

250W / 300W TO-227 HIGH POWER RESISTORS

Features

- Non-Inductive,
- Rated up to 300W depending on resistor configuration.
- Small TO-227 style package, with very low thermal resistance.
- Superior vibration durability, with M4 screw terminals.
- RoHS compliant.

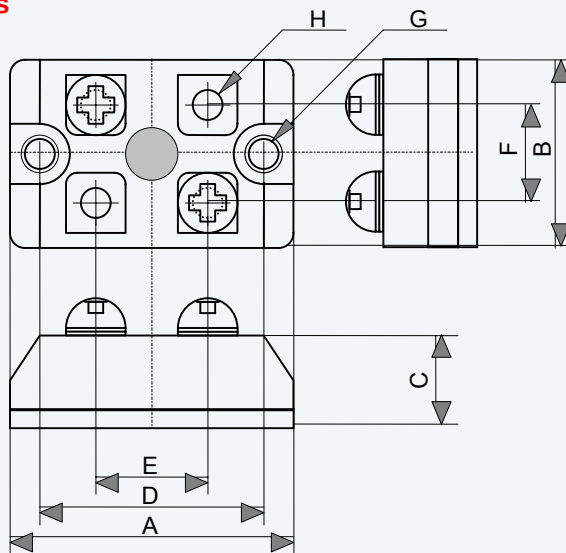
Applications

- High power snubber resistors in power supplies.
- High frequency and pulse handling circuits.
- Pulse generator load resistors.
- High power crossover circuits in audio speaker systems



Specification

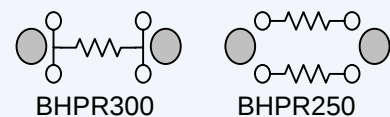
Dimensions



Dimensions

Symbols	(mm)
A	38+/-0.5
B	25+/-0.5
C	15+/-0.5
D	30+/-0.2
E	15+/-0.5
F	13+/-0.5
G	2-3.2dia.
H	4-M4.0

Schematics



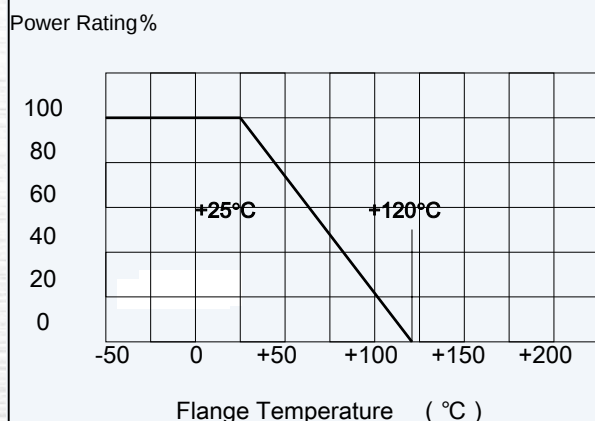
Specifications subject to change without notice

BHPR

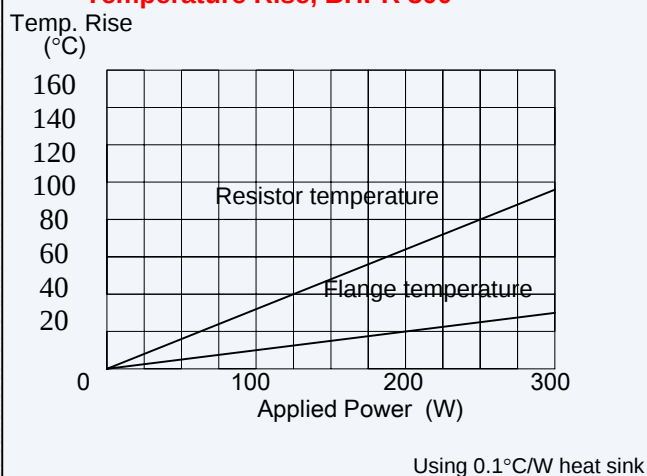
Specification Items	BPHR 250	BPHR300	Test Conditions
Power Rating	250 Watts	300 Watts	At flange temperature -55 to +25°C
Resistance Range	1Ω to 1KΩ Dual	1Ω to 1KΩ Single	
Nominal Resistance Series	E24	E24	2.0 Ω and 5.0 Ω also available.
TCR	+/-100 ppm/°C	+/-100 ppm/°C	From -55 to +120 °C
Tolerance	+/-5%(J)	+/-5%(J)	
Operation Temp. Range	-55 - +120 °C	-55 - +120 °C	
Max. Applied Voltage	$\sqrt{(P.R)}$		
Dielectric Withstanding Voltage	2500V		60 seconds.
Load Life	$\Delta R \pm (1.0 \% + 0.05 \Omega)$		25°C, 90 min.ON, 30min.OFF, 1000hours.
Humidity	$\Delta R \pm (1.0 \% + 0.05 \Omega)$		70°C, 90 to 95%RH, DC0.1W, 1000hours.
Temperature Cycle	$\Delta R \pm (1.0 \% + 0.05 \Omega)$		-55°C, 30 min., +155°C 30 min., 20 cycles. 55°C, 30 min., +120°C, 30 min., 20 cycles.
Short Time Overload	$\Delta R \pm (0.25 \% + 0.05 \Omega)$		(Rated Power×2.5) for 2.5seconds with heat sink.
Insulation Resistance	Over 1000 MΩ		Between terminals and flange.
Vibration	$\Delta R \pm (0.25 \% + 0.05 \Omega)$		

Note: BHPR 250 has two resistors of equal values. (e.g. BHPR250 500 F, has two 50Ω resistors. See schematic). Current rating: 100A Maximum.

Derating Curve, BHPR 250, BHPR 300



Temperature Rise, BHPR 300



Materials

Flange: Ni plated copper plate. Substrate: alumina substrate. Resistor: Metal film resistor. Case: Polycarbonate plastics. Terminals: Ni plated copper alloy to suit screw: 4-M4/10mm.

Ordering Information

Model	Power Rating	Resistance Code	Tolerance
BHPR	250	500	J
250 : 250W 300 : 300W		J = 5% Tol	
500 : 50Ω (First two digits significant, last digit: number of trailing zeros)			

BHPR