



features

- Power type current detecting resistors
- Flame retardant resistors in ceramic case
- Automatic insertion for a 5mm pitch between terminals is applicable (26 type, 58 type)
- Low inductance
- Space saving
- Marking: Alpha/numeric marking
- Products with lead-free terminations meet EU RoHS requirements

dimensions and construction



Size Code	Dimensions inches (mm)				
	A	B	C	d	P
BPR26	.335±.04 (8.5±1.0)	.512±.04 (13.0±1.0)	.157±.04 (4.0±1.0)	.024±.04 (0.6±1.0)	.354±.04 (9.0±1.0)
BPR28	.335±.04 (8.5±1.0)	.512±.04 (13.0±1.0)	.157±.04 (4.0±1.0)	.031±.04 (0.8±1.0)	.354±.04 (9.0±1.0)
BPR38	.512±.04 (13.0±1.0)	.551±.04 (14.0±1.0)	.197±.04 (5.0±1.0)	.031±.04 (0.8±1.0)	.354±.04 (9.0±1.0)
BPR58	.709±.04 (18.0±1.0)	.551±.04 (14.0±1.0)		.031±.04 (0.8±1.0)	.354±.04 (9.0±1.0)
BPR108	.669±.06 (17.0±1.5)	1.02±.06 (26.0±1.5)		.031±.04 (0.8±1.0)	.787±.04 (20.0±1.0)
BPR55	.669±.06 (17.0±1.5)	1.02±.06 (26.0±1.5)	.031±.04 (0.8±1.0)	.031±.04 (0.8±1.0)	.394±.04 (10.0±1.0)
BPR77	.787±.07 (20.0±1.8)	1.02±.06 (26.0±1.5)		.031±.04 (0.8±1.0)	.394±.04 (10.0±1.0)

ordering information

New Part #	BPR	5	8	C	F	R10	J
	Type	Power Rating	Lead Wire Diameter	Termination Material	Packaging	Nominal Resistance	Tolerance
		2: 2W 3: 3W 5: 5W 10: 10W 55: 5W+5W 77: 7W+7W	6: ø0.6mm 8: ø0.8mm Blank	C: SnCu	Nil: Straight lead F: Forming FT: Radial taping (BPR26FT, BPR58FT only)	2 significant figures +1 multiplier. "R" indicates decimal on value <10Ω. All values less than 0.1Ω are expressed in mΩ with "L" as decimal. Ex: 20mΩ - 20L	J: ±5% K: ±10%

For further information on packaging, please refer to Appendix C.

applications and ratings

Part Designation	Power Rating	T.C.R. (ppm/°C) Max.	Resistance Range		Rated Ambient Temperature	Operating Temperature Range
			J: ±5% (E12)	K: ±10% (E12)		
BPR26	2W	±350	0.01Ω 0.1Ω - 0.68Ω	0.01Ω - 0.68Ω	+70°C	-40°C to +200°C
BPR28	2W					
BPR38	3W					
BPR58	5W		0.01, 0.1Ω - 1.0Ω	0.01Ω - 1.0Ω		
BPR108	10W		—	0.05Ω, 0.1Ω - 1.0Ω		
BPR55	5W+5W		0.05Ω, 0.1Ω 0.22Ω - 0.47Ω	0.03Ω - 0.47Ω		
BPR77	7W+7W					

standard resistance

Resistance	26, 28		38		58		108		55		77	
	J: ±5%	K: ±10%	J: ±5%	K: ±10%	J: ±5%	K: ±10%	J: ±5%	K: ±10%	J: ±5%	K: ±10%	J: ±5%	K: ±10%
0.01	○	○	○	○	○	○	—	—	—	—	—	—
0.012		○		○		○	—	—	—	—	—	—
0.015		○		○		○	—	—	—	—	—	—
0.02*		○		○		○	—	—				
0.022		○		○		○	—	—				
0.027		○		○		○	—	—				
0.03*		○		○		○	—	—	○			
0.033		○		○		○	—	—				
0.039		○		○		○	—	—				
0.04*		○		○		○						
0.047		○		○		○						
0.05*		○		○		○		○	○	○		○
0.068		○		○		○						
0.082		○		○		○						
0.1	○	○	○	○	○	○		○	○	○		○
0.12	○	○	○	○	○	○				○		
0.15	○	○	○	○	○	○		○		○		
0.18	○	○	○	○	○	○		○		○		
0.22	○	○	○	○	○	○		○	○	○	○	○
0.27	○	○	○	○	○	○		○	○	○		
0.33	○	○	○	○	○	○			○	○	○	○
0.39	○	○	○	○	○	○			○	○		
0.47	○	○	○	○	○	○			○	○		
0.56	○	○	○	○	○	○						
0.68	○	○	○	○	○	○			—	—	—	—
0.82					○	○			—	—	—	—
1.00					○	○		○	—	—	—	—

○ : Available

Blank : Please consult

— : Not available

environmental applications

Derating Curve



Performance Characteristics

Parameter	Requirement ΔR		Test Method
	Limit	Typical	
Resistance	Within regulated tolerance	—	25°C (Measurement position: 10mm under from the case)
T.C.R.	Within specified T.C.R.	—	+25°C/-55°C and +25°C/+125°C (Application range; the straight style of 0.012Ω over)
Overload (Short time)	±2.0%	±1.0%	Rated power x 2.5 for 5 seconds
Resistance to Solder Heat	±2.0%	±1.0%	260°C ± 5°C, 10 seconds ± 1 second
Moisture Resistance	±5.0%	±3.0%	40°C ± 2°C, 90 - 95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±5.0%	±3.0%	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±3.0%	±2.0%	+125°C, 100 hours
Resistance to Solvent	No evidence of damage to protective coating and marking	—	After immersing the sample in I.P.A for 60 seconds ± 10 seconds, the resistor surface should be rubbed with absorbent cotton 10 times