# **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

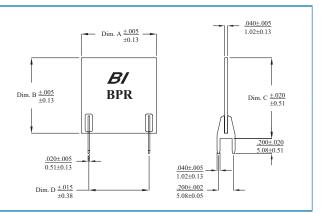


**Electronics** 

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: 0.1 $\Omega$ to 200 k $\Omega$ BPR50: 1 $\Omega$ to 1 k $\Omega$	Extended resistance range available.	
TCR	100 ppm/°C	For -55 to +155°C and above $1\Omega$	
Tolerance	+/-5%, optional 1%, 2%		
DperatiingTemp. 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.	

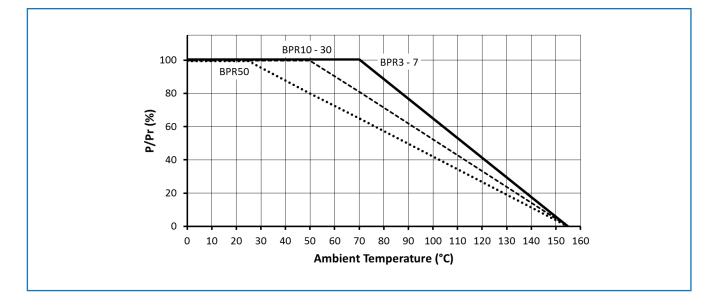
#### General Note

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.

### BI Technologies IRC Welwyn



### **Derating Curve**



## **Ordering Information**

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

BPR10	500	F
1	2	3

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		

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.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Thin Film Resistors - Through Hole category:

Click to view products by TT Electronics manufacturer:

Other Similar products are found below :

 RESISTOR-0125-A
 MBA02040C3249FC100
 MRS16000C2200FCT00
 MRS16000C1501FCT00
 MRS16000C6803FCT00

 MRS16000C2703FCT00
 MRS16000C4703FCT00
 MBA02040C1209FCT00
 MBA02040C2701FCT00
 MBA02040C3301FCT00

 MBA02040C3901FCT00
 MBA02040C5600FCT00
 MBA02040C6809FC100
 MBB02070D9312BCT00
 MBA02040C1008FCT00

 MBA02040C1200FCT00
 MBA02040C2202FCT00
 MBA02040C4754FRP00
 MBA02040C6041FRP00
 MBB02070C1821FRP00

 MBB0207IC1001FCT00
 MFP1-10RJI
 MFP2-100KJI
 MFR4-1K0FI
 MFR4-220RFI
 MFR4-33RFI
 BPC5563K
 BPR5473J
 W21-1R2JI
 W31 

 R056JA1
 WR404140A6803J4100
 MFR3-47KFC
 MFR4-1R0FI
 MFR4-390RFI
 MRS25000C2373FC100
 CF18JT47K0

 MRS25000C1051FC100
 MFR5-15RFI
 MBB0207VD1004BC100
 BPC10203J
 RSF12JT150R
 RC14JT39K0
 MBA02040C6980FC100

 MRS25000C2002FC100
 MRS25000C8200FC100
 MBA02040C1878FC100
 MBE04140C1200FC100
 MBA02040C1600FC100

 MBA02040C7508FC100
 TNP10SC20R0FE
 MBA02040C1878FC100
 MBE04140C1200FC100
 MBA02040C1600FC100