

# Resistor Wirewound Chassis Mount

## RWC Series



### KEY FEATURES

- Resistances from 0.005 to 250kOhms
- Tolerance to  $\pm 0.01\%$
- High Temperature:  $-55^{\circ}\text{C}$  to  $+275^{\circ}\text{C}$
- Low TCR:  $\pm 20\text{ppm}/^{\circ}\text{C}$
- Power Rating 5 to 300 Watts
- Excellent Pulse Handling
- Non-Inductive windings available
- Four Terminal Versions Available (Call Factory)

### APPLICATIONS

- Motor Control
- Braking Systems
- Welding
- X-Ray

### PRODUCT SUMMARY

PRODUCT SERIES (RWC)	RESISTANCE RANGE ( $\Omega$ ) <sup>1</sup>	POWER RATING (W @ 25°C)			DIELECTRIC STRENGTH	TEMPERATURE COEFFICIENT	TEMPERATURE RANGE
		FREE AIR	COMMERCIAL	MIL			
G1	0.01 to 22K	4.5	7.5 <sup>a</sup>	5 <sup>a</sup>	1500 VAC	<ul style="list-style-type: none"> <li>◆ <math>&gt;10\ \Omega</math>: <math>\pm 20\text{ppm}/^{\circ}\text{C}</math></li> <li>◆ <math>1\ \Omega</math> to <math>10\ \Omega</math>: <math>\pm 50\text{ppm}/^{\circ}\text{C}</math></li> <li>◆ <math>&lt;1\ \Omega</math>: Call Factory</li> </ul>	- 55°C to + 275°C
G2	0.01 to 47K	7.5	12.5 <sup>a</sup>	10 <sup>a</sup>	1500 VAC		
G3	0.01 to 90K	12	25 <sup>b</sup>	20 <sup>b</sup>	2500 VAC		
G4	0.01 to 250K	20	50 <sup>c</sup>	30 <sup>c</sup>	3500 VAC		

TOLERANCE:  $\pm 0.01$  to  $\pm 10\%$  (1% Standard)

<sup>1</sup> For non-inductive windings, divide maximum resistance by 2

<sup>a</sup> Heatsink required: 0.040 [1.0] Aluminum Plate, 129 in<sup>2</sup> [832 cm<sup>2</sup>] or equiv.

<sup>b</sup> Heatsink required: 0.040 [1.0] Aluminum Plate, 167 in<sup>2</sup> [1077 cm<sup>2</sup>] or equiv.

<sup>c</sup> Heatsink required: 0.059 [1.5] Aluminum Plate, 291 in<sup>2</sup> [1877 cm<sup>2</sup>] or equiv.

<sup>d</sup> Heatsink required: 0.125 [3.2] Aluminum Plate, 294 in<sup>2</sup> [1896 cm<sup>2</sup>] or equiv.

<sup>e</sup> Heatsink required: 0.125 [3.2] Aluminum Plate, 895 in<sup>2</sup> [5780 cm<sup>2</sup>] or equiv.

### AVAILABLE OPTIONS (Consult Factory)

- Special Testing Requirements
- Special Pulse Requirements

### HOW TO ORDER

RWC	N	G1	U	003K8	F	S
RESISTOR WIRE-WOUND CHASSIS MOUNT	WINDINGS	PACKAGE CODE, WATTS (COMMERCIAL), RESISTANCE	TEMPERATURE COEFFICIENT OF RESISTANCE (TCR)	RESISTANCE	TOLERANCE	PACKING
	S = Standard N = Non-Inductive	G1, 7.5W, [0.01 to 22k] $\Omega$ G2, 12.5W, [0.01 to 47k] $\Omega$ G3, 25.0W, [0.01 to 90k] $\Omega$ G4, 50.0W, [0.01 to 250k] $\Omega$	U = $\pm 20\text{ppm}/^{\circ}\text{C}$ Q = $\pm 50\text{ppm}/^{\circ}\text{C}$ Z = Special	038R0 = 38 $\Omega$ 003K8 = 3.8K $\Omega$ 038K0 = 38.0K $\Omega$ 380K0 = 380.0K $\Omega$ 003M8 = 3.8M $\Omega$ Letter denotes decimal place. R = decimal., "K" $10^3$ , "M" $10^6$ Remaining 4 digits are significant or placeholders.	T = $\pm 0.01\%$ Q = $\pm 0.02\%$ A = $\pm 0.05\%$ B = $\pm 0.1\%$ F = $\pm 1.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$	S = Bulk

Example P/N: RWCNG1U003K8FS is Resistor Wirewound Chassis Mount, Non-Inductive, 7.5W,  $\pm 20\text{ppm}/^{\circ}\text{C}$ , 3.8K $\Omega$ ,  $\pm 1.0\%$ , bulk

\* For Tin/Lead coated leads, add "- Pb" to part number.





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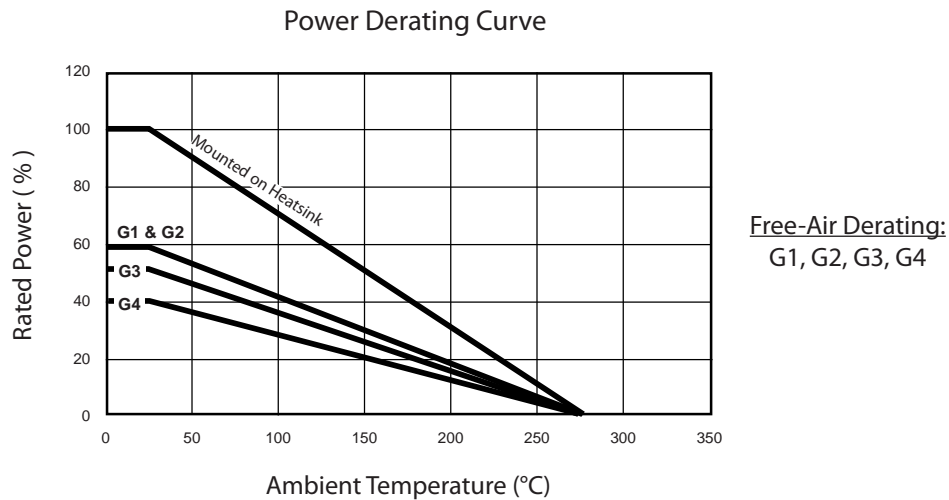
### ENVIRONMENTAL PERFORMANCE

Environmental Performance (MIL-STD 202)	$\Delta R$
Vibration	$\pm 0.1 \% + 0.05 \Omega$
Load Life	$\pm 1\% + 0.05 \Omega$
Moisture Resistance	$\pm 0.2 \% + 0.05 \Omega$
Dielectric	$\pm 0.2 \% + 0.05 \Omega$
Storage	$\pm 0.2 \% + 0.05 \Omega$
Shock	$\pm 0.1 \% + 0.05 \Omega$
Thermal Shock	$\pm 0.2 \% + 0.05 \Omega$
5X Overload (5s)	$\pm 0.2 \% + 0.05 \Omega$

#### CONSTRUCTION NOTES:

- ◆ Centerless ground ceramic core
- ◆ Tinned copper or copperweld leads
- ◆ All welded terminations
- ◆ High Temperature epoxy molding compound
- ◆ Anodized aluminum housing

\* Moisture Sensitivity Level: MSL-1



This datasheet is subject to change without notice.