Series ACP 100

100 W resistor

AEC-Q200 ready

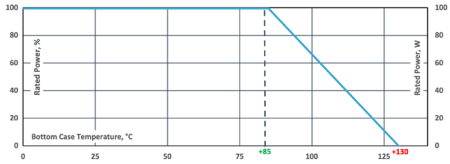
The 100 W resistor is a good solution for small pulses. The proven concept with Fast-On connection offers easy mounting on heat sinks and PCB.

Features

- 100 W power rating at 85°C bottom case temperature
- Non-Inductive design
- ROHS compliant
- Materials in accordance with UL 94 V-0
- Thermal interface management available (ask for details)

Technical Specifications

Resistance value	0.24 Ω to 1 MΩ
Resistance tolerance	±1 % to ±10 %
Temperature coefficient	≥1 Ω: ±150 ppm/°C (+25°C to +105°C, ref. to +25°C) <1 Ω: ±250 ppm/°C (+25°C to +105°C, ref. to +25°C)
Power rating	100 W at +85°C bottom case temperature
Maximum operating voltage	1000 V DC
Dielectric strength	3500 V DC
Insulation resistance	min. 10 GΩ
Momentary overload	2 times rated power, but no more than 1.5 time max. continuous operating voltage, last 5s, ΔR ≤ ±(0.25%R + 0.001Ω)
Load life	1000 h at rated power, BCT at 85°C ΔR ≤ ±(0.5%R + 0.001Ω)
Moisture resistance	56 days / 40°C, RH ≥ 95 %, ΔR ≤ ±(0.5%R + 0.001Ω)
Thermal schock	MIL-Std.-202, method 107, Cond. F ΔR ≤ ±(0.3%R + 0.001Ω)
Terminal strength	MIL-Std.-202, method 211, Cond. A (pull test) 2.4 N ΔR ≤ ±(0.2%R + 0.001Ω)
Vibration, high frequency	MIL-Std.-202, method 204, Cond. D ΔR ≤ ±(0.2%R + 0.001Ω)
Working temperature	-55°C to +125°C
Installation	M3 screw, max. torque 0.7 Nm
Weight	~6 g



Derating (thermal resist.) ACP-100: 0.45 K/W

A thermal interface material with a specific thermal resistance >3,4W / (mK) and a printed thickness of <0,15mm shall be pre-applied on the resistor.

How to make a request

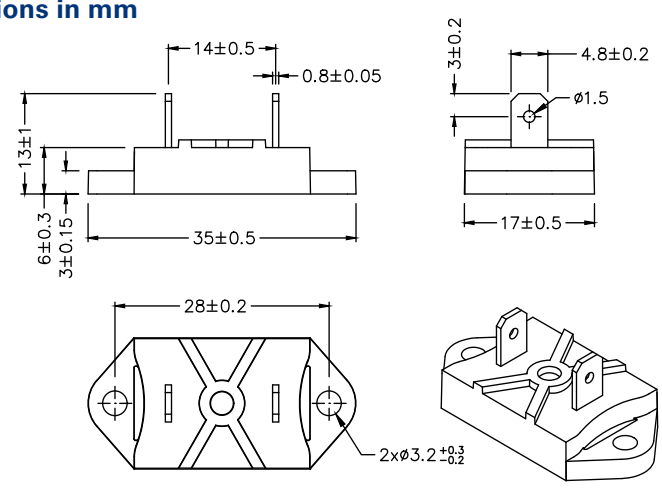
ACP-100_Ohmic Value_Tolerance

For example:
ACP-100 50R 10%

Suggested Mounting Procedure:

1.) Position component and press down by hand
2.) Fix both mounting screws (M3) with 0.1 to 0.2 Nm torque
3.) Apply final torque to mounting screws of 0.6 to 0.7 Nm

Dimensions in mm



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