

RESISTOR METAL ELEMENT CURRENT SENSE

RMC SERIES



KEY FEATURES

- Resistances from 0.005 to 0.100 Ohms
- Low Inductance (<10nH)
- Tolerances to $\pm 1\%$
- Resistance Wire TCR: $\pm 20\text{ppm}/^\circ\text{C}$
- For Current Sensing and Shunt Applications
- All Welded Construction
- Economical Bare Metal Element

APPLICATIONS

- Base Station
- Current Sensing
- Power Inverters
- Lightning Pulse Survival

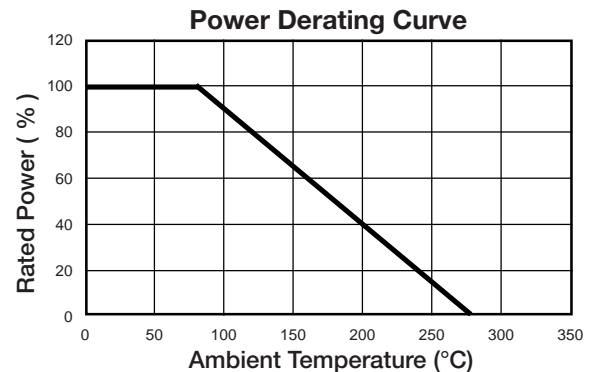
PRODUCT SUMMARY

PRODUCT SERIES (RMC)	POWER RATING @ 85°C (W)	RESISTANCE (Ω) ¹	TOLERANCES
J1	1	0.005, 0.01, 0.02, 0.025, 0.03, 0.04, 0.05, 0.1	$\pm 1\%$ / $\pm 5\%$
J2	3	0.005, 0.01, 0.015, 0.02, 0.025, 0.03, 0.04, 0.05, 0.1	$\pm 1\%$ / $\pm 5\%$
J3	5	0.005, 0.01, 0.015, 0.02, 0.025, 0.03, 0.05, 0.1	$\pm 1\%$ / $\pm 5\%$

¹ Contact Factory for other resistances

AVAILABLE OPTIONS (Consult Factory)

- Special Testing Requirements



HOW TO ORDER

RMC	J2	U	0R005	F	S
RESISTOR METAL ELEMENT CURRENT SENSE	PACKAGE CODE, WATTS	TEMPERATURE COEFFICIENT OF RESISTANCE (TCR)	RESISTANCE	TOLERANCE	PACKING
	J1, 1.0W J2, 3.0W J3, 5.0W	U = $\pm 20\text{ppm}/^\circ\text{C}$	0R005 = 0.005 Ω (5m Ω) 0R025 = 0.025 Ω (25m Ω) 00R05 = 0.05 Ω (50m Ω) 000R1 = 0.1 Ω (100m Ω)	F = $\pm 1.0\%$ J = $\pm 5.0\%$	S = Bulk

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

Standard Termination Finish: Matte Tin (Sn)

Example P/N: RMCJ2U0R005FS is Resistor Metal Element Current Sense, 3.0W, $\pm 20\text{ppm}/^\circ\text{C}$, 0.005 Ω , $\pm 1.0\%$, bulk

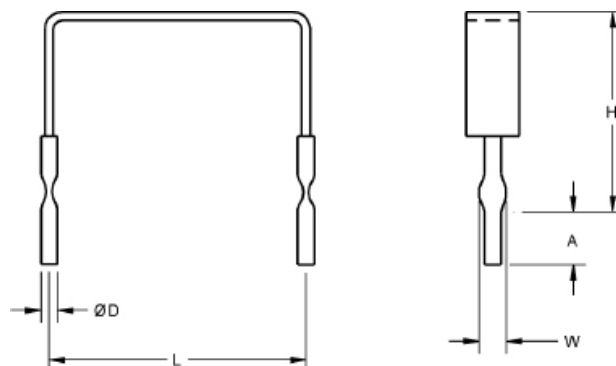
Letter denotes decimal place.
R = decimal, "K" 10^3 , "M" 10^6
Remaining 4 digits are significant or placeholders.



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MECHANICAL CHARACTERISTICS



Package Code		J1	J2	J3
Dimensions Inches [mm]	H	0.200 [5.08] (Tolerances) $\pm 0.100''$ [$\pm 2.54\text{mm}$]	1.0 [25.40mm] Max	1.0 [25.40mm] Max
	L (Tolerances) +0.040 / -0.020" [+1.02 / 0.51mm]	0.450 [11.43mm]	0.600 [15.24mm]	0.800 [20.32mm]
	D (Tolerances) $\pm 0.002''$ [$\pm 0.05\text{mm}$]	0.040 [1.02mm]	0.040 [1.02mm]	0.040 [1.02mm]
	W (Tolerances) +0.010 / -0.005 [+0.25 / -0.13mm]	0.065 [1.65mm]	0.065 [1.65mm]	0.065 [1.65mm]
	A (Tolerances) $\pm 0.030''$ [$\pm 0.8\text{mm}$]	0.125 [3.18mm]	0.125 [3.18mm]	0.125 [3.18mm]

PACKAGING INFORMATION

Package Code	J1	J2	J3
Standard Package Quantities	250 (Bulk Only)		

Moisture Sensitivity Level: MSL-1

This datasheet is subject to change without notice.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Johanson:

<u>RMCJ1U00R04FS</u>	<u>RMCJ1U0R025FS</u>	<u>RMCJ2U00R05FS</u>	<u>RMCJ1U0R005FS</u>	<u>RMCJ3U0R025FS</u>	<u>RMCJ3U00R05FS</u>
<u>RMCJ2U00R03FS</u>	<u>RMCJ1U00R03FS</u>	<u>RMCJ3U00R03FS</u>	<u>RMCJ2U000R1FS</u>	<u>RMCJ3U0R015FS</u>	<u>RMCJ1U00R05FS</u>
<u>RMCJ3U000R1FS</u>	<u>RMCJ3U0R005FS</u>	<u>RMCJ2U0R025FS</u>	<u>RMCJ2U0R005FS</u>	<u>RMCJ1U000R1FS</u>	<u>RMCJ2U00R01FS</u>
<u>RMCJ3U00R01FS</u>	<u>RMCJ2U00R08FS</u>	<u>RMCJ1U00R01FS</u>	<u>RMCJ1U00R02FS</u>	<u>RMCJ2U0R015FS</u>	<u>RMCJ2U00R02FS</u>
<u>RMCJ3U00R02FS</u>	<u>RMCJ2U00R04FS</u>				