

Series VHP

Non-Inductive 180 Watt Power Resistors according to VDE 0160 and UL 94-V0

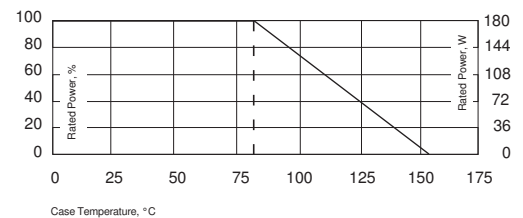
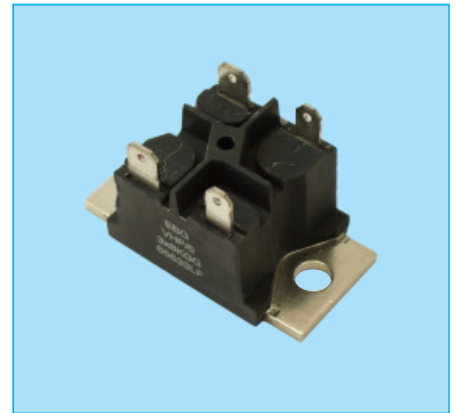
EBG's series VHP is rated at 180 Watts mounted to a heat sink. There are four configurations of resistive patterns available in the package. The increased height of the package makes this resistor ideal in applications where creeping distance must meet VDE 0160 and UL 094-V0 standards.

A few features of the VHP include:

- 180 Watts at 85°C
- Non-Inductive Design
- Four configurations of resistive patterns
- Up to 3 resistors in 1 package
- Easy mounting using already existing infrastructure

Specifications

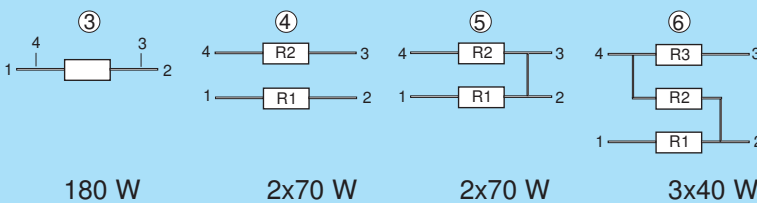
- Resistance Range: 1Ω to 1MΩ (other values on request)
- Tolerance: ±1%, ±2%, ±5%, ±10%
- Temperature Coefficient: ±50ppm, ±100ppm, ±250ppm (at +105°C ref. to +25°C)
- Max. Working Voltage: 500V (up to 1,000V on special request)
- Power Rating at 85°C: 180W (others upon request)
- Voltage Proof: 5,000 VDC, 3,000 VAC
- Insulation Resistance: 10GΩ Min. @ 1kV DC
- Isolation voltage between R1 and R2: 500V
1000V on special request
- Heat resistance to cooling plate: < 0.47 °K/W
- Capacitance/mass: 45 pF
- Working temperature range: -55°C to +155°C
- Max. torque for base plate (static): 1.5 Nm. M5 screws



Derating (thermal resistance): 2.5W/°K (0.40°K/W). (for conf. 3)

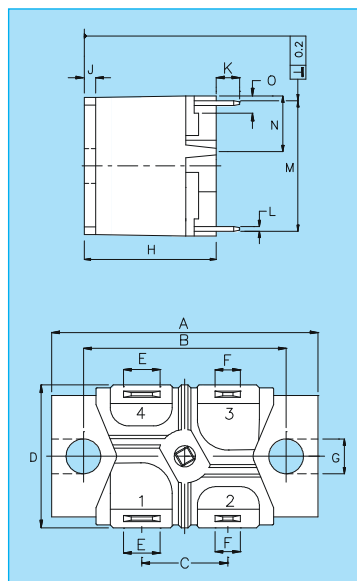
Best results can be reached by using a thermal transfer compound with a heat conductivity of better than 1W/mK. The flatness of the cooling plate must be better than 0.05mm overall. The roughness of the surface should not exceed 6.4μm.

Configurations (P/package)



Version 5: ohmic value between contact 2 and 3 = 3mΩ

Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	44.7	46.5	1.760	1.831
B	34.7	35.3	1.366	1.390
C	14.8	15.2	0.583	0.598
D	--	26.5	--	1.043
E	6.2	6.4	0.244	0.252
F	4.7	4.9	0.185	0.193
G	5.9	6.1	0.232	0.240
H	20.9	21.3	0.823	0.839
J	1.9	2.1	0.075	0.083
K	3.4	4.0	0.134	0.157
L	0.77	0.83	0.0303	0.0326
M	23.0	23.4	0.905	0.921
N	9.4	9.8	0.370	0.386
O	1.9	2.1	0.075	0.083



- ③ Air distance contact to contact:
 - Contacts 1 and 2 resp. 3 and 4 without Fast-on-Plug: 9.2mm
 - with Fast-on-Plug: 8.2mm
 - ④ • Contacts 1 and 4 resp. 2 and 3 without Fast-on-Plug: 21.9mm
 - with Fast-on-Plug: 20.9mm
 - ⑤ • Contacts 2 resp. 3 and M5 - mounting screw with washer without Fast-on-Plug: 16.3mm
 - with Fast-on-Plug: 15.9mm
 - ⑥ • Contacts 1 resp. 4 and M5 - mounting screw with washer without Fast-on-Plug: 15.5mm
 - with Fast-on-Plug: 15.0mm
- Creeping distance:
- ③ • Contacts 1 and 2 resp. 3 and 4 without Fast-on-Plug: 20.0mm
 - with Fast-on-Plug: 19.0mm
 - ④ • Contacts 1 and 4 resp. 2 and 3 without Fast-on-Plug: 27.4mm
 - with Fast-on-Plug: 25.8mm
 - ⑤ • Contacts 2 resp. 3 to base plate without Fast-on-Plug: 20.2mm
 - with Fast-on-Plug: 19.8mm
 - ⑥ • Contacts 1 resp. 4 to base plate without Fast-on-Plug: 19.5mm
 - with Fast-on-Plug: 18.9mm

In the above spec sheet, you will find our standard product, please contact your local manufacturing representative or call us direct to find out details of other options available regarding this style. Please see our website for the most updated information!