

Ultra-High-Power Resistors

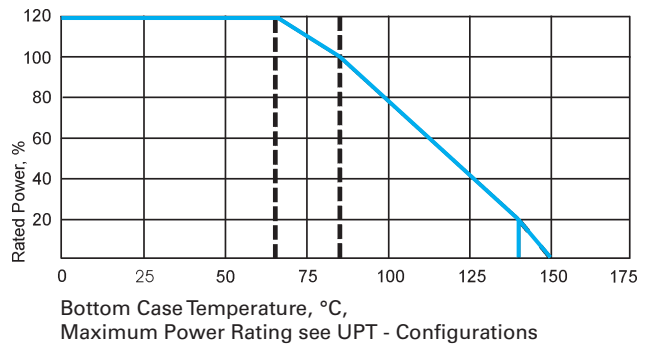
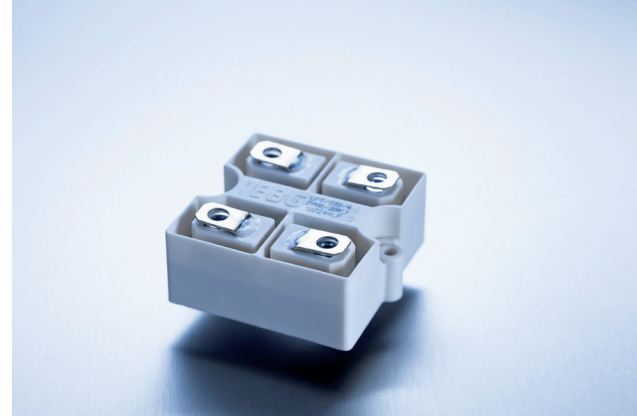
Series UPT 600

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

For variable speed drives, power supplies, control devices, robotics, motor control and other power devices, the easy mounting fixture guarantees an auto-calibrated pressure to the cooling plate of about 120 to 160 N. Materials in accordance with UL94-V0

Specifications

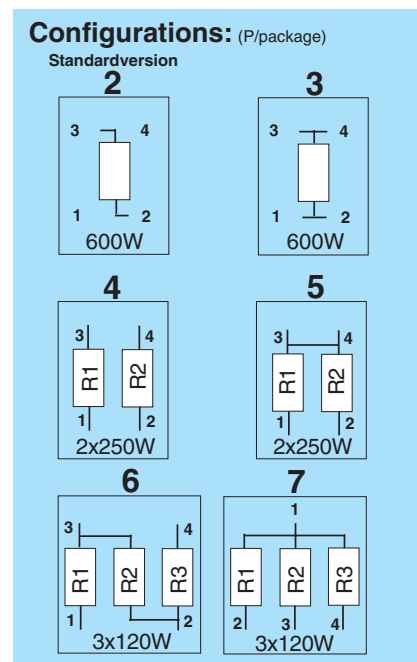
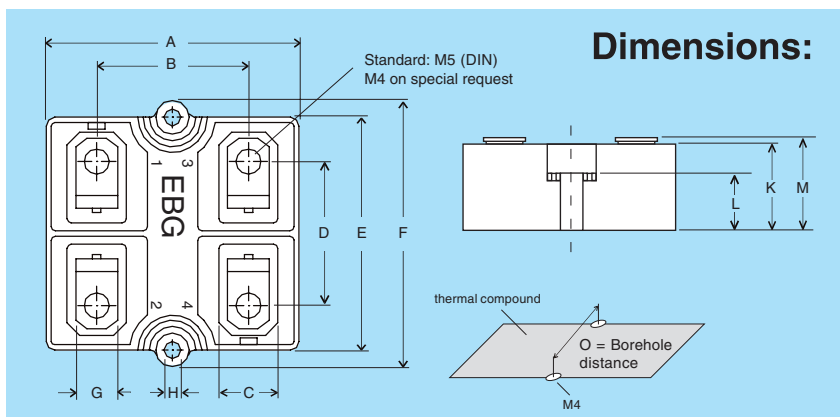
- Resistance values: 0.5 Ω to 1 MΩ
 - Resistance tolerance: ±5% to ±10%, tighter tolerances are available upon request, with the reduction of the max. power/pulse rating. Please ask your local representative!
 - Temperature coefficient: ±150 ppm/°C (others upon request)
 - Maximum working voltage: 5,000 V DC, higher voltage upon request, not exceeding max. power
 - Short time overload: 1,000 W at 70°C for 10sec., ΔR = 0.4% max. (for conf. 2 and 3)
 - Power rating: up to 600 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: >5kV DC
 - 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
 - Capacity/mass: –110 pF
 - Capacity/parallel: –40 pF
 - Operating temperature: –55°C to +150°C
 - Mounting - max. torque for contacts: 2 Nm
 - Mounting - max. torque: 1.8 Nm, M4 screws
 - For pulse power details, please see datasheet UXP-300, same as UXP-600, valid for configuration 2 and 3.
- For other configurations, please contact EBG.



Derating (thermal resist.) UPT 600: 8.33W/°K (0.12°K/W) (for conf. 2 and 3)
Power rating: 600W 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!