

Series EVR V50

AEC-
Q200
ready

PCB soldered Power Resistor for continuous discharge applications such as passive discharge.

Features

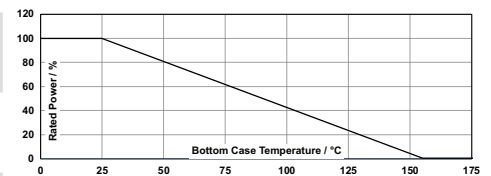
- Low profile SMD thick film resistor
- Best in class pulse energy performance
- Small size, surge capable film resistor
- TO-263 footprint



Technical Specifications

Resistance value	0.5 Ω to 1 k Ω
Resistance tolerance	$\pm 0.5\%$ to $\pm 10\%$ (other values on special request) (measured at + 25 °C ± 3 °C)
Temperature coefficient	< 2 Ω : ± 500 ppm/°C 2 Ω to 10 Ω : ± 250 ppm/°C > 10 Ω : ± 100 ppm/°C
Power rating	55 W at 25 °C bottom ceramic temperature
Operating temperature	- 55 °C to + 175 °C
Thermal resistance	< 3.0 K/W resistor to bottom solder pad
Operating voltage	900 V (not exceeding max. power)
Maximum operating current	10 A
Dielectric strength	1500 V AC (method: terminal and heat sink, 60 s 1 mA)
Capacity	13 pF, typical parallel capacity
Inductivity	50 nH, typical series inductivity
Load life	$\pm 1\%$ (method: 25 °C, 90 min. ON, 30 min. OFF, 1000 h)
Humidity	$\pm 1\%$ (method: 85 °C, 85 % RH, DC 0.25 W, 1000 h)
Temp. cycle	$\pm 0.5\%$ (method: - 55 °C, 30 min., +125 °C, 30 min., 1000 cycle)
Solder heat	$\pm 0.1\%$ (method: 260 °C ± 5 °C, 10 ± 1 s)
Lead solderability	over 95 % of surface (250 °C ± 5 °C, 3 s)
Insulation resistance	over 1000 M Ω (between terminals and heat sink)
Vibration	$\pm 0.25\%$ (MIL-STD-202, Method 204)
Storage conditions	15-60 % rel. humidity (- 30 °C to + 70 °C)
Weight	< 0.4 g

Derating Curve



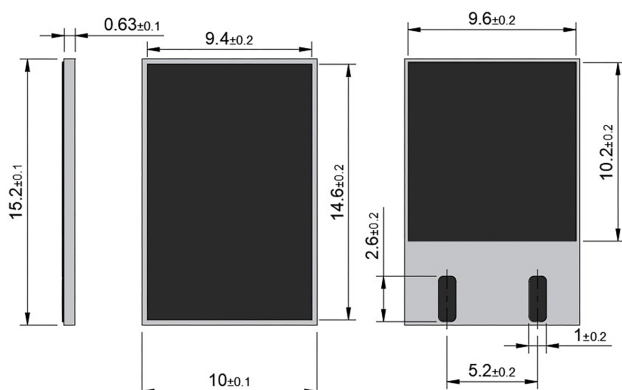
Typical Pulse Load (initial resistor temperatur ≤ 85 °C)

20 J for $\tau = 0.1$ s
25 J for $\tau = 0.2$ s
35 J for $\tau = 0.5$ s

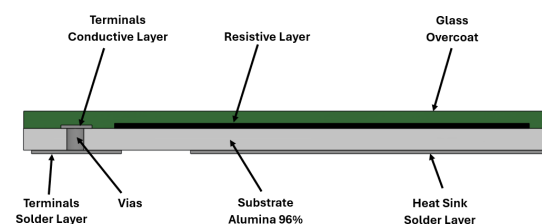
Circuit Diagram



Dimensions in mm



Construction





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