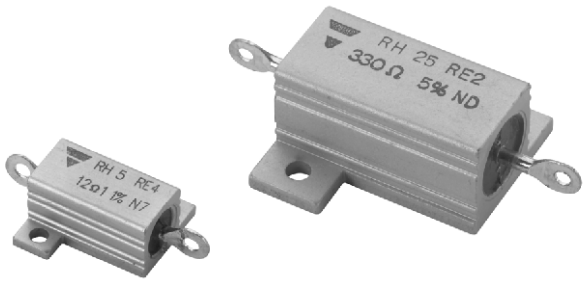
Heatsink Encased Wirewound Power Resistors



FEATURES

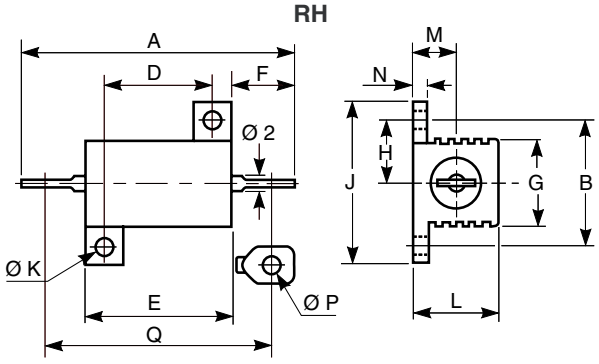
- 5 Watt to 50 Watt at 25 °C
- NF C 83-210
- CECC 40 203
- High stability < 0.05 % year
- Low temperature coefficient typically ± 15 ppm/°C
- Wide range of values from 0.006 Ω to 130 kΩ
- Termination = Sn/Ag/Cu

Pb-free

RoHS
COMPLIANT

Encased in a compact and light heatsink offering complete environmental protection, great mechanical strength and easy mounting. Non inductive versions can be supplied under the RHNI designation (please indicate required specifications and frequency range upon ordering).

DIMENSIONS in millimeters



MODEL AND STYLE	RH5	RH10	RH25	RH50
A B ± 0.2 D ± 0.2	28.5 ± 1.5 12.5 11.3	35 ± 1.5 15.9 14	49 ± 1.3 19.8 18.3	70.2 ± 1.4 21.4 39.7
E ± 0.5 F	16.3 6.8 ± 1.5	19 7.9 ± 1.5	28 11.1 ± 1.5	50 11 ± 1.2
G ± 1 H ± 0.7	8.5 6.2	11 7.9	14 9.9	15.5 10.7
J ± 0.5 Ø K ± 0.1	16.4 2.4	20.6 2.4	27.5 3.2	29.4 3.2
L max. M ± 0.5	8.9 4.3	11 5.6	15 8	15 8
N ± 0.3 Ø P min.	1.6 2.1	2 2.1	2.4 2.1	2.4 2.1
Q	25.3 ± 1.5	30.6 ± 1.5	44.6 ± 1.3	66.5 ± 1.4
Weight in g	3	8.8	16.5	30.8

ELECTRICAL SPECIFICATIONS

VISHAY SFERNICE MODEL AND STYLE				RH5	RH10	RH25	RH50
NF C 83-210 (CECC 40 203)				RE4	RE1	RE2	RE3
Power Rating	Chassis Mounted Resistors	MIL Limits	25 °C	5 W	10 W	20 W	30 W
			70 °C	4 W	8 W	16 W	24 W
	413 cm² for RH5 and RH10 536 cm² for RH25 and RH50	VISHAY SFERNICE Limits	25 °C	10 W	12.5 W	25 W	50 W
			70 °C	8 W	10 W	20 W	40 W
	Unmounted Resistors	VISHAY SFERNICE Limits	25 °C	4 W	6 W	9W	12 W
			70 °C	3.2 W	4.8 W	7.2 W	9.6 W
Rated Maximum Voltage (VRMS)				160 V	250 V	550 V	1285 V
Dielectric Strength VRMS				1000 V	1500 V	2500 V	2500 V
Ohmic Range		VISHAY SFERNICE		0.01 Ω 12 kΩ	0.006 Ω 20 kΩ	0.006 Ω 62 kΩ	0.006 Ω 130 kΩ
Qualified Ohmic Range		NF C 83-210		0.1 Ω 2.7 kΩ	0.1 Ω 4.99 kΩ	0.1 Ω 11.8 kΩ	0.1 Ω 33.2 kΩ
Minimum Ohmic Values in Relation to Tolerance		E 96	± 0.1 %	1 Ω		1 Ω	
		E 96	± 0.5 %	0.1 Ω		0.1 Ω	
		E 96	± 1 %	0.1 Ω		0.05 Ω	
		E 48	± 2 %	0.01 Ω		0.01 Ω	
		E 24	± 5 %	0.01 Ω		0.01 Ω	
		E 12	± 10 %	0.01 Ω	0.008 Ω	0.006 Ω	

Undergoes European Quality Insurance System (CECC)

PERFORMANCE

MIL-R-18546 D / NF C 83-210				TYPICAL DRIFTS
TESTS	CONDITIONS		REQUIREMENTS	
Operating Temperature Range	- 55 °C + 200 °C		-	-
Momentary Overload	5 Pr/5 s		± (0.25 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Climatic Sequence	- 55 °C + 200 °C 5 cycles		± (0.25 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Load Life Test at High Temperature	2 h at + 275 °C		± (1 % + 0.05 Ω) Ins. resistance ≥ 1 GΩ	± (0.1 % + 0.05 Ω)
Humidity (Steady State)	56 days		± (1 % + 0.05) Ins. resistance ≥ 100 MΩ	± (0.5 % + 0.05 Ω)
Resistance to Moisture	Climatic sequences test, with load and polarisation		± (1 % + 0.05 Ω)	± (0.5 % + 0.05 Ω)
Temperature Coefficient	5 to 10 > 10		± 50 ppm/°C ± 25 ppm/°C	± 15 ppm/°C
Load Life at Maximum Temperature	1000 h 25 °C	Pn MIL VISHAY	± (1 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
	200 °C	30 % of Pn SFERNICE	Ins. resistance ≥ 1 GΩ	± (0.5 % + 0.05 Ω)

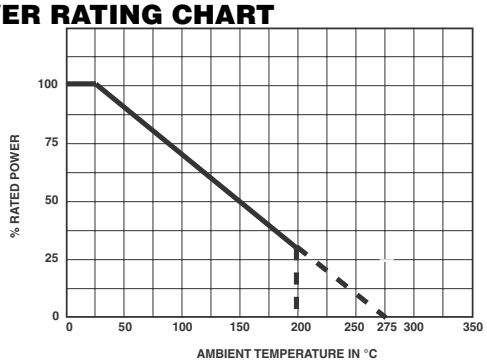
MOMENTARY OVERLOAD

1. Momentary overload (> 2 s):
See example in table below. In all cases, it should be understood that:
- the 12 Pn overload applies only to ohmic values 0.1.
- the overload voltage shall not be higher than that used for the dielectric strength test (see Standard Electrical Specifications).

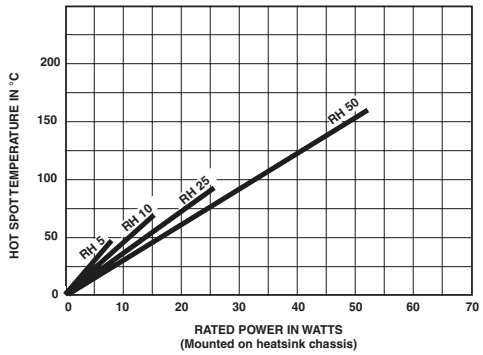
2. Short time overload (< 2 s):
For times shorter than 2 seconds, higher overloads can be sustained in some cases. Consult VISHAY SFERNICE.

POWER LOADING	DURATION
2.5 Pn	10 s
5 Pn	5 s
12 Pn	2 s

POWER RATING CHART



TEMPERATURE RISE



MARKING

VISHAY SFERNICE trademark, model, style, CECC style (if applicable) nominal resistance (in Ω), tolerance (in %), manufacturing date.

PACKAGING

Bag of 10 units

ORDERING INFORMATION

RH	5	NI		18U	± 5 %	BA10	e1
MODEL	STYLE	NON INDUCTIVE WINDING Optional	SPECIAL DESIGN Method N° Optional	OHMIC VALUE Custom items are subject to extra-charge and min. order. Please see price list.	TOLERANCE	PACKAGING	LEAD (Pb)-FREE

SAP PART NUMBERING GUIDELINES

RH	05	N	18R00	J	S03
MODEL	STYLE	NON INDUCTIVE WINDING Optional	OHMIC VALUE	TOLERANCE	PACKAGING

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