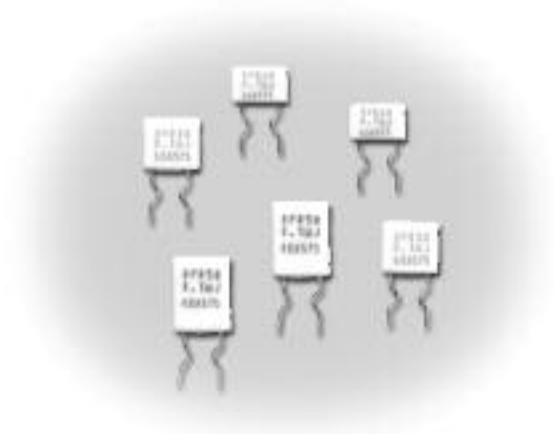
EU RoHS COMPLIANT

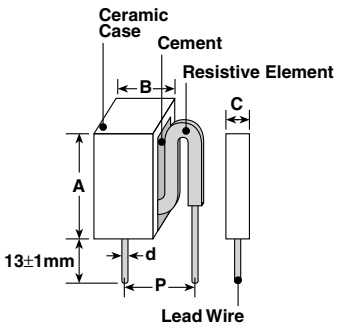


features

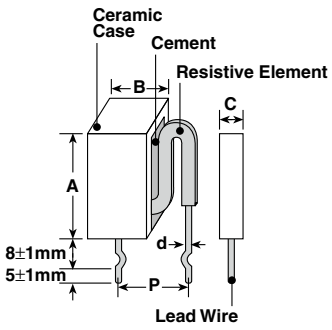
- Power type current detecting resistors
- Flame retardant resistors in ceramic case
- Automatic insertion for a 5mm pitch between terminals is applicable (26 type, 58 type)
- Low inductance
- Space saving
- Marking: Alpha/numeric marking
- Products with lead-free terminations meet EU RoHS requirements

dimensions and construction

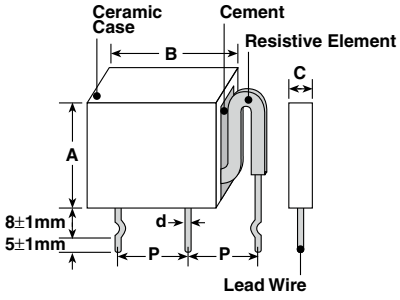
Single Straight Style



Single Forming Style

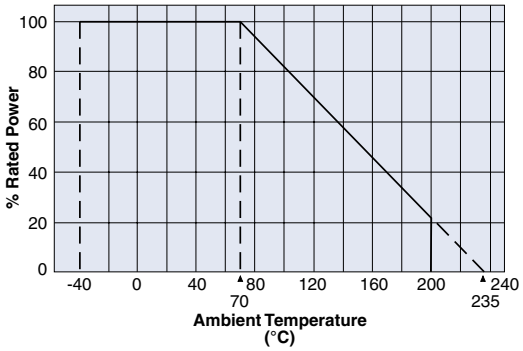


Twin Style



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)	.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)

Derating Curve



For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the above derating curve.

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	6: ø0.6mm 8: ø0.8mm	C: SnCu	Blank: Straight lead (9.0mm pitch) F: Forming (9.0mm pitch) FT: Radial taping (BPR26FT, BPR58FT only, 5.0mm pitch)	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%
	10: 10W	8: ø0.8mm				
	55: 5W+5W 77: 7W+7W	Blank				

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

 11/30/14

KOA SPEER ELECTRONICS, INC.

BPR

rectangular type metal plate resistors

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		0.01Ω, 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					

* Application range: The straight style of 0.018Ω or over

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 * Non standard E-12 Decade Value

environmental applications

Performance Characteristics

Parameter	Requirement Δ R% Limit	Typical	Test Method
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 0.018Ω over)
Overload (Short time)	±2.0%	±1.0%	Rated power x 2.5 for 5 seconds (Application range: 0.05Ω & over)
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