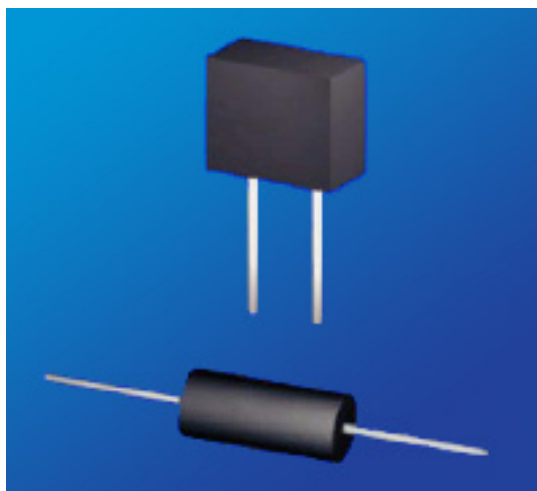


RESISTOR WIREWOUND PRECISION

RWP SERIES



KEY FEATURES

- Temperature Coefficients of $\pm 2\text{ppm}/^\circ\text{C}$
- Temperature Range -55°C to $+145^\circ\text{C}$
- Resistance to 6 Mega-Ohms
- Resistance Tolerance starting at $\pm 0.005\%$
- Long Term Stability / 100ppm/year
- High TCR Available - Platinum & Balco Wire
- Matched Resistance Sets to ± 0.001 and $\pm 0.5\text{ppm}/^\circ\text{C}$
- 100% Acceptance Tested
- Options available: Wide TCR Range, High Stability and Fast Rise Time

APPLICATIONS

- Smart Grid Metering
- Engine Sensors
- Power Inverters
- Temperature Sensors

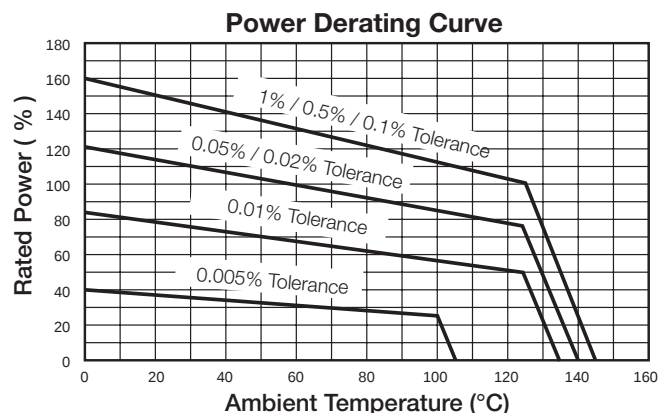
PRODUCT SUMMARY

PRODUCT SERIES (RWP)	RESISTANCE (Ω)	POWER RATING (W)	TOLERANCE ¹	TEMPERATURE COEFFICIENT	TEMPERATURE RANGE ¹
Radial	Up to 1M	0.125 to 0.500	$\pm 0.005\%$ to 1%	• $>100\Omega : \pm 10\text{ppm}/^\circ\text{C}$ • 10Ω to $100\Omega : \pm 20\text{ppm}/^\circ\text{C}$ • $<10\Omega : \pm 30\text{ppm}/^\circ\text{C}$	-55°C to $+145^\circ\text{C}$
Axial	Up to 6M	0.06 to 2.00			

AVAILABLE OPTIONS (Consult Factory)

- **Wide TCR Range:** Low and High TC configurations from $-20\text{ppm}/^\circ\text{C}$ to $+6000\text{ppm}/^\circ\text{C}$. Down to $1\text{ppm}/^\circ\text{C}$ available.
- **High Stability:** High stability version with maximum resistance change of $\pm 20\text{ppm}/\text{year}$ under normal conditions.
- **Fast Rise Time:** Low reactance design for fast rise time and extended frequency response.
- **Special Testing Requirements**
- **Special Pulse Requirements**

¹ See Power Derating Curve



HOW TO ORDER

RWP	A01	W	038K0	F	S
RESISTOR WIREWOUND PRECISION	PACKAGE CODE, WATTS, VOLTAGE	TEMPERATURE COEFFICIENT OF RESISTANCE (TCR)	RESISTANCE	TOLERANCE	PACKING
	Radial B01, 0.125W, 150Vmax B02, 0.250W, 150Vmax Axial A01, 0.06W, 75Vmax A02, 0.08W, 100Vmax See Table	W = $\pm 10\text{ppm}/^\circ\text{C}$ U = $\pm 20\text{ppm}/^\circ\text{C}$ S = $\pm 30\text{ppm}/^\circ\text{C}$ Z = special	0R038 = 0.038 Ω 003K8 = 3.8K Ω 038K0 = 38.0K Ω 380K0 = 380.0K Ω 003M8 = 3.8M Ω Letter denotes decimal place. R = decimal, "K" 10^3 , "M" 10^6 Remaining 4 digits are significant or placeholders	V = $\pm 0.005\%$ T = $\pm 0.01\%$ Q = $\pm 0.02\%$ A = $\pm 0.05\%$ B = $\pm 0.1\%$ F = $\pm 1.0\%$	S = Bulk T = Tape & Reel

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

Standard Termination Finish: Matte Tin(Sn)

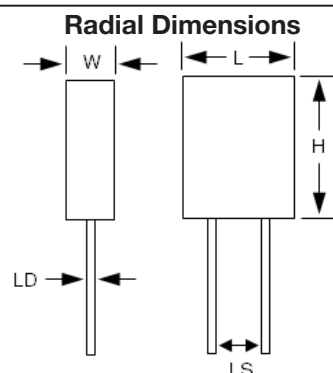
Example P/N: RWPA01W038K0FS is Resistor Wirewound Precision 0.06W, 75V, $\pm 10\text{ppm}/^\circ\text{C}$ 38.0K Ω , $\pm 1.0\%$, bulk



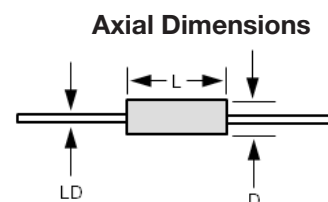
RWP SERIES

RADIAL

Package Code		B01	B02	B03	B04
Max Resistance (Ω)		500k	750k	500k	1M
Max Working Voltage (V)		150	150	150	150
Power Rating (W)		0.125	0.250	0.300	0.500
Dimensions Inches [mm]	Width $\pm 0.010"$ [± 0.25 mm]	0.140 [3.56]	0.150 [3.81]	0.102 [2.59]	0.160 [4.06]
	Height $\pm 0.025"$ [± 0.64 mm]	0.250 [6.35]	0.270 [6.86]	0.320 [8.13]	0.525 [13.34]
	Length $\pm 0.010"$ [± 0.25 mm]	0.270 [6.86]	0.540 [13.72]	0.300 [7.62]	0.585 [14.86]
	Lead Diameter ¹ $\pm 0.002"$ [± 0.05 mm]	0.032 [0.81]	0.032 [0.81]	0.025 [0.64]	0.032 [0.81]
	Lead Spacing $\pm 0.015"$ [± 0.4 mm]	0.125 [3.18]	0.250 [6.35]	0.150 [3.81]	0.400 [10.16]



¹ Lead Length 1.00" [25.40mm] Min



² Lead Length 1.50" [38.10mm] Min

Moisture Sensitivity Level: MSL-1

AXIAL

Package Code		A01	A02	A03	A04	A05	A06	A07	A08	A09	A10	A11	A12
Max Resistance (Ω)		75k	150k	150k	250k	250k	400k	500k	500k	750k	750k	1M	1M
Max Working Voltage (V)		75	100	100	100	100	150	150	100	200	200	200	200
Power Rating (W)		0.06	0.08	0.08	0.10	0.10	0.12	0.15	0.15	0.175	0.20	0.20	0.20
Dimensions Inches [mm]	Length $\pm 0.025"$ [± 0.64 mm]	0.210 [5.33]	0.260 [6.60]	0.260 [6.60]	0.375 [9.53]	0.312 [7.92]	0.250 [6.35]	0.295 [7.49]	0.250 [6.35]	0.375 [9.53]	0.450 [11.43]	0.375 [9.53]	0.375 [9.53]
	Diameter $\pm 0.005"$ [± 0.13 mm]	0.100 [2.54]	0.125 [3.18]	0.125 [3.18]	0.125 [3.18]	0.156 [3.96]	0.187 [4.75]	0.187 [4.75]	0.250 [6.35]	0.187 [4.75]	0.187 [4.75]	0.250 [6.35]	0.250 [6.35]
	Lead Diameter ² $\pm 0.002"$ [± 0.05 mm]	0.020 [0.51]	0.020 [0.51]	0.025 [0.64]	0.020 [0.51]	0.020 [0.51]	0.025 [0.64]	0.025 [0.64]	0.025 [0.64]	0.025 [0.64]	0.025 [0.64]	0.032 [0.81]	0.025 [0.64]

Package Code		A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23
Max Resistance (Ω)		1M	1.2M	1.2M	2.5M	2.5M	3.8M	3.8M	6M	6M	6M	6M
Max Working Voltage (V)		250	300	300	400	400	300	400	600	800	900	1000
Power Rating (W)		0.25	0.25	0.25	0.33	0.33	0.40	0.50	0.75	1.00	1.50	2.00
Dimensions Inches [mm]	Length $\pm 0.025"$ [± 0.64 mm]	0.465 [11.81]	0.500 [12.70]	0.500 [12.70]	0.750 [19.05]	0.750 [19.05]	0.500 [12.70]	0.750 [19.05]	1.000 [25.40]	1.000 [25.40]	1.500 [38.10]	2.000 [50.80]
	Diameter $\pm 0.005"$ [± 0.13 mm]	0.210 [5.33]	0.250 [6.35]	0.250 [6.35]	0.250 [6.35]	0.250 [6.35]	0.375 [9.53]	0.375 [9.53]	0.375 [9.53]	0.500 [12.70]	0.500 [12.70]	0.500 [12.70]
	Lead Diameter ² $\pm 0.002"$ [± 0.05 mm]	0.025 [0.64]	0.032 [0.81]	0.025 [0.64]	0.032 [0.81]	0.025 [0.64]	0.032 [0.81]	0.032 [0.81]	0.032 [0.81]	0.032 [0.81]	0.032 [0.81]	0.032 [0.81]

Moisture Sensitivity Level: MSL-1

This datasheet is subject to change without notice.

Mouser Electronics

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Johanson:

<u>RWPB03W050K0BS</u>	<u>RWPB03W005K0BS</u>	<u>RWPB03U100R0BS</u>	<u>RWPB03W010K0TS</u>	<u>RWPA14W025K0TS</u>
<u>RWPA14W025K0BS</u>	<u>RWPB03W500R0TS</u>	<u>RWPA14U100R0TS</u>	<u>RWPA14W050K0TS</u>	<u>RWPA14W001K0BS</u>
<u>RWPB03W025K0BS</u>	<u>RWPA14W002K5TS</u>	<u>RWPA14W500R0TS</u>	<u>RWPA14W250R0BS</u>	<u>RWPA14W005K0TS</u>
<u>RWPB03W001K0BS</u>	<u>RWPB03W001K0TS</u>	<u>RWPA14W010K0TS</u>	<u>RWPA14W350R0BS</u>	<u>RWPA14W100K0TS</u>
<u>RWPB03W005K0TS</u>	<u>RWPA14W010K0BS</u>	<u>RWPB03U100R0TS</u>	<u>RWPB03W500R0BS</u>	<u>RWPA14W250R0TS</u>
<u>RWPB03W350R0TS</u>	<u>RWPA14W500R0BS</u>	<u>RWPB03W025K0TS</u>	<u>RWPB03W250R0BS</u>	<u>RWPA14W050K0BS</u>
<u>RWPB03W250R0TS</u>	<u>RWPA14W001K0TS</u>	<u>RWPB03W050K0TS</u>	<u>RWPB03W350R0BS</u>	<u>RWPA14U100R0BS</u>
<u>RWPA14W002K5BS</u>	<u>RWPB03W010K0BS</u>	<u>RWPB03W002K5BS</u>	<u>RWPA14W350R0TS</u>	<u>RWPB03W100K0TS</u>
<u>RWPA14W005K0BS</u>	<u>RWPB03W002K5TS</u>			