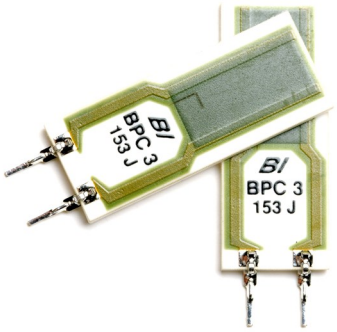
Planar High Power Resistors

BPC Series



Features:

- Ratings 3W to 10W
- Non-inductive planar package
- High power density
- Thin package for high density PCB installation
- Power dissipated above the board

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

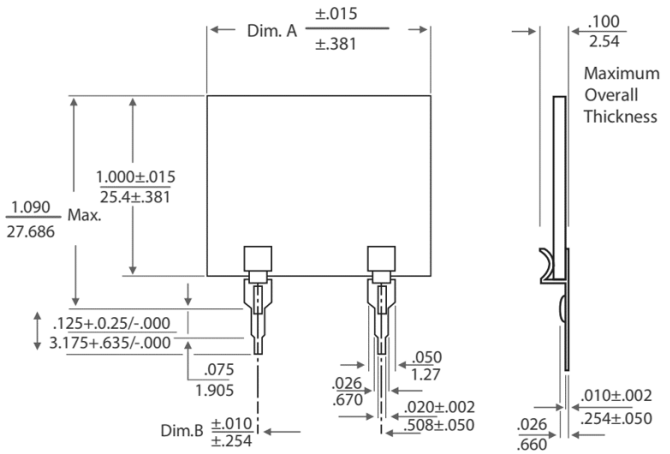
Electrical Data

		BPC3	BPC5	BPC7	BPC10
Power rating at 70°C	W	3	5	7.5	10
Limiting element voltage	V	300Vrms or 500Vdc			
Resistance range [1]	Ω	R10 to 200K			
Resistance tolerance [1]	%	1, 2, 5, 10			
TCR (-55 to +155°C)	ppm/°C	>1R0: ±100			
Ambient temperature range	°C	-55 to +155			
Dielectric withstand	V	5000			
Standard values [1]		E24 or decade multiples of 5 preferred			

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

Physical Data

Dimensions in inches / mm and weight in g			
	A	B	Wt. nom.
BPC3	0.4 10.16	0.2 5.08	1.1
BPC5	0.5 12.7	0.2 5.08	1.3
BPC7	0.75 19.05	0.5 12.7	2.0
BPC10	1 25.4	0.8 20.32	2.9



Construction

A thick film resistor is printed and fired onto a 96% alumina ceramic substrate, to which termination pins are fitted.

Terminations

A matt tin plated (100% Sn) copper alloy leadframe is used.

Marking

BPC resistors are marked with product brand (BI), type, value code and tolerance code. The marking is resistant to all normal industrial cleaning solvents suitable for printed circuits.

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.

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Planar High Power Resistors

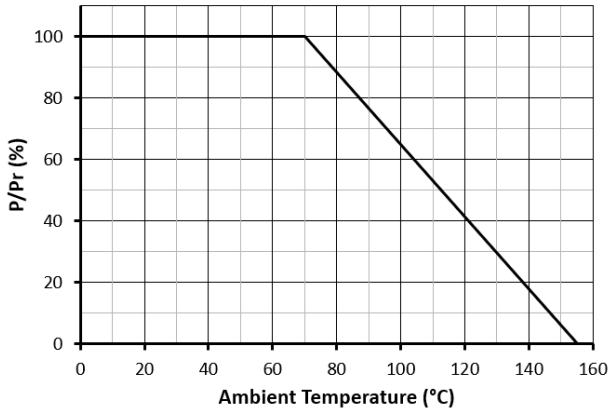
BPC Series

Performance Data

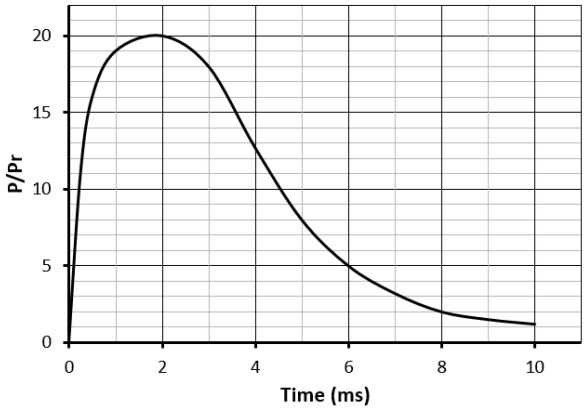
Test	Method		Maximum
Load at rated power	Cyclic load, 1000 hours at 70°C	±ΔR%	2
Humidity	85°C, 85%RH, 1000 hours, dc bias, 0.1W	±ΔR%	0.5
Temperature cycle	-55 to +155°C, 30 minutes dwell, 5 cycles	±ΔR%	0.5
Vibration	20g, 10 to 2000Hz	±ΔR%	0.25
Mechanical shock	100g	±ΔR%	0.25
Resistance to solder heat	260 ±5°C for 10s	±ΔR%	0.25
Solderability	230 ±5°C for 5s		>95% coverage
Insulation resistance		MΩ	>1000

Thermal & Pulse Data

Temperature Derating



Example Pulse Withstand



Ordering Procedure

Example: BPC10103G (BPC10, 10 kilohms ±2%, Pb-free)

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

1 Type	2 Value	3 Tolerance	Termination & Packing
BPC3	E24 = 2 digits + multiplier xRx for values 1R0 to <10R 0Rxxx for values <1R0	F = ±1%	Pb-free, tray packed, 50/tray
BPC5		G = ±2%	
BPC7		J = ±5%	
BPC10		K = ±10%	

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