

3W to 10W Planar High Power Resistors

BPC Series

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

Applications

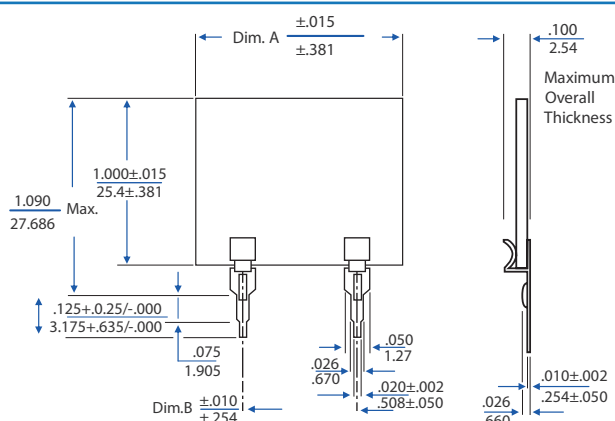
- Power supply pre-load resistors.
- UPS systems
- Snubber and pulse handling circuits.
- Pulse generator load resistors.
- In-rush current protection
- Bleeder Resistors



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

Specification (Dimensions)

Model	BPC3	BPC5	BPC7	BPC10
Dim A	0.40 10.16	0.50 12.70	0.75 19.05	1.00 25.40
Dim B	0.20 5.08	0.20 5.08	0.50 12.70	0.80 20.32



Materials

Leads:
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, 7.5W & 10W	@ ambient temp < 70°C
Operating Voltage Max	300Vac, 500VDC	
Resistance Range	0.1Ω to 200 KΩ	Extended resistance range available.
TCR	100 ppm/°C	For -55 to +155°C and above 1Ω.
Tolerance	10, optional +/- 5%, 1%, 2%	
Operating Temp. Range	-55 - +155 °C	
Dielectric Withstand Voltage	5000 Volts minimum	
Mechanical Shock	ΔR +/- 0.25 %	100G.
Vibration	ΔR +/- 0.25 %	20G, 10 to 2KHz
Load Life	ΔR +/- 2.0 %	70°C, 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 %	260+/-5°C, 10 seconds,
Solderability	Min 95% coverage	230+/-5°C, 5 seconds.
Insulation Resistance	Over 1000 MΩ	

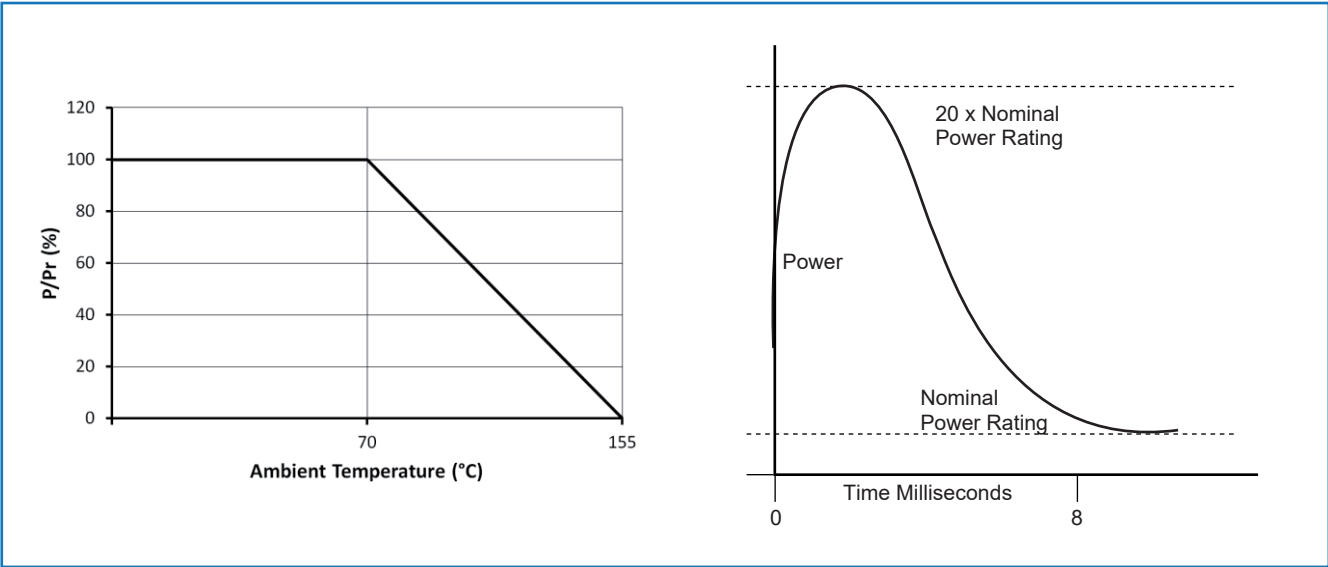
General Note

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.

Derating Curve

Overload Characteristic



Ordering Information

Example: **BPC10103G** (BPC10, 10 kilohms $\pm 2\%$, Pb-free)

B	P	C	1	0	1	0	3			G
			1		2			3		

1	2	3
Type	Value	Tolerance
BPC3	2 digits + multiplier	F = $\pm 1\%$
BPC5	xRx for values <10 ohms	G = $\pm 2\%$
BPC7	0Rxxx for values <1 ohm	J = $\pm 5\%$
BPC10		K = $\pm 10\%$

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