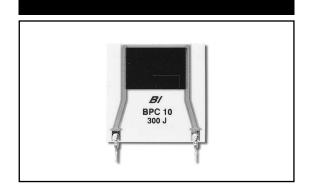
MODEL BPC SERIES

Noninductive Planar Thick Film Power Resistor Network



STANDARD TYPES

| BPC 3 | 3 Watts |
|--------|-----------|
| BPC 5 | 5 Watts |
| BPC 7 | 7.5 Watts |
| BPC 10 | 10 Watts |

FEATURES

- · High power density
- · Power is dissipated above circuit board
- Low temperature solder
- · Board layout flexibility

APPLICATIONS

- · Inrush current limiters
- · Power supply preloads

Resistance Tolerances

- Snubber circuits
- UPS systems

ELECTRICAL

Resistance Range, Ohms BPC 3, BPC 5, BPC 7: 1 to 200K

BPC 10: 3 to 200K

±10%

Optional: $\pm 1\%$, $\pm 2\%$, $\pm 5\%$ (<10 Ohms = $\pm 2\%$, $\pm 5\%$)

Operating Temperature Range -55°C to +125°C

Temperature Coefficient of Resistance, Maximum ±100ppm/°C

Power Ratings, Watts ±100ppm/°C 3W, 5W, 7.5W, 10W

Operating Voltage, Maximum 300 Vac, 500 Vdc

Peak Current 20 x rated current up to 8 ms (Δ R ±0.5%)

Specifications subject to change without notice.



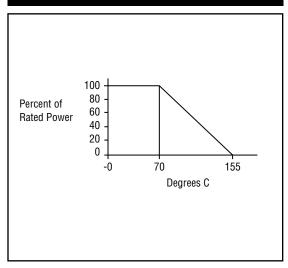
MECHANICAL

| Lead Material | Solder Tinned Copper Alloy |
|--------------------|----------------------------|
| Substrate Material | 96% Alumina |
| Resistor Material | Ruthenium Oxide |

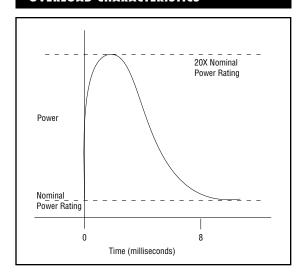
ENVIRONMENTAL (PER MIL-R-83401)

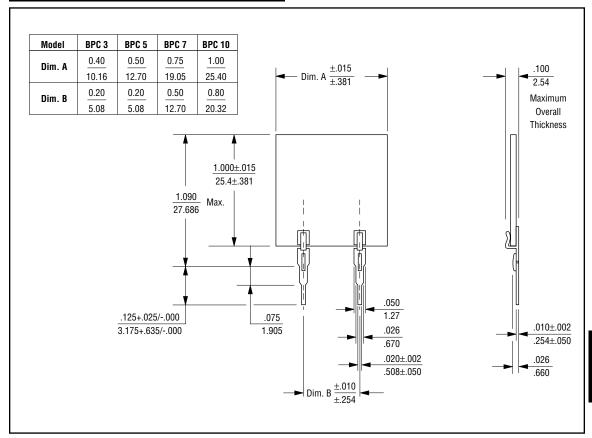
| Thermal Shock | ΔR 0.50% |
|--|------------------------------|
| Terminal Strength | ΔR 0.25% |
| Moisture Resistance | ΔR 0.25% |
| Mechanical Shock | 30G's, ΔR 0.25% |
| Vibration | 10G's, 10 to 500 Hz ΔR 0.25% |
| Low Temperature Storage | ΔR 0.25% |
| High Temperature Exposure | ΔR 0.25% |
| Load Life, 1,000 Hours | ΔR 1.00% |
| Resistance to Solder Heat | ΔR 0.25% |
| Dielectric Withstanding Voltage, Minimum | 5,000 Vdc |
| 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 |

POWER DERATING CURVE



OVERLOAD CHARACTERISTICS





STANDARD RESISTANCE VALUES (OHMS)

| Value | 1 | 2 | 5 | 10 | 20 | 50 | 100 | 200 | 500 | 1K | 2K | 5K | 10K | 20K | 50K |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Code | 1R0 | 2R0 | 5R0 | 100 | 200 | 500 | 101 | 201 | 501 | 102 | 202 | 502 | 103 | 203 | 503 |

PACKAGING

Standard: 50 per tray

ORDERING INFORMATION

