

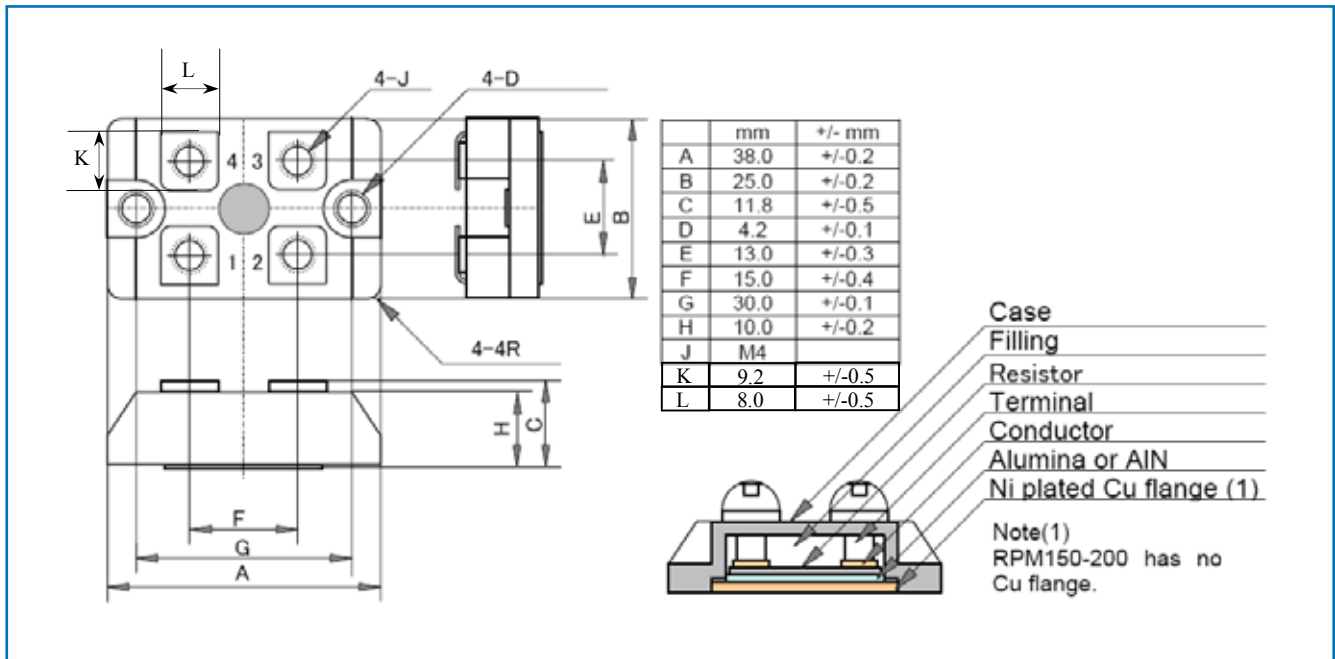
MODEL BHPR SERIES

BHPR Series

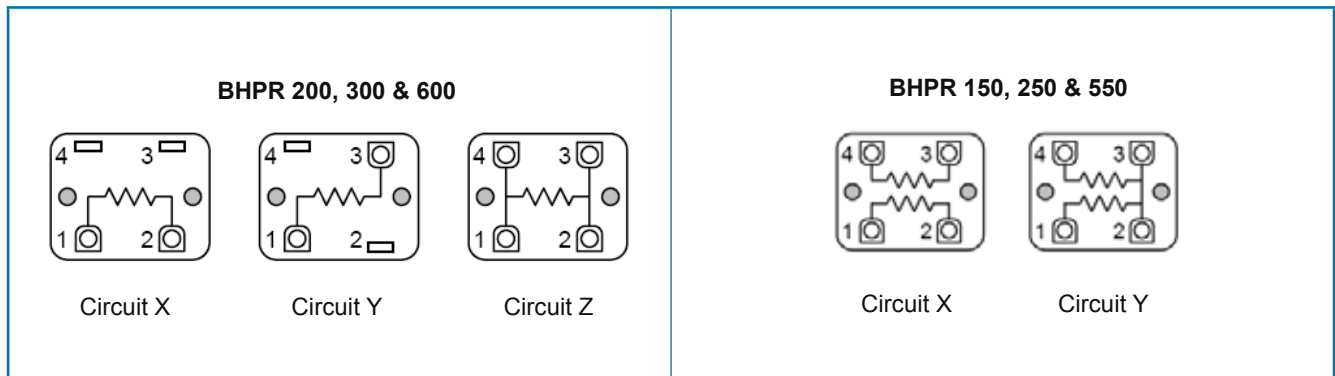
- **Non-Inductive.**
- **Rated upto 600W depending on resistor configuration.**
- **Small TO-227 package, very low thermal resistance.**
- **Superior vibration durability, with M4 screw terminals.**
- **RoHS Compliant.**
- **High power snubber resistors in power supplies.**
- **High frequency and pulse handling circuits.**
- **Pulse generator load resistors.**
- **High power crossover circuits in audio speaker systems.**



Dimensions



Schematics



General Note

TT electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT electronics' own data and is considered accurate at time of going to print.

BHPR Series

Specification

Specification Items	BHPR 150	BHPR 200	Test Conditions
Power Rating	150 Watts	200 Watts	With Heatsink, 0.9°C / W.
Resistor Schematic	Dual	Single	
Resistance Range	0.1Ω - 51KΩ	0.1Ω - 51KΩ	
Nominal Resistance	Any	Any	Within range and tolerance
TCR	±100ppm/°C	±100ppm/°C	For -55 to +155°C
Tolerance	±1%, ±5%	±1%, ±5%	
Operating Temp. Range	-55 to +155°C	-55 to +155°C	
Max Applied Voltage	E = √P*R		
Withstand Voltage	2500 VDC		60 Seconds
Load Life	ΔR ±(1.0% +0.05Ω)		25°C, 90 min On, 30 min Off, 1000 Hours
Humidity	ΔR ±(1.0% +0.05Ω)		70°C, 90 ~ 95%RH, DC 0.1W, 1000 Hours
Temperature Cycle	ΔR ±(1.0% +0.05Ω)		-55°C 30 min, +120°C 30 min, 20 cycles
Short Term Overload	ΔR ±(0.25% +0.05 Ω)		Rated Power * 2.5, 2.5 seconds, with Heatsink
Solder Heat	ΔR ±(0.25% +0.05Ω)		350°C ±5°C, 3 seconds
Insulation Resistance	Over 1000 MegΩ		Between Terminals and Flange.
Vibration	ΔR ±(0.25% +0.05Ω)		

Specification Items	BHPR 250	BHPR 300	Test Conditions
Power Rating	250 Watts	300 Watts	At Flange Temp -55 to +25°C
Resistor Schematic	Dual	Single	
Resistance Range	0.1Ω - 51KΩ	0.1Ω - 51KΩ	
Nominal Resistance	Any	Any	Within range and tolerance
TCR	±100ppm/°C	±100ppm/°C	For -55 to +155°C
Tolerance	±1%, ±5%	±1%, ±5%	
Operating Temp. Range	-55 to +155°C	-55 to +155 °C	
Max Applied Voltage	E = √P*R		
Withstand Voltage	2500 VDC		60 Seconds
Load Life	ΔR ±(1.0% +0.05Ω)		25°C, 90 min On, 30 min Off, 1000 Hours
Humidity	ΔR ±(1.0% +0.05Ω)		70°C, 90 ~ 95%RH, DC 0.1W, 1000 Hours
Temperature Cycle	ΔR ±(1.0% +0.05Ω)		-55°C 30 min, +120°C 30 min, 20 cycles
Short Term Overload	ΔR ±(0.25% +0.05Ω)		Rated Power * 2.5, 2.5 seconds, with Heatsink
Solder Heat	ΔR ±(0.25% +0.05Ω)		350°C ±5°C, 3 seconds
Insulation Resistance	Over 1000 MegΩ		Between Terminals and Flange.
Vibration	ΔR ±(0.25% +0.05Ω)		

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Specification (cont.)

Specification Items	BHPR 550	BHPR 600	Test Conditions
Power Rating	600 Watts	600 Watts	With Heatsink, 0.9°C / W.
Resistor Schematic	Dual	Single	
Resistance Range	50Ω - 1KΩ	50Ω - 1KΩ	
Nominal Resistance	Any	Any	Within range and tolerance
TCR	±100ppm/°C	±100ppm/°C	For -55 to +155°C
Tolerance	±1%, ±5%	±1%, ±5%	
Operating Temp. Range	-55 to +155°C	-55 to +155°C	
Max Applied Voltage	$E = \sqrt{P \cdot R}$		
Withstand Voltage	2500 VDC		60 Seconds
Load Life	$\Delta R \pm(1.0\% +0.05\Omega)$		25°C, 90 min On, 30 min Off, 1000 Hours
Humidity	$\Delta R \pm(1.0\% +0.05\Omega)$		70°C, 90 ~ 95%RH, DC 0.1W, 1000 Hours
Temperature Cycle	$\Delta R \pm(1.0\% +0.05\Omega)$		-55°C 30 min, +120°C 30 min, 20 cycles
Short Term Overload	$\Delta R \pm(0.25\% +0.05\Omega)$		Rated Power * 2.5, 2.5 seconds, with Heatsink
Solder Heat	$\Delta R \pm(0.25\% +0.05\Omega)$		350°C ±5°C, 3 seconds
Insulation Resistance	Over 1000 MegΩ		Between Terminals and Flange.
Vibration	$\Delta R \pm(0.25\% +0.05\Omega)$		

General Note

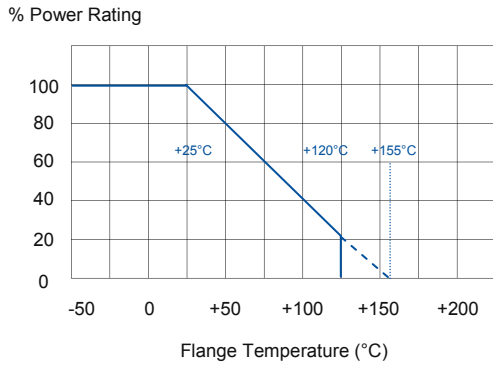
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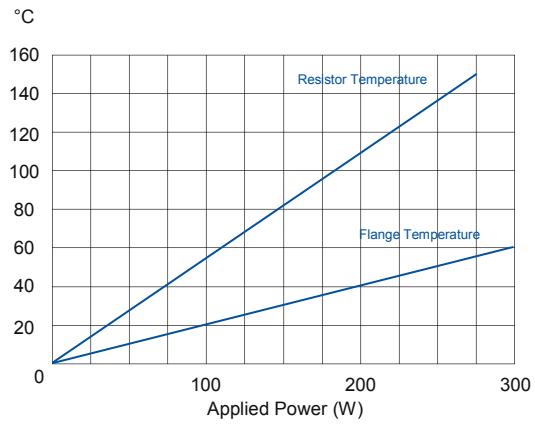
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Performance

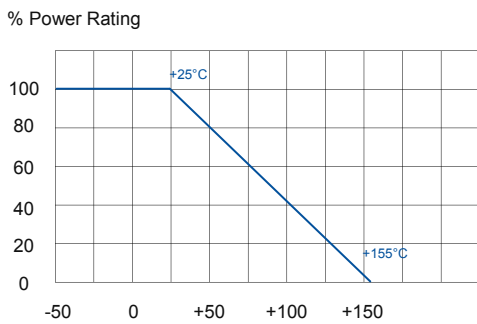
Derating Curve, BHPR 150, 200, 250 & 300



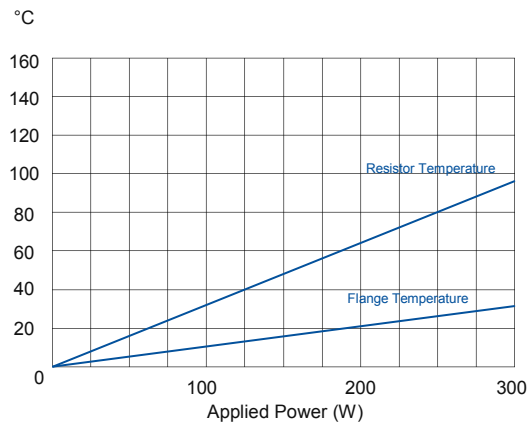
Temperature Rise, BHPR 200 on 0.2°C / W Heatsink



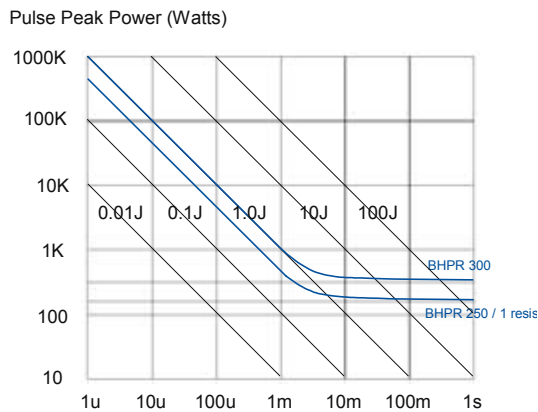
Derating Curve, BHPR 550 & 600



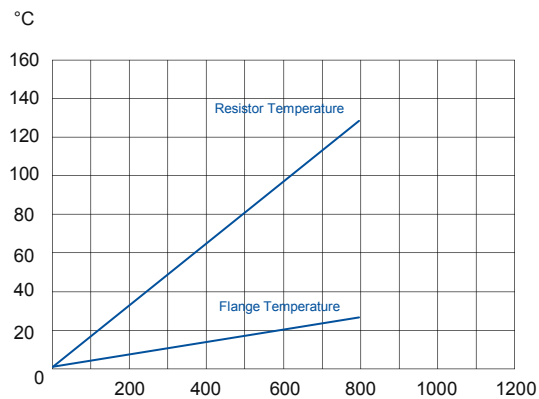
Temperature Rise, BHPR 300 on 0.1°C / W Heatsink



Pulse Operation Durability



Temperature Rise, BHPR 600



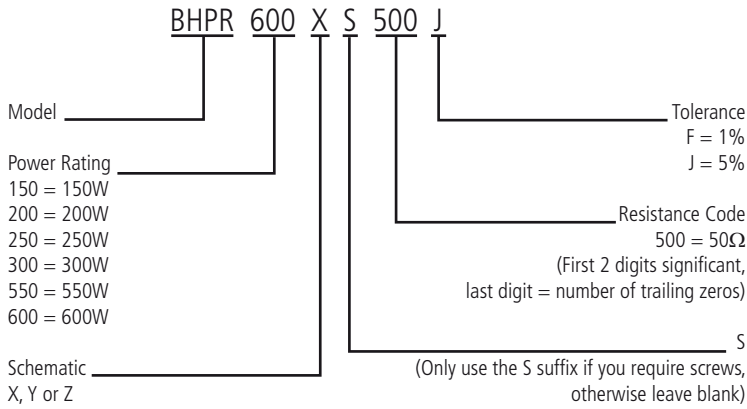
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Ordering Information



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