

Series SUPT400 High Power Resistor

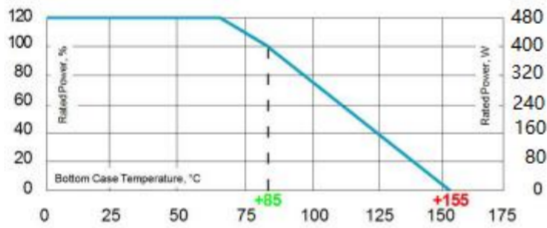
For variable speed drives , Power supplies,control devices,robotics,motor control and other power designs, the easy mounting fixture assures a pressure of the cooling plate of about 300N.

- 400W operating power
- Non-Inductive design
- ROHS compliant
- High insulation & partial discharge performance
- Materials in accordance with UL 94 V-0



Product Detail:

1. Derating

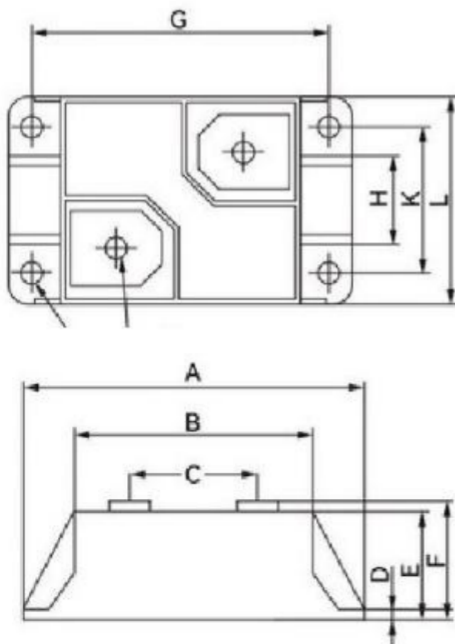


Derating (thermal resist.) SUPT400: 5.65W/K (0.18 K/W)

Power rating: 400 W at 85°C bottom case temperature

This value is only applicable when using a thermal conduction to the heat sink $R_{th-cs} < 0.025K/W$. This value can be obtained by using a thermal transfer compound with a heat conductivity of at least 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 .

2. Dimensions in millimeters



	Min (mm)	Max (mm)
A	65.5	66.5
B	45.2	46.8
C	24.5	25.5
D	1.95	2.10
E	20.5	21.5
F	21.0	23.0
G	56.2	57.8
H	16.7	17.0
K	19.5	20.5
L	39.5	41.0
M	4.1	4.3

3. Specifications

Resistance ranges: $0.5 \Omega \leq 1M \Omega$

Resistance Tolerance: $\pm 5\%$ to $\pm 10\%$

$\pm 1\%$ to $\pm 2\%$ on special request for limited ohmic values with the reduction of the max. power / pulse rating (ask for details)

Temperature Coefficient: $\pm 150\text{PPM}/^\circ\text{C}$ lower TCR on special request for limited ohmic values

Power rating: 400 W at 85°C bottom case temperature

Short time overload: 480 W at 70°C for 10sec., $\Delta R = 0.4\%$ max.

Maximum operating voltage: 5,000 V DC = 3,500 V AC RMS (50 Hz)

higher voltage on request, not exceeding max. power

Electric strength voltage: 7 kVrms / 50 Hz / 500 VA, test time 1 min

between terminal und case (up to 12 kVrms on request)

voltages above 10 kVrms are tested at DC equivalent to avoid pre damage of component

Insulation resistance: $> 10 \text{G}\Omega$ at 1,000 V

Single shot voltage: up to 12 kV norm wave (1.5/50 μsec)

Inductance: $\leq 80 \text{nH}$ (typical), measuring frequency 10 kHz

Capacity/mass: $\leq 110 \text{pF}$ (typical), measuring frequency 10 kHz

Capacity/parallel: $\leq 40 \text{pF}$ (typical), measuring frequency 10 kHz

Operating temperature: -55°C to $+155^\circ\text{C}$

Mounting - torque for contacts: 1.8 Nm to 2 Nm

Mounting - torque: 1.6 Nm to 1.8 Nm M4 screws

Weight: $\sim 49.5\text{g}$

4. Ordering Information

Type	ohmic Value	TOL
SUPT400	30K	5%