# ECONOMY WIREWOUND RESISTORS 1 WATT to 10 WATT

## **RW SERIES**







☐ Excellent performance at economy prices

☐ Inherent stability due to all-welded wirewound construction

 $\square$  Wide resistance range:  $0.01\Omega$  to  $25K\Omega$ 

☐ Standard tolerance is 5% (2% and 10% available)

☐ Available on exclusive **SWIFT**<sup>™</sup> delivery program

☐ Available on horizontal Tape & Reel (1W-10W), or vertical Tape & Reel (1W-3W)

#### **OPTIONS**

☐ Option X: Low Inductance

☐ Option P: Increased Pulse Capability

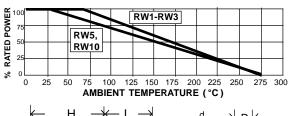
☐ Option FF: Flameproof Fusible (see application guide below)

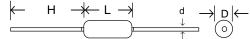
☐ Option E: Low Thermal EMF

□ Option F: Flameproof Coating

□ Also available: cut & formed leads (horizontal and vertical), increased voltage, special marking, etc. Customized components are an RCD specialty! RW Series resistors are manufactured on an exclusive automated system, resulting in significant cost savings. Ceramic core results in performance levels far superior to conventional fiberglass cores, 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)	D ±.032 [.8]	d ±.005 [.13]	H Min.**
RW1	1	60V	0.01Ω-2.4K	.390 [9.9]	.140 [3.56]	.027 [.69]	0.96 [24]
RW2	2	100V	0.01Ω-10K	.500 [12.7]	.180 [4.6]	.028 [.71]	1.16 [30]
RW2S	2	100V	0.01Ω-9.1K	.49 [12.2]	.188 [4.9]	.028 [.71]	1.16 [30]
RW3	3	140V	0.01Ω-20K	.638 [16.2]	.220 [5.6]	.031* [.8]	1.16 [30]
RW3S	3	120V	0.01Ω-10K	.500 [12.7]	.180 [4.6]	.03 [.75]	1.25 [32]
RW5	5	210V	0.05Ω-25K	.74 [18.8]	.256 [6.5]	.031* [.8]	1.25 [32]
RW10	10	700V	0.1Ω-25K	1.7 [43.2]	.325 [8.26]	.031* [.8]	1.25 [32]

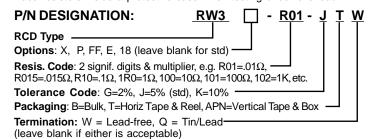
<sup>\* 0.040</sup> lead dia. available, specify option '18' \*\* Lead length of parts supplied on tape may be shorter

### TYPICAL PERFORMANCE CHARACTERISTICS

Temperature Range	-55°C to +275°C		
Temperature Coefficient	$1\Omega$ and above: 100ppm/°C 0.05 to 0.99Ω : 300ppm/°C Below 0.05Ω : 600ppm/°C		
Insulation Resistance	1000 Megohms		
Marking	Color band (or alpha-numeric) with res.value and tolerance		
Moisture Resistance	± 2% Δ R		
Thermal Shock	± 1% Δ R		
Dielectric Strength	500V		
Load Life	2% ΔR (Option FF= 3% typ)		
Overload	5 x rated W, 5 Sec. (Option FF = 2xW, 5S)		

#### **OPTION FF FUSE RESISTOR APPLICATION GUIDE**

- 1. Opt. FF fusible version is available from 0.1  $\!\Omega$  2.4K (RW1=1.2K max)
- 2. Fault level must be suitable to safely open the resistor. Option FF parts are desgned to blow within 20S at 15x rated power if  $\geq 1\Omega$ , 20x if<1 $\Omega$  (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 reqts, 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.



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FA046D Sale of this product is in accordance with GF-061. Specifications subject to change without notice.