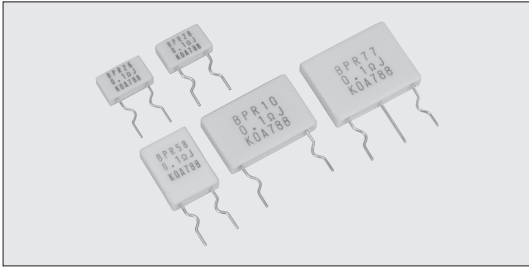
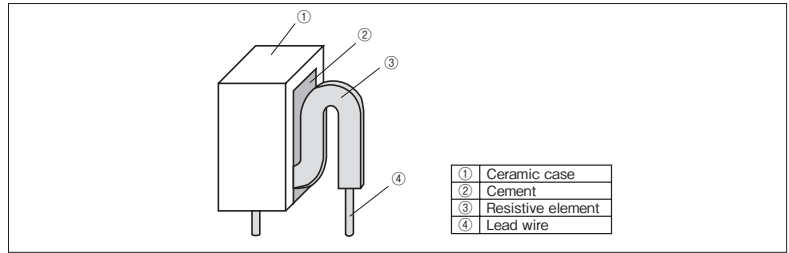


## BPR Rectangular Type Metal Plate Resistors



Case : Ceramic  
Marking : Alphanumeric

### Construction



### Features

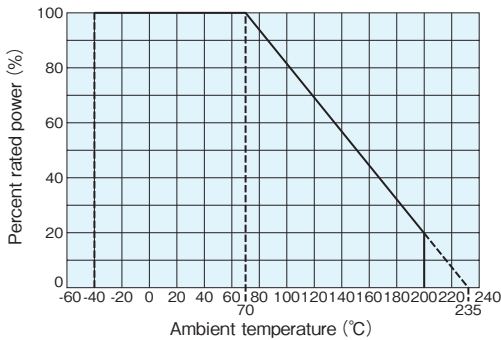
- Power type current detecting resistors.
- Flame retardant resistors in Ceramic Case.
- Automatic insertion for a 5mm pitch between terminals is applicable. (BPR26, BPR58 Radial Taping)
- Low inductance.
- Space saving.
- Products meet EU-RoHS requirements.

### 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 : $\phi$ 0.6mm 8 : $\phi$ 0.8mm  8 : $\phi$ 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. 0.1 $\Omega$ : R10 47m $\Omega$ : 47L	J : $\pm$ 5% K : $\pm$ 10%

### Derating Curve



Resistance Value ( $\Omega$ )	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.

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

### Dimensions and Ratings

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

Rated Ambient Temperature : +70°C

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

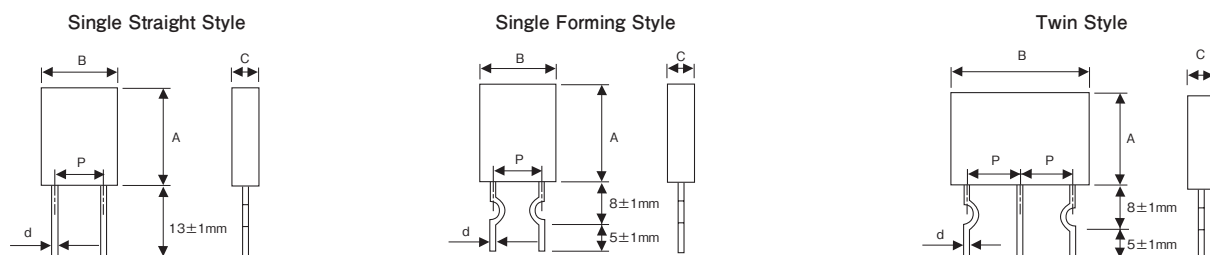
Rated voltage =  $\sqrt{\text{Power Rating} \times \text{Resistance value}}$

※1 See table standard resistance

※2 Application range : The straight style of 0.018 $\Omega$  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