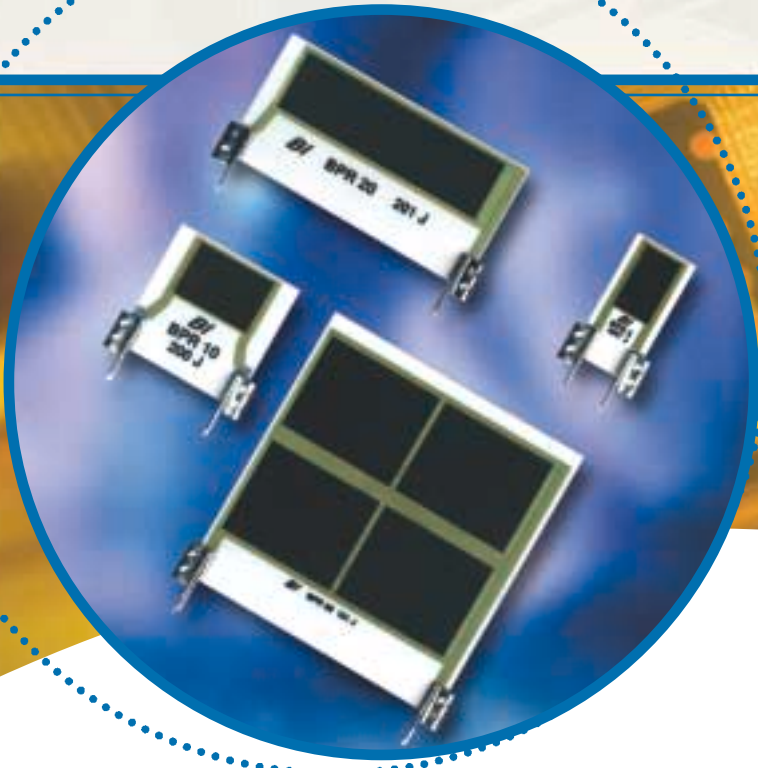


Model BPR



Non-Inductive Planar
Shock and Vibration Proof
High Power Thick Film Resistor
3, 5, 7.5, 10, 20, 30, 40, 50 Watts

Applications

- Switching Power Supplies
- Snubbers
- In-rush Current Suppression
- Current Limiters

Features

- High power density
- Power is dissipated above circuit board
- Low temperature solder
- Non-flammable
- Non-Inductive planar
- Ideal for high shock and vibration environments

Electrical

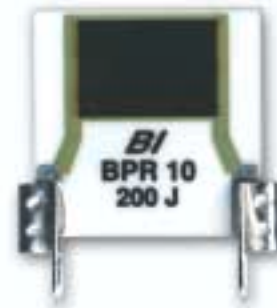
Resistance Range, Ohms	1Ω to 200K
Resistance Tolerances	Standard 5%, Optional 1% & 2%
Operating Temperature Range	-55°C to +155°C
Temperature Coefficient of Resistance, Maximum	100ppm/°C
Power Ratings, at 70°C	3, 5, 7.5, 10, 20, 30, 40, 50 Watts
Operating Voltage, Maximum	500V or \sqrt{PR} , whichever is less
Peak Current	15 x rated current up to 8ms ($\Delta R \pm 0.5\%$)
Dielectric Strength	750V

Standard Resistance Values (Ohms)

Value Ohms	1	2	5	10	20	50	100	200	500	1K	2K	5K	10K	100K	200K
Code	1R0	2R0	5R0	100	200	500	101	201	501	102	202	502	103	105	204

Mechanical

Lead Material	Solder Tinned Phosphor Bronze
Substrate Material	96% Alumina
Resistor Material	Thick Film

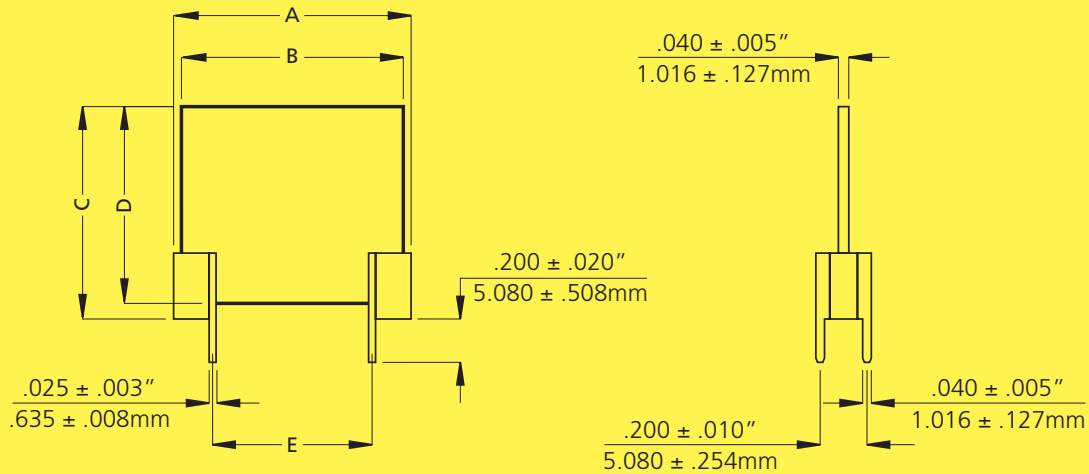


Environmental (Per MIL-R-83401)

Thermal Shock	$\Delta R \pm 0.50\%$
Terminal Strength	$\Delta R \pm 0.25\%$
Short Time Overload 2 x rated Power for 5 Seconds	$\Delta R \pm 0.50\%$
Moisture Resistance	$\Delta R \pm 0.50\%$
Mechanical Shock	100 G, $\Delta R \pm 0.25\%$
Vibration	20G's, 10 Hz to 2 kHz $\Delta R \pm 0.25\%$
Low Temperature Storage	$\Delta R \pm 0.25\%$
High Temperature Exposure	$\Delta R \pm 0.25\%$
Load Life 1,000 Hours	$\Delta R \pm 2.00\%$
Resistance to Solder Heat	$\Delta R \pm 0.25\%$
Dielectric Withstanding Voltage, Minimum	1000V
Marking Permanency	MIL-STD-202, Method 215
Lead Solderability	MIL-STD-202, Method 208
Flammability	UL 94V-0 Rated
Storage	-55°C to +155°C

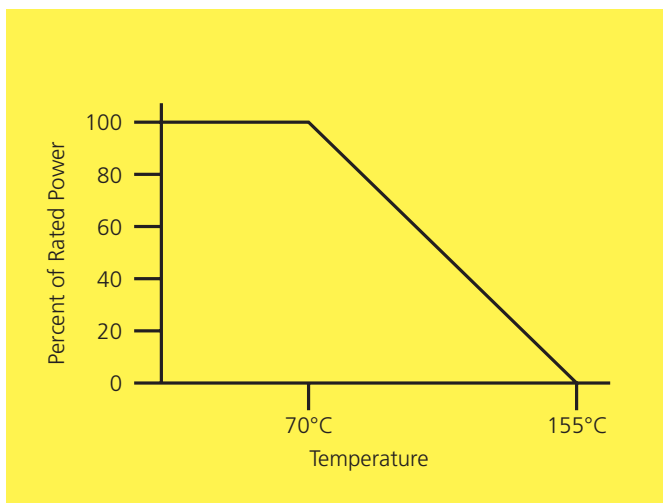
- Specifications subject to change without notice.
- Contact factory for custom products, non standard values and tolerances.

Outline Dimensions (Inch/mm)

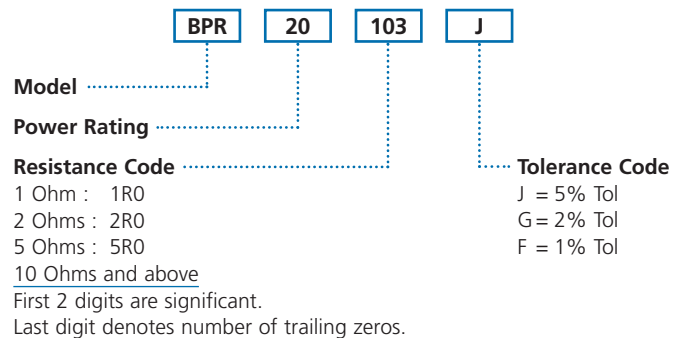


Model/Watts	Dimensions in inches					Dimensions in millimetres				
	A	B	C	D	E	A	B	C	D	E
BPR 3	0.65	0.50	0.67	0.60	0.30	16.5	12.7	17.0	15.2	7.6
BPR 5	0.65	0.50	1.07	1.00	0.30	16.5	12.7	27.2	25.4	7.6
BPR 7	1.15	1.00	0.82	0.75	0.80	29.2	25.4	20.8	19.1	20.3
BPR 10	1.15	1.00	1.07	1.00	0.80	29.2	25.4	27.2	25.4	20.3
BPR 20	2.15	2.00	1.07	1.00	1.80	54.6	50.8	27.2	25.4	45.7
BPR 30	2.25	2.10	1.47	1.40	1.90	57.2	53.3	37.3	35.6	48.3
BPR 40	2.25	2.10	1.97	1.90	1.90	57.2	53.3	50.0	48.3	48.3
BPR 50	2.25	2.10	2.27	2.20	1.90	57.2	53.3	57.7	55.9	48.3
Tolerance	±0.020	±0.005	±0.020	±0.005	±0.015	±0.5	±0.1	±0.5	±0.2	±0.4

Power Derating Curve



Ordering Information



Packaging

BPR 3 to BPR 10 - 50 per tray.
 BPR 20 to BPR 50 - 20 per tray.

- Specifications subject to change without notice.
- Contact factory for custom products, non standard values and tolerances.

BI Technologies - SMT

Company Profile

BI Technologies, SMT Division is a World Class manufacturer of thick film Passive Components. The company was established in 1958 in Glenrothes, Scotland. BI Technologies have earned a great reputation as a high quality, high volume, cost effective and responsive supplier of thick film passive components for telecommunications, computer, automotive, medical and industrial applications.



Product Range

- Packaged SIL, DIL and Surface Mount Resistor Networks
- Chip Resistor Arrays
- Chip Resistor - Capacitor Arrays
- Planar Power Resistors
- Surge Resistors
- Thick Film Substrates
- Custom Thick Film products
- High Voltage Resistors and Networks

BI Technologies - ECD

Company Profile

BI Technologies has been an innovator and leader in electronic components for more than 50 years manufacturing products for communication, computer, industrial and automotive applications.

BI Technologies serves a global customer base with manufacturing locations in the United States, Mexico, Scotland, Japan, China and Malaysia.



Product Range

- Trimming and Precision Potentiometers
- Position Sensors
- Chip Resistor Arrays
- Resistor Networks
- Integrated Passive Networks
- Inductors
- Transformers
- Turns Counting Dials
- Hybrid Microelectronics and Custom Integration Products

BI Technologies - MCD

Company Profile

BI Technologies, Magnetic Component Division, headquartered in Fullerton, California, with a manufacturing base in Kuantan, Malaysia, is a world leader in miniature surface mount high power inductors. The magnetic material and manufacturing expertise of various inductors, choke coils, transformers and assemblies has expanded the customer and market base into automotive, medical, computer, data communication and industrial in addition to other specialized magnetic assembly applications.



Product Range

- Transformers both surface mount and through hole
- Surface Mount high powered inductors
- Toroidal inductors (through hole and surface mount)
- High power specialty laminate transformers
- Data communication modules, filters, and transformers for ethernet and DSL
- Common mode filters and chokes
- Planar transformer solutions

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