Resistors



3W to 50W Planar Shock / Vibration **Proof High Power Resistors**

BPR Series

- Non-Inductive planar package
- High power density.
- Thin package for high density PCB installation.
- Power dissipated above the board.
- Superior vibration durability

Applications

- Ideal for extreme mechanically stressed environments.
- Power supply pre-load resistors.
- **UPS** systems
- Snubber and pulse handling circuits.
- Pulse generator load resistors.
- In-rush current protection
- **Bleeder Resistors**

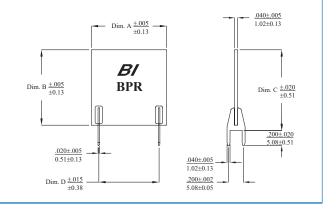


All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Specification, Dimensions and Materials

Model	BPR 3	BPR 5	BPR 7	BPR 10	BPR 30	BPR 50
Dim A	0.50	0.50	1.00	1.00	2.10	2.10
	12.70	12.70	25.40	25.40	53.34	53.34
Dim B	0.60	1.00	0.75	1.00	1.40	2.00
	15.24	25.40	19.05	25.40	35.56	50.80
Dim C	0.67	1.07	0.82	1.07	1.47	2.07
	17.02	27.18	20.82	27.18	37.34	52.58
Dim D	0.30	0.30	0.80	0.80	1.90	1.90
	7.62	7.62	20.32	20.32	48.26	48.26

Lead: Tin Plated Copper Alloy Substrate: 96% Alumina Resistor: Thick Film



Notes:

1. Contact factory for custom products, non-standard values and tolerances.

Items	Specification	Conditions
Power Rating	3W, 5W, 7W, 10W, 30W & 50W	@ ambient temp 70°C (3 - 7W), 50°C (10 - 30W) & 25°C (50W)
Operating Voltage Max	300Vac, 500VDC	
Resistance Range	BPR3-30: 0.1Ω to $200~\text{k}\Omega$ BPR50: 1Ω to $1~\text{k}\Omega$	Extended resistance range available.
TCR	100 ppm/°C	For -55 to +155°C and above 1Ω
Tolerance	+/-5%, optional 1%, 2%	
OperatiingTemp. Range	-55 - +155 °C	
Dielectric Withstand Voltage	5KV minimum	
Mechanical Shock	ΔR +/- 0.25 %	100G.
Load Life	ΔR +/- 2.0 %	90 min. ON, 30 min.OFF, 1000 hours.
Humidity	ΔR +/- 0.5 %	85°C, 85% RH, DC 0.1W, 1000 hours.
Temperature Cycle	ΔR +/- 0.5%	-55°C, 30 min.,+155°C 30min., 5cycles.
Solder Heat (Max)	ΔR +/- 0.25 %	250+/-5°C, 10 seconds,
Solderability	Min 95% coverage	230+/-5°C, 5 seconds.
Insulation Resistance	Over 1000 MΩ	Between terminals and metal back plate.
Vibration	ΔR +/- 0.25 %	20G, 10Hz to 2 KHz.

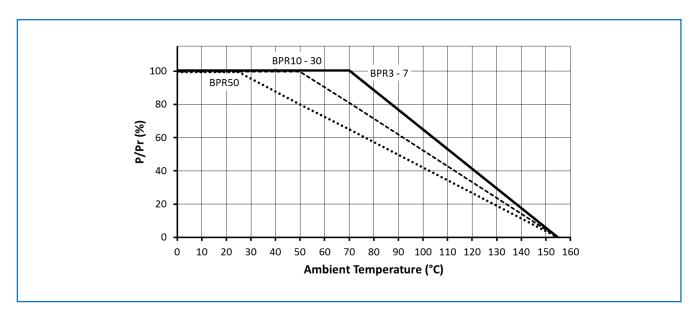
BI Technologies IRC Welwyn

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Derating Curve



Ordering Information

Example: BPR10500F (BPR10, 50 ohms ±1%, Pb-free)



1	2	3
Туре	Value	Tolerance
BPR3	2 digits + multiplier	F = ±1%
BPR5	xRx for values <10 ohms	G = ±2%
BPR7	0Rxxx for values <1 ohm	J = ±5%
BPR10		
BPR30		
BPR50		