¹</th>
<th>d</th>
<th>H Min.²</th>
</tr>
</thead>
<tbody>
<tr>
<td>RW1</td>
<td>1W @ 70°C</td>
<td>60V</td>
<td>0.01Ω-2.4K</td>
<td>.390 [9.9]</td>
<td>.140 [3.56]¹</td>
<td>.027 [6.9]</td>
<td>0.96 [24]</td>
</tr>
<tr>
<td>RW2</td>
<td>2W @ 70°C</td>
<td>100V</td>
<td>0.01Ω-10K</td>
<td>.500 [12.7]</td>
<td>.180 [4.6]¹</td>
<td>.028 [7.1]</td>
<td>1.16 [30]</td>
</tr>
<tr>
<td>RW2S</td>
<td>2W @ 70°C</td>
<td>100V</td>
<td>0.01Ω-9.1K</td>
<td>.457 [11.6]</td>
<td>.170 [4.32]¹</td>
<td>.028 [7.1]</td>
<td>1.16 [30]</td>
</tr>
<tr>
<td>RW3</td>
<td>3W @ 70°C</td>
<td>140V</td>
<td>0.01Ω-20K</td>
<td>.638 [16.2]</td>
<td>.220 [5.6]¹</td>
<td>.031 [8.3]</td>
<td>1.16 [30]</td>
</tr>
<tr>
<td>RW3S</td>
<td>3W @ 20°C</td>
<td>120V</td>
<td>0.01Ω-10K</td>
<td>.500 [12.7]</td>
<td>.180 [4.6]¹</td>
<td>.028 [7.1]</td>
<td>1.16 [30]</td>
</tr>
<tr>
<td>RW5</td>
<td>5W @ 20°C</td>
<td>210V</td>
<td>0.05Ω-25K</td>
<td>.74 [18.8]</td>
<td>.256 [6.5]¹</td>
<td>.031 [8.3]</td>
<td>1.25 [32]</td>
</tr>
<tr>
<td>RW10</td>
<td>10W @ 20°C</td>
<td>700V</td>
<td>0.1Ω-25K</td>
<td>1.7 [43.2]</td>
<td>.325 [8.26]¹</td>
<td>.031 [8.3]</td>
<td>1.25 [32]</td>
</tr>
</tbody>
</table>

¹ Allow .032”[.8mm] additional for Opt.X or values <1Ω
² The lead length of parts supplied on tape may be shorter

TYPICAL PERFORMANCE CHARACTERISTICS

- Temperature Range: -55°C to +250°C
- Temperature Coefficient: 1Ω and above: 100ppm°C
  0.05 to 0.99Ω: 50ppm°C
  Below 0.05Ω: 60ppm°C
- Insulation Resistance: 1000 Megohms
- Marking: Color band or digitally marked with resistance & 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% Δ R
  RW2S,RW3S,RW5,RW10= 3%Δ R
  Option FF= 3% Δ R
- Overload: 5 x rated W, 5 Sec.

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

OPTION FF FUSE RESISTOR APPLICATION GUIDE

1. Opt. FF fusible version is available from 0.1Ω - 2.4K (RW1FF=1.2K max)
2. 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).
3. Maximum fault must not exceed 200x W rating, or voltage rating, whichever is less (increased levels avail).
4. For customized fusing, complete RCD’s fuse questionnaire, or advise the desired fusing wattage/current, min/max blow times, continuous power, surge tests, ambient temp, physical constraints, fault voltage, inductance, etc.
5. Fuse types shouldn’t be mounted in contact with other components or PCB.
6. Residual resistance is ≥100x initial value after fusing.
7. Verify selection by evaluating under the full range of fault conditions. Place resistors inside a protective case when testing under overload.

P/N DESIGNATION:

RCD Components Inc., 520 E. Industrial Park Dr, Manchester, NH, USA 03109 Telephone: 603-669-0054 Fax: 603-669-5455 Email: sales@rcdcomponents.com

FA0466 Sale of this product is in accordance with 2011/65/EU. Specifications subject to change without notice.