



FEATURES

Extruded aluminium housing provides superior heat conduction. Housing deep finned for maximum heat dissipation at natural or forced air convection.
 Gold anodized finish for maximum resistance to environmental conditions. Special thermosetting compound with high thermal conductivity
 Winding designed to give maximum core coverage and uniformity for even heat dissipation.
 Core centerless ground for maximum winding uniformity.
 Marking at top surface for easy identification after mounting.
 Complete welded construction terminal to terminal.

SPECIFICATION

These resistors meet or exceed the requirements of MIL-R-18546 E specification.

ELECTRICAL

For **Power ratings** and **Resistance values**: see table.

Tolerance

the following tolerances are available: 1%, 3%, 5%

Temperature coefficient

30 ppm R > 20 Ohm
 50 ppm 1 Ohm < R < 20 Ohm
 100 ppm 0.1 Ohm < R < 1 Ohm.

Dielectric strength

1.500 Vac for RB5 / RB10
 2.500 Vac for RB25 / RB50
 3.500 Vac for RB75 / RB101 / RB150
 4.500 Vac for RB100 / RB 250.

Insulation resistance

10.000 MOhms minimum
 1.000 MOhms after moisture test.

Overload

5 sec. at 5 times rated power.

Non inductive

Models of equivalent physical and electrical specifications are available with non inductive Ayrton-Perry winding.

MECHANICAL

Terminal strength

10 lb, pull test.

Solderability

Satisfactory when tested in accordance with method 208 of MIL-STD-202
 The use of high temperature solder is recommended when resistors are operated near the maximum specified ratings.

MATERIAL

Core

Ceramic steatite or alumina centerless ground.

Element

Copper-nickel alloy or nickel-chrome alloy of determined temperature coefficient.

End caps

Stainless steel.

Encapsulant

High temperature thermosetting compound.

Housing

Aluminium with hard anodic coating

Standard terminals

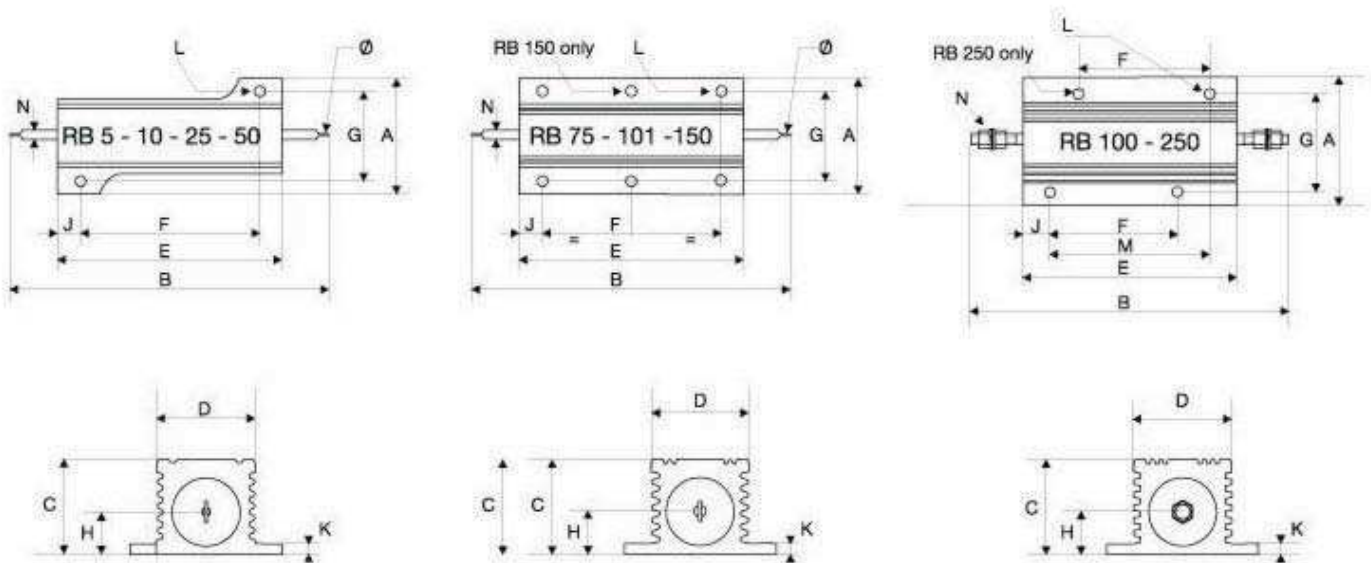
Copperweld RB5 to RB150.
 Stainless steel for RB100 and RB250.

DERATING

ATE RB resistors have an operative temperature range of -55 °C to +250 °C.
 Derating is required for reduced chassis area and for high ambient temperature.

ATE type	Type MIL-R-18546E	Nominal power (W)	Max power no heatsink (W)	Res. range (Ohm)	V limit (V)	Temp. rise with heatsink (°C/W)	Weight (Gr)	Heatsink dim. (cm² x mm)
RB5	RE 60	7.5	4	0.01/6K8	160	4,5	3.5	415x1
RB10	RE 65	12	6	0.01/10K	265	5,1	6	415x1
RB25	RE 70	25	12,5	0.01/18K	550	3	14	535x1
RB50	RE 75	50	20	0.01/68K	1250	1,9	35	930x1.5
RB75	-	75	35	0.1/50K	1400	1,1	85	995x3
RB101	-	100	40	0.1/70K	1900	1	115	995x3
RB150	-	150	55	0.1/100K	2500	1	165	995x3
RB100	RE 77	150	75	0.1/100K	1900	0,84	500	930x3
RB250	RE 80	250	100	0.1/120K	2300	0,66	900	930x3

ATE type	DIMENSIONS (mm)													
	A	B	C	D	E	F	G	H	J	K	L	M	N	Ø
RB5	16.5	28.6	8.2	8.5	15.3	11.3	12.4	4	2	1.6	2.4	-	1.5	1.3
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	76.2	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





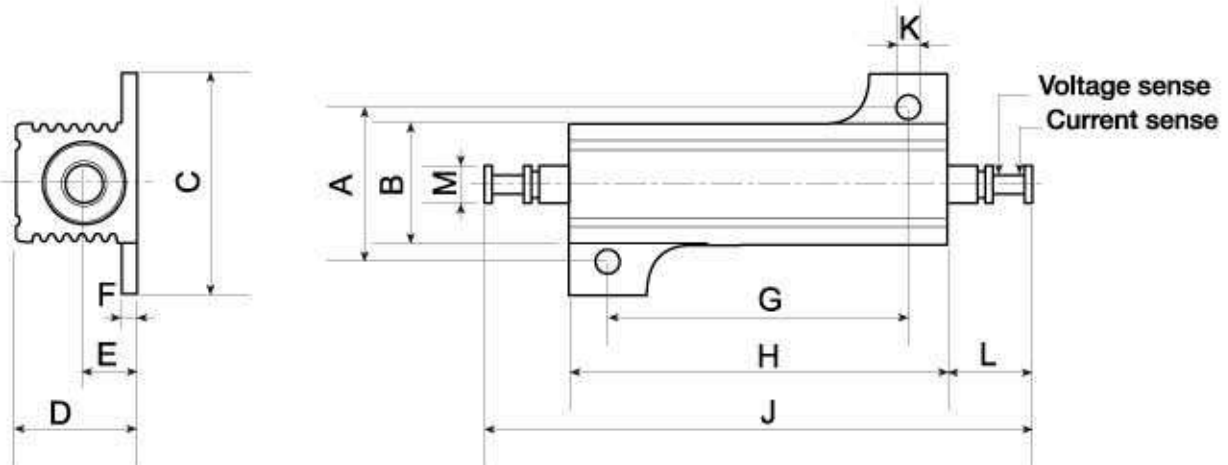
SPECIFICATIONS

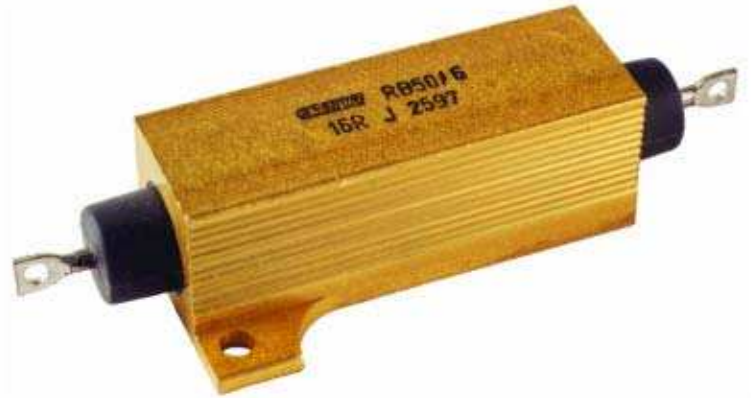
Standard tolerance:	5% ($\pm 1\%$ on request)
Ohmic Values:	Serie E12
Temperature Coefficient:	From 200 to 100 ppm from R01 to R10
Insulation resistance:	10.000 M Ω minimum 1.000 M Ω after moisture test
Dielectric Strength:	2.000 Vac / 2.800 Vac peak
Max terminal current:	RB25/4 50 A RB50/4 70 A

More technical data as RB25/RB50 standard models.

ATE type	Type MIL-R-18546E	Nominal power (W)	Res. range (Ω)	V limit (V)	Weight (Gr)	Heatsink dim. (cm ² x mm)
RB25/4	RE70	25	0.01/0.10	550	16	535x1
RB50/4	RE75	50	0.01/0.10	1250	35	930x1.5

ATE type	DIMENSIONS (mm)												
	A	B	C	D	E	F	G	H	J	K	L	M	
RB25/4	19.8	14	27.7	14	6.5	2	18.3	27	49	3.2	10.5	4	
RB50/4	21.5	16	29.2	16	7	2	39.7	50	71	3.2	10.5	5	
Tol.	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.5	± 1	± 0.1	± 1	± 0.2





SPECIFICATIONS

Standard Tolerance:	5% ($\pm 1\%$ on request)
Ohmic Values:	Serie E12
Temperature Coefficient:	From 100 to 30 ppm from R10 to Rmax
Insulation resistance:	10.000 MOhm minimum 1.000 MOhm after moisture test
Dielectric Strength:	3.000 Vac / 4.200 Vac peak
Large creep distance:	RB25/6 > 6.5 mm RB50/6 > 10 mm

More technical data as RB25/RB50 standard models.

ATE type	Type MIL-R-18546D	Nominal power (W)	Res. range (Ohm)	V limit (V)	Weight (Gr)	Heatsink dim. (cm ² x mm)
RB25/6	RE70	25	0.01-18K/33K	550	13	535x1
RB50/6	RE75	50	0.01-68K/100K	1250	32	930x1.5

ATE type	DIMENSIONS (mm)												
	A	B	C	D	E	F	G	H	J	K	L	M	N
RB25/6	19.8	14	27.7	14	6.5	2	18.3	24	49	3.2	12.5	8	4
RB50/6	21.5	16	29.2	16	7	2	39.7	46	75	3.2	14.5	10	6.5
Tol.	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.5	± 1	± 0.1	± 1	± 0.5	± 0.5

