

Ultra High Power Resistors

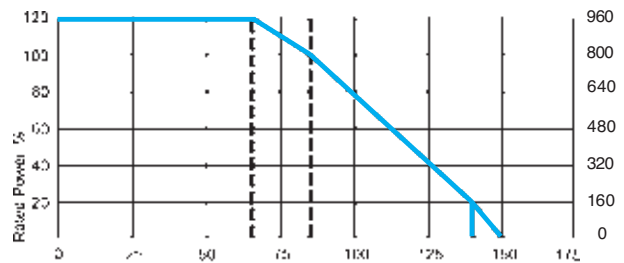
Series UPT 800

800 W Resistor · US Patent-No. 5,355,281

For variable speed drives, power supplies, control devices, robotics, motor control and other power designs, the easy mounting fixture guarantees an auto-calibrated pressure to the cooling plate of about 120 to 160 N.

Specifications

- Resistance values: 0.5 Ω to 1 MΩ
- Resistance tolerance: ±5% to ±10%, tighter tolerances are available upon request, with reduction of max. power/pulse rating. Please ask our local representative!
- Temperature coefficient: ±150 ppm/°C (others upon request)
- Maximum working voltage: 5,000 V DC, higher voltage upon request, not exceeding max. power
- Short time overload: 1,000 W at 70°C for 10sec., R = 0.4% max. (for conf. 2 and 3)
- Power rating: up to 800 W at 85°C bottom case temperature, see configurations
- Electric strength voltage: 6 kVrms, 50 Hz, up to 12 kVrms or 23 kV DC upon special request.
- Dielectric strength between R1–R2 : >5 kV DC (for conf. 4)
- Single shot voltage: up to 12 kV norm wave (1.5/50 µsec)
- Partial discharge: 4 KVrms, <10 pC, up to 7 kV upon special request
- Insulation resistance: 10 GΩ min. at 500 V
- Inductance: 80 nH (typical)
- Capacity/mass: 140 pF (typical)
- Capacity/parallel: 40 pF (typical)
- Operating temperature: –55°C to +150°C
- Mounting - max. torque for contacts: 2 Nm
- Mounting - max. torque: 1.8 Nm, M4 screws
- Housing material acc. to UL94-V0
- Standard storage conditions: 0 to 85°C at 80% RH max. for min. 12 months. For different conditions please contact your local EBG representative!
- Pulse load rating: please see our website (www.ebg-at.com/...) for sample pulse load information. For details please contact your local EBG representative!

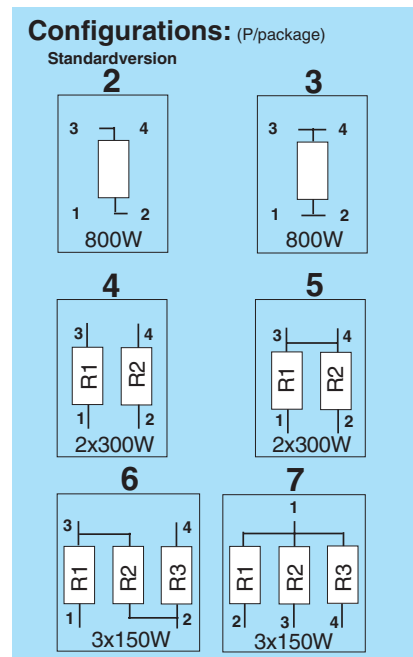
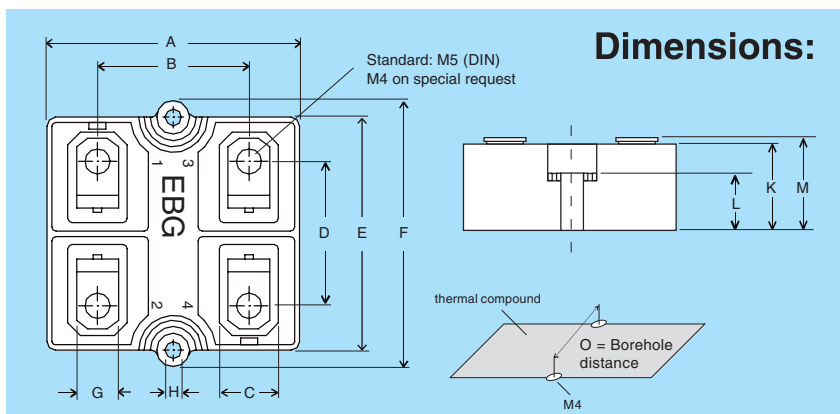


Bottom Case Temperature, °C,
Maximum Power Rating see UPT - Configurations

Derating (thermal resist.) UPT 800: 9.09W/°K (0.11°K/W) for conf. 2 and 3
Power rating: 800W at 85°C bottom case temp.*
Please ask for detailed mounting procedure!

* This value is only applicable if using thermal conduction to heat sink Rth-cs<0.025°K/W. This value can be obtained by using a thermal transfer compound with a heat conductivity of 1 W/mK. The flatness of the cooling plate must be better than 0.05 mm overall. Surface roughness should not exceed 6.4 µm.

Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	59.2	60.8	2.331	2.394
B	35.8	36.2	1.409	1.425
C	13.5	14.5	0.531	0.571
D	33.8	34.2	1.331	1.346
E	57.0	58.0	2.244	2.283
F	64.2	65.8	2.527	2.591
G	9.5	10.5	0.374	0.413
H	4.05	4.3	0.159	0.169
K	24.0	25.0	0.945	0.984
L	14.5	15.5	0.571	0.610
M	25.5	26.5	1.004	1.043
O	56.8	57.2	2.236	2.252



The above spec. sheet features our standard products. For further options, please contact our local EBG representative or contact us directly. For updated information, please visit our website!