

# 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
- Power Inverters
- Current Sensing
- Lightning Pulse Survival

### PRODUCT SUMMARY

PRODUCT SERIES (RMC)	POWER RATING @ 85°C (W)	RESISTANCE ( $\Omega$ ) <sup>1</sup>	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	$\pm 1\%$ / $\pm 5\%$

<sup>1</sup> 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 $\Omega$ (5m $\Omega$ ) 0R025 = 0.025 $\Omega$ (25m $\Omega$ ) 00R05 = 0.05 $\Omega$ (50m $\Omega$ ) 000R1 = 0.1 $\Omega$ (100m $\Omega$ )	F = $\pm 1.0\%$ J = $\pm 5.0\%$	S = Bulk

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

**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 $\Omega$ ,  $\pm 1.0\%$ , bulk



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### MECHANICAL CHARACTERISTICS



Package Code		J1	J2	J3
Dimensions Inches [mm]	<b>H</b>	0.200 [5.08] (Tolerances) $\pm 0.100''$ [ $\pm 2.54\text{mm}$ ]	1.0 [25.40mm] Max	1.0 [25.40mm] Max
	<b>L</b> (Tolerances) +0.040 / -0.020" [+1.02 / 0.51mm]	0.450 [11.43mm]	0.600 [15.24mm]	0.800 [20.32mm]
	<b>D</b> (Tolerances) $\pm 0.002''$ [ $\pm 0.05\text{mm}$ ]	0.040 [1.02mm]	0.040 [1.02mm]	0.040 [1.02mm]
	<b>W</b> (Tolerances) +0.010 / -0.005 [+0.25 / -0.13mm]	0.065 [1.65mm]	0.065 [1.65mm]	0.065 [1.65mm]
	<b>A</b> (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
<b>Standard Package Quantities</b>	250 (Bulk Only)		

Moisture Sensitivity Level: MSL-1

This datasheet is subject to change without notice.