

## Series UXM 400 Watt High Pulse Load Resistor

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.

### General Characteristics

Electric support:

- High alumina ceramic metallized with EBG ALTOX film on the bottom for better heat transfer and optimum discharge.

Encapsulation:

- Special resin filled epoxy casing with large creeping distance to mass, large air distance between the terminals and high insulation resistance (CTI 600).

Contacts:

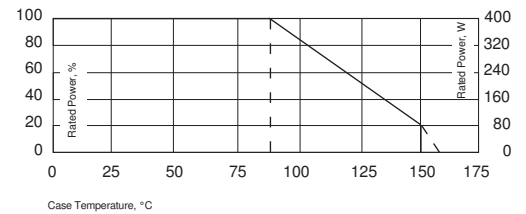
- Easy load connecting with M4 or M5 screws.
- Connector height (M+N) available from 25 to 42mm.
- Various sleeves for increased creeping distance up to 85mm or potted cable connections are available on special request
- Materials in accordance with UL94-V0

### Specifications

- Resistance Values: 0.1Ω to 5Ω
- Resistance Tolerance: ±5% to ±10% (others on request)
- Temperature Coefficient: +500ppm/°C typical (others upon request)
- Maximum Working Voltage: Depending on max. pulse load capability - ask for details
- Short Time Overload: 600W at 70°C for 10sec., ΔR = 0.4% max.
- Power Rating: 400W at 85°C Bottom case temperature. (higher on request)
- Electric Strength Voltage: Standard: 6 kV DC, up to 12 kV DC on request
- Partial Discharge: on request
- Insulation Resistance: 10GΩ Min. at 1000V
- Creeping Distance: 42 mm Min.
- Air Distance: 14 mm Minimum
- Inductance: 400 nH ÷ 1μH
- Capacity/Mass: 110 pF typical
- Operation Temperature: -55°C to +150°C
- Max. Torque for Contacts: 2 Nm
- Max. Torque for Mounting: 1.8 Nm M4 screws



Derating:



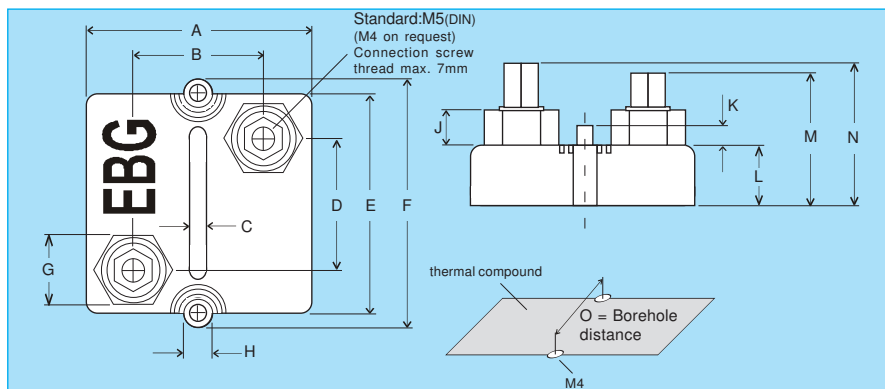
Best results can be reached by using a thermal transfer compound with a heat conductivity of better than 1W/mK. The flatness of the cooling plate must be better than 0.05mm overall. The roughness of the surface should not exceed 6.4μm.

Test	Method	Typical Results
• Humidity Steady State	56 days/40°C/95%	0.25%
• Temp. Cycling	-55/+125/5 cycles	0.20%
• Shock	40g/4,000 times	0.25%
• Vibrations	2-500Hz/10g	0.25%
• Load Life	Pn 30 min. on/30 min off	0.40%
• Terminal Strengths	f. Contacts	200N
		0.05%

Pulse load capability:  
Example: UXM 4R7 10%

e-function pulse, f = 8 Hz, tau = 15μsecs.,  
**E = 50 Joules**

Dimensions:



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	4.5	5.5	0.177	0.216
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	17.5	18.5	0.689	0.728
H	4.05	4.3	0.159	0.169
J	6.5	7.5	0.256	0.295
K	4.5	5.5	0.177	0.216
L	14.5	15.5	0.571	0.610
M	29.5	30.5	1.161	1.201
N	31.5	32.5	1.240	1.279
O	56.8	57.2	2.236	2.252

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!