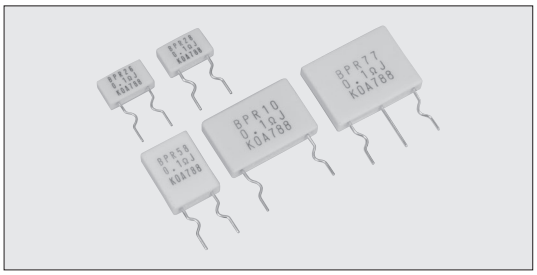
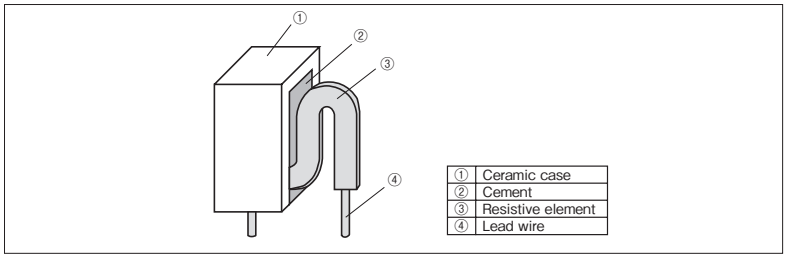
EU RoHS

BPR Rectangular Type Metal Plate Resistors



Case : Ceramic
Marking : Alphanumeric

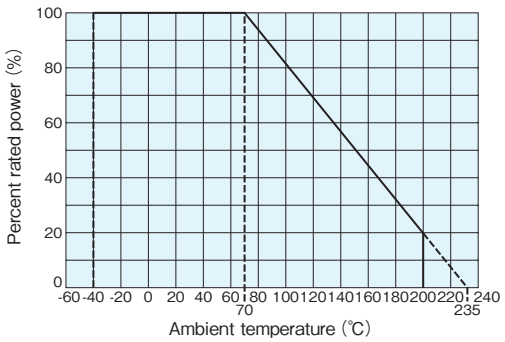
■Construction



■Features

- Power type current detecting resistors.
- Flame retardant resistors in Ceramic Case.
- Automatic insertion for a 5mm pitch between terminals is applicable. (BPR26, BPR58 Radial Taping)
- Low inductance.
- Space saving.
- Products meet EU-RoHS requirements.

■Derating Curve



For resistors operated at an ambient temperature of 70℃ or higher, the power shall be derated in accordance with the above derating curve.

■Type Designation

Example

BPR	5	8	C	F	R10	J
Product Code	Power Rating	Lead Wire Diameter	Terminal Surface Material	Taping & Forming	Nominal Resistance	Resistance Tolerance
	2:2W 3:3W 5:5W	6:φ0.6mm 8:φ0.8mm	C:SnCu	Nil:Straight lead (Pitch 9.0mm) F:Forming (Pitch 9.0mm) FT:Radial taping (BPR26FT-BPR58FT only) (Pitch 5.0mm)	3 digits Ex. 0.1Ω:R10 47mΩ:47L	J:±5% K:±10%
	10:10W	8:φ0.8mm				
	55:5W+5W 77:7W+7W	Blank				

Resistance Value (Ω)	3 digits
10m～82m	10L～82L
0.1～0.82	R10～R82
1	1R0

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.
For further information on radial taping, please refer to APPENDIX C on the back page.

■Dimensions and Ratings

Type	Power Rating	Resistance Range (Ω)※1		T.C.R. (×10⁻⁶/K)	Dimensions (mm)					Weight (g/1,000pcs)
		J : ±5% (E12)	K : ±10% (E12)		A	B	C±1	d±0.1	P±1	
BPR26	2W	0.01 0.1～0.68	0.01～0.68	±350※2	8.5±1.0	13.0±1.0	4.0	0.6	9.0	1,190
BPR28	2W							0.8		1,220
BPR38	3W				13.0±1.0	14.0±1.0	5.0			2,240
BPR58	5W	0.01, 0.1～1.0	0.01～1.0		18.0±1.0					3,470
BPR108	10W	—	0.05, 0.1～1.0		17.0±1.5	26.0±1.5			20.0	5,560
BPR55	5W+5W	0.05, 0.1 0.22～0.47	0.03～0.47						10.0	5,830
BPR77	7W+7W				20.0±1.8					7,060

Rated Ambient Temperature : +70℃
Operating Temperature Range : −40℃～+200℃
Rated voltage = $\sqrt{\text{Power Rating} \times \text{Resistance value}}$
※1 See table standard resistance
※2 Application range : The straight style of 0.018Ω over

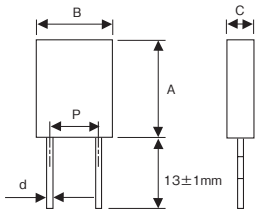
Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.
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Malfunction or failure of the products in such applications may cause loss of human life or serious damage.

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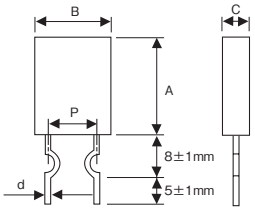
■Dimensions (mm)

Please inquire of us if the dimensions for the case and lead position are required.

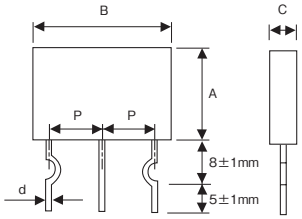
Single Straight Style



Single Forming Style



Twin Style



■Standard Resistance

Resistance (Ω)	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		○		○		○	—	—	—	—	—	—
0.018		○		○		○	—	—	—	—	—	—
0.02※3		○		○		○	—	—				
0.022		○		○		○	—	—				
0.027		○		○		○	—	—				
0.03※3		○		○		○	—	—		○		
0.033		○		○		○	—	—				
0.039		○		○		○	—	—				
0.04※3		○		○		○						
0.047		○		○		○						
0.05※3		○		○		○		○	○	○		○
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					○	○		○	—	—	—	—

※3 : Out of E12 Series
○ : Available
Blank : Please consult.
— : Not available

■Performance

Test Items	Performance Requirements ΔR%		Test Methods
	Limit	Typical	
Resistance	Within specified tolerance	—	25℃ (Measurement position : 10mm under from the case)
T.C.R.	Within specified T.C.R.	—	+25℃/+125℃ (Application range : The straight style of 0.018Ω over)
Overload (Short time)	2	1	Rated voltage×2.5 for 5s (Application range : 0.05Ω over)
Resistance to soldering heat	2	1	260℃±5℃, 10s±1s
Moisture resistance	5	3	40℃±2℃、90%～95%RH, 1000h 1.5h ON/0.5h OFF cycle
Endurance at 70℃	5	3	70℃±2℃、1000h 1.5h ON/0.5h OFF cycle
High temperature exposure	3	2	+125℃、100h
Resistance to solvent	No evidence of damage to protective coating and marking	—	After immersing the sample in I.P.A for 60s ±10s, the resistor surface should be rubbed with absorbent cotton 10 times.

■Precautions for Use

- In the resistance values of 50mΩ or under, the resistance value after soldering may change depending on the size of pad pattern or solder amount. Make sure the effect of decline/increase of resistance value before designing.
- Recommendation condition of a solderability.
  Peak temperature : 260℃±5℃　　Peak time : 5s～10s

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.
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