TAP800 Series



800 Watt Heat Sinkable Planar

FEATURES

- Electric support is high alumina content ceramic metallized on the bottom for ideal heat transfer and optimum discharge.
- Encapsulated with a special resin filled epoxy casing with a large creepage distance to mass, large air distance between terminals, and a high insulation resistance (CTI 600).
- Resistive element is specially designed for low inductance and capacitance. The element provides stable performance in addition to high wattage and pulse loading capability.
- Contacts allow for easy load connecting with M4 or M5 screws (not included).
- Materials meet the requirements of UL94-V0

Max. Torque for 2 Nm Contacts Max. Torque for

Mounting



Ohmite's TAP800 Series dissipates 800 watts of power when used with a liquid or air cooled heat sink system. The Ohmite CP4 (http://www.ohmite. com/cat/sink_cp4.pdf) is an example of properly designed heat sink. The TAP800 rounds out 600 watt (TAP600) and 1000 watt (TAP1000) product offerings. Applications include variable speed drives, power supplies, robotics, motor control, control devices, and other power designs.

Test Method

Vibration 2-500Hz/10g

Short time overload Humidity

Steady State Temp. Cycling

Shock

Terminal 200N

1,000 W/10sec

56 days/40°C/95%

-55/+125/5 cycles

40g/4,000 times

Load Life Pn 30 min. on/30 min

off, 1,000cyl

Resistance Values	1 Ω to 10K Ω
Resistance Tolerance	±5% to ±10%
Temperature Coefficient	±150ppm/°C (others upon request)
Maximum Working Voltage	5,000V DC, higher voltage on request, not exceeding max. power
Short Time Overload	1,200W at 70°C for 10sec., ΔR=0.4% max.
Power Rating	800W at 85°C Bottom case temperature.
Peak Current	up to 1500 amp. depending on pulse length and frequency Please ask for details
Electric Strength Voltage	6kVrms, 50Hz,upto 12kVrms on special request
Single Shot Voltage	up to 12kV Normwave (1.5/50 μsec)
Partial Discharge	4KVrms, <10pC, up to 7kV on special request
Insulation Resistance	10GΩ min. at 500V
Creeping Distance	42mm min.
Air Distance	14mm min.
Inductance	80nH
Capacity/Mass	110pF
Capacity/Parallel	40pF
Operation Temperature	-55°C to +150°C

1.8 Nm M4 screws (not included)

Power Rating 800W at 85°C bottom case temp. This value is only

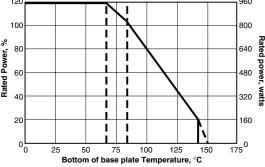
surface should not exceed 6.4um.

Derating 9.09W/°K (0.11°K/W)

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D	era	ating							
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CHARACTERISTICS



(continued)

Typical Results

ΔR 0.4%

0.25%

0.20%

0.25%

0.25%

0.40%

0.05%

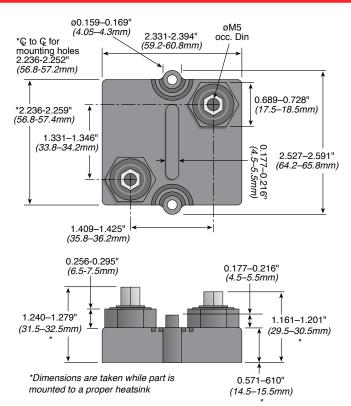
valid by using a thermal conduction to the heatsink Rth-cs<0.025°K/W. This value can be reached by using thermal transfer compound with a heat conductivity of 1W/mK. The flatness of the cooling plate must be better than 0.05mm overall. The roughness of the

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DIMENSIONS

(in./mm)



ORDERING INFORMATION

RoHS compliant Non-compliant version unavailable

Standard Values

TA P 8 0 0 K 5 R 0 E 1

Wattage 800 watts

Tolerance J = 5%

Resistance 1 Ohm = 1R0 K = 10%, Std. 10 Ohm = 10R L = 20% 1000 Ohm = 11 1000 Ohm = 1K0

