



Series UPT 400

400 Watt Resistor, US Patent # 5,355,281

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

Encapsulation:

Special resin filled epoxy casing with large creeping distance to mass, large air distance between the terminals and high insulation resistance.

Resistance Element:

Special design for low inductance and capacitance values. The element employs our special METOXFILM which demonstrates stability while covering high wattage and pulse loading.

Contacts:

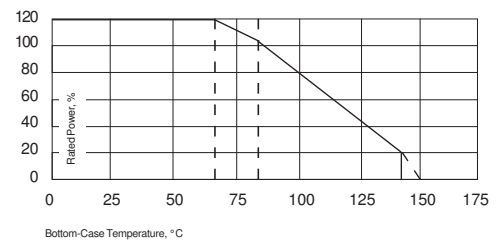
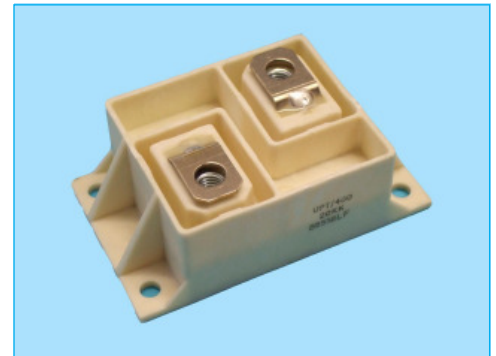
Easy load connecting with M5 screws (others on special request).

Materials in accordance with UL94-V0

Specifications

- Resistance Values: 0.5Ω to 1MΩ
- Resistance Tolerance: ±5% to ±10%, tighter tolerances are available on request, with the reduction of the max. power / pulse rating. Please ask your local representative.
- Temperature Coefficient: ±150ppm/°C (others upon request)
- Maximum Working Voltage: 5,000V DC, higher voltage on request, not exceeding max. power
- Short Time Overload: 700W at 70°C for 10sec., ΔR = 0.4% max.
- Power Rating: up to 400W at 85°C bottom case temperature
- Electric Strength Voltage: 6kVrms, 50Hz, upto 12kVrms or 23kV DC on special request.
- Single Shot Voltage: up to 12 kV Normwave (1.5/50 μsec)
- Partial Discharge: 4kVrms, <10pC, up to 7kV on special request
- Insulation Resistance: 10GΩ Min. at 500V
- Inductance: - 80 nH
- Capacity/Mass: - 110 pF
- Capacity/Parallel: - 40 pF
- Operation Temperature: -55°C to +150°C
- Max. Torque for Contacts: 2 Nm
- Max. Torque for Mounting: 1.8 Nm M4 screws

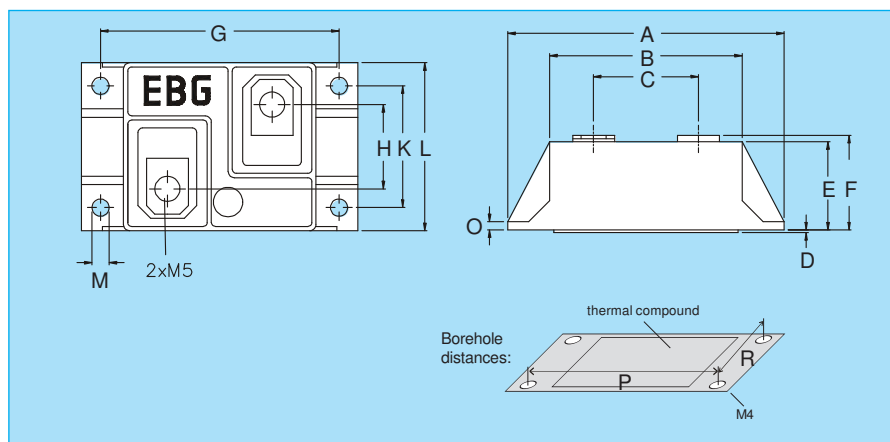
For other configurations please contact EBG.



Derating (thermal resist.)
UPT 400: 5.55W/°K (0.18°K/W)
Power Rating: 400W at 85°C bottom case temp.*

* This value is only valid by using a thermal conduction to the heatsink $R_{cs} < 0.025^{\circ}\text{K/W}$. This value can be reached by using thermal transfer compound with a heat conductivity of 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.

Dimensions:



Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	65.2	66.8	2.567	2.630
B	45.2	46.8	1.780	1.843
C	24.5	25.5	0.965	1.004
D	0.1	0.2	0.004	0.008
E	20.5	21.5	0.807	0.846
F	22.0	23.0	0.866	0.906
G	56.2	57.8	2.213	2.276
H	19.5	20.5	0.768	0.807
K	28.5	29.5	1.122	1.161
L	39.2	40.8	1.543	1.606
M	4.1	4.3	0.161	0.169
O	1.85	2.15	0.073	0.085
P	56.8	57.2	2.236	2.252
R	28.8	29.2	1.134	1.150

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!