

【HIGH POWER RESISTOR- FCH500 Series】



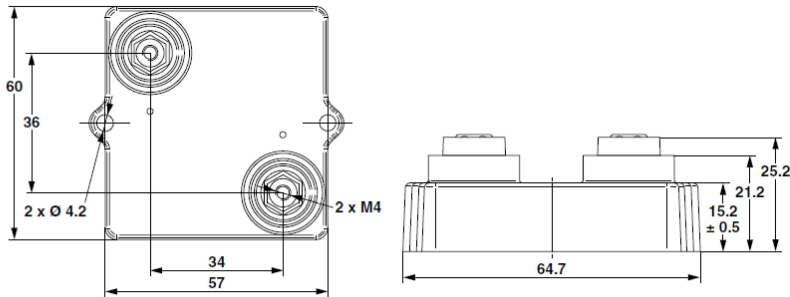
■ Features

- Thick film & Non-inductive design, ROHS compliant
- High voltage and pulse loading, easy load connecting with M4 or M5 screws
- Extremely low TCR down to 50PPM with high power
- High power rating up to 500 Watts at 85 degree.

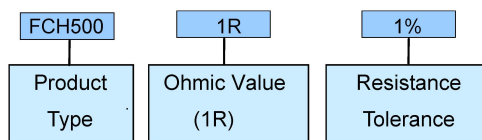
■ Applications

- Evariable speed drives
- Power supplies
- Control devices, robotics, motor control and other power designs

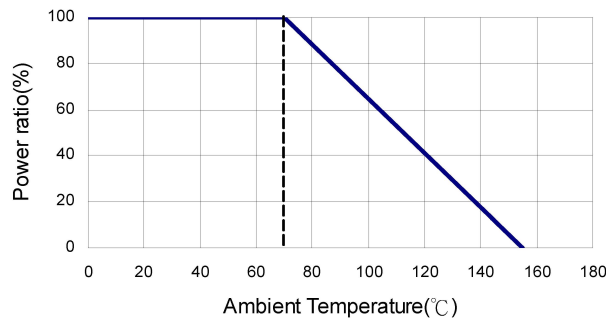
■ Construction



■ Part Numbering



■ Derating Curve



■ Technical and standard electrical specifications

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

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

Temperature Coefficient: $\pm 150PPM/^{\circ}C$ ($25^{\circ}C \sim 105^{\circ}C$) On special request

Power Rating: 500W at $85^{\circ}C$ Bottom case temperature

Maximum Working Voltage: 5000VDC, higher voltage in request, not exceeding max. power

Peak Current: up to 1500 Amp. depending on pulse length and frequency please ask for details

Electric Strength Voltage: 6kVrms, 50Hz, up to 12kVrms On special request

Single Shot Voltage: up to 12kV Normwave (1.5/50usec)

Parital Discharge: 4kVrms, <10pC, up to 7kV On special request

Insulation Resistance: $10G \Omega$ Min at 500V, Creeping Distance: 42 mm Min.

Air Distance: 14 mm Min. ; Inductance: ≤ 80 nH; Capacity/Mass: ≤ 110 pF; Capacity/Parallel: ≤ 40 pF;

Moisture Resistance: 56day/ $40^{\circ}C$, $RH \geq 95\%$, $\Delta R \leq \pm (0.25\% + 0.001 \Omega)$,

Vibration, High Frequency: MIL-Std-202, Method 204, cond. D, $\Delta R \leq \pm (0.2\% + 0.001 \Omega)$ Max.

Short Time Overload: 750W at $70^{\circ}C$ for 10sec. , $\Delta R = 0.4\%$ max.

Working Temperature Range: $-55^{\circ}C \sim 150^{\circ}C$

Max. Torque for Contacts: 2Nm; Max. Torque for Mounting: 1.8Nm M4 screws;

■ Reference Standards: IEC60115-1:2001(GB/T5729-2003)

MIL-STD-202/MIL-R-39009D

■ Storage Temperature: $25 \pm 3^{\circ}C$; Humidity < 80%RH