

Aluminium housed wire-wound resistors series RB

Data sheet

widap

A/T/E ELECTRONICS

RoHS
Compliant



Main features

- Nominal power range: 12 up to 250 W
- Housing provides superior heat conduction
- All connections are spot welded

Technical specification

Tolerance	Standard: J ($\pm 5\%$), down to $\pm 0.5\%$ on request
Nominal power	According to table: Linear derating from 25°C down to 250°C
Temperature coefficient	R > 20R: 30 ppm/K 1R0 < R < 20R: 50 ppm/K 0R1 < R < 1R0: 100 ppm/K
Dielectric strength	RB10: 1500 V AC RB25 / RB50: 2500 V AC RB75 / RB101 / RB150: 3500 V AC RB100 / RB250: 4500 V AC
Insulation resistance	Minimum 10'000 M Ω , dry Minimum 1'000 M Ω , after moisture test
Overload	5 x P _N during 5 seconds
Working temperature range	from - 55 °C up to + 250 °C
Low inductance execution	Ayrton-Perry winding, model designation RBN
Terminals	Pull test: 10 N continuous tractive force Torque: RB100: maximum 3 Nm RB250: maximum 4 Nm
Solderability	According MIL-STD-202, method 208 The use of high temperature solder is required, when the resistors are used near the maximum specified ratings.
Materials	Terminals: From RB10 to RB50: copperweld RB100 and RB250: stainless steel Core: Ceramic steatit oder alumina centerless ground Resistive element: CuNi or NiCr alloy End caps: Stainless steel
Standards	These resistors meet or exceed the MIL-R18546E standards

Type	Type MIL-R-18546E	Nominal power [W]	Max. power without heat sink [W]	Resistance range [Ω]	Max. voltage [V]	Temperature rise with heat sink [K/W]	Weight [g]	Heat sink dimensions [cm ² x mm]
RB10	RE 65	12	6	R01 - 10K	265	5.1	6	415 x 1.0
RB25	RE 70	25	12.5	R01 - 18K	550	3.0	14	535 x 1.0
RB50	RE 75	50	20	R01 - 68K	1250	1.9	35	930 x 1.5
RB75	-	75	35	0R1 - 50K	1400	1.1	85	995 x 3.0
RB101	-	100	40	0R1 - 70K	1900	1.0	115	995 x 3.0
RB150	-	150	55	0R1 - 100K	2500	1.0	165	995 x 3.0
RB100	RE 77	150	75	0R1 - 100K	1900	0.84	500	930 x 3.0
RB250	RE 80	250	100	0R1 - 120K	2300	0.66	900	930 x 3.0

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Type	Dimensions [mm]													
	A	B	C	D	E	F	G	H	J	K	L	M	N	Ø
RB10	20.4	35	10	11	19	14.3	15.9	5	2.4	2	2.4	-	2	2.2
RB25	27.2	49	14	14	27	18.3	19.8	6.5	4.4	2	3.2	-	2	2.2
RB50	29.2	71	16	16	50	39.7	21.5	7	5.2	2	3.2	-	2	2.2
RB75	47.5	73	24	27	48	29	37	11.5	9.5	3.5	4.4	-	3	3.2
RB101	47.5	89	24	27	64	35	37	11.5	14.5	3.5	4.4	-	3	3.2
RB150	47.5	122	24	27	97	58	37	11.5	19.5	3.5	4.4	-	3	3.2
RB100	71.5	139	44.5	46	89	-	57.1	20	9.6	5	4.8	69.8	M5	-
RB250	76	178	55.6	54	114	98.4	63.5	25.5	7.8	6.3	4.8	98.4	M6	-
Tol.	±0.2	±1	±0.2	±0.2	±0.5	±0.2	±0.2	±0.2	±0.5	±0.2	±0.2	±0.2	±0.2	±0.2

