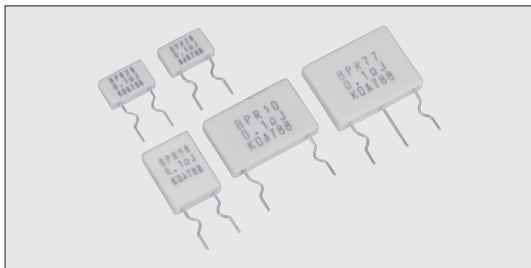
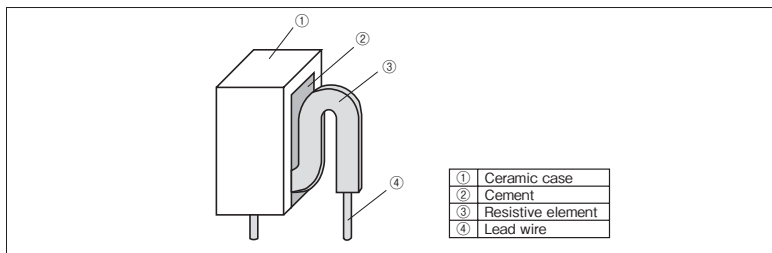


## BPR Rectangular Type Metal Plate Resistors



Case : Ceramic  
Marking : Alphanumeric

### Construction



### Features

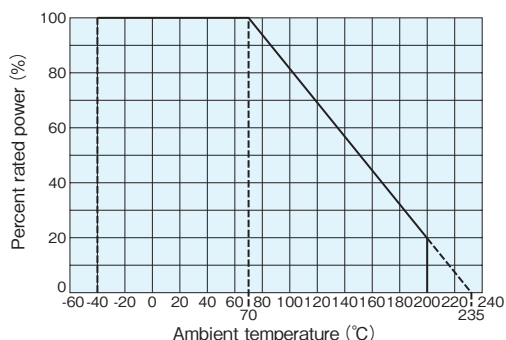
- Power type current detecting resistors.
- Flame retardant resistors in Ceramic Case.
- Automatic insertion for a 5mm pitch between terminals is applicable. (BPR26, BPR58 Radial Taping)
- Low inductance.
- Space saving.
- Products meet EU-RoHS requirements.

### 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 10: 10W 55: 5W+5W 77: 7W+7W	6: φ 0.6mm 8: φ 0.8mm 8: φ 0.8mm Blank	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%

### Derating Curve



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

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) <sup>※1</sup>		T.C.R. (×10 <sup>-6</sup> /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 <sup>※2</sup>	8.5±1.0	13.0±1.0	4.0	0.6	9.0	1,190	
BPR28	2W				13.0±1.0	14.0±1.0	5.0	0.8		20.0	1,220
BPR38	3W				18.0±1.0						2,240
BPR58	5W	0.01, 0.1~1.0	0.01~1.0		17.0±1.5	26.0±1.5			10.0		3,470
BPR108	10W	—	0.05, 0.1~1.0		20.0±1.8		5,560				
BPR55	5W+5W	0.05, 0.1	0.03~0.47						5,830		
BPR77	7W+7W	0.22~0.47							7,060		

Rated Ambient Temperature : +70°C

Operating Temperature Range : -40°C~+200°C

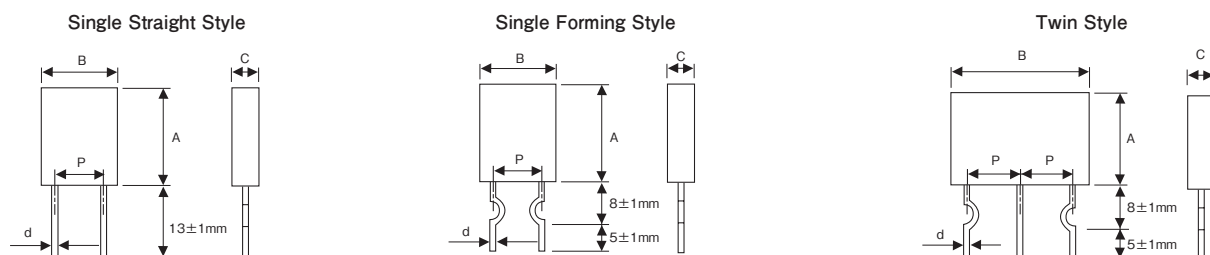
Rated voltage = √(Power Rating × Resistance value)

※1 See table standard resistance

※2 Application range : The straight style of 0.018Ω over

## ■ Dimensions (mm)

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



## ■ 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 <sup>※3</sup>		○		○		○	—	—	—	—	—	—
0.022		○		○		○	—	—	—	—	—	—
0.027		○		○		○	—	—	—	—	—	—
0.03 <sup>※3</sup>		○		○		○	—	—		○		
0.033		○		○		○	—	—				
0.039		○		○		○	—	—				
0.04 <sup>※3</sup>		○		○		○						
0.047		○		○		○						
0.05 <sup>※3</sup>		○		○		○		○	○	○		○
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°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	1	Rated voltage×2.5 for 5s (Application range : 0.05Ω over)
Resistance to soldering heat	2	1	260°C±5°C, 10s±1s
Moisture resistance	5	3	40°C±2°C, 90%~95%RH, 1000h 1.5h ON/0.5h OFF cycle
Endurance at 70°C	5	3	70°C±2°C, 1000h 1.5h ON/0.5h OFF cycle
High temperature exposure	3	2	+125°C, 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°C±5°C    Peak time : 5s~10s