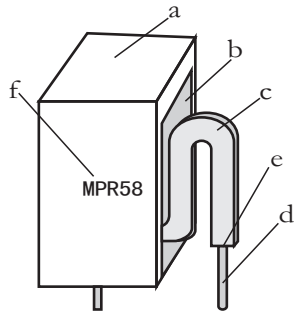


● Features

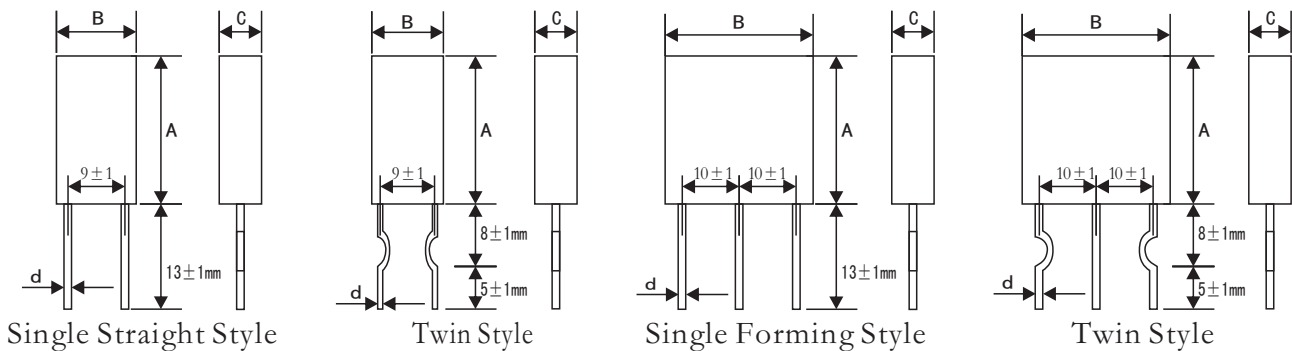
- I Power type current detecting resistors.
- II Flame retardant resistors in Ceramic Case.
- III Automatic insertion for a 5mm pitch between terminals is applicable.
- IV Low inductance.
- V Space saving.
- VI Products meet EU-RoHS requirements.

● Construction



| | |
|---|-------------------|
| a | Ceramic case |
| b | Cement |
| c | Resistive element |
| d | Lead wire |
| e | Welding |
| f | Marking |

● Dimensions



| Type | Model | Dimensions(mm) | | | | Weight(g) (1000pcs) |
|-----------------------|--------|----------------|----------|---------|------------|------------------------|
| | | A | B | C | Φd | |
| BPR (MPR) (SLR) | 18 | 10 ± 1.0 | 10 ± 1.0 | 5 ± 0.5 | 0.8 ± 0.05 | 1250 |
| | 26, 28 | 8.0 ± 1.0 | 13 ± 1.0 | 5 ± 0.5 | 0.6 ± 0.05 | 1250 |
| | 36, 38 | 13 ± 1.0 | 13 ± 1.0 | 5 ± 0.5 | 0.6 ± 0.05 | 2350 |
| | 56, 58 | 18 ± 1.0 | 14 ± 1.0 | 5 ± 0.5 | 0.8 ± 0.05 | 3400 |
| | 108 | 18 ± 1.0 | 26 ± 1.0 | 5 ± 0.5 | 0.8 ± 0.05 | 5900 |
| | 22 | 9.0 ± 1.0 | 26 ± 1.0 | 5 ± 0.5 | 0.6 ± 0.05 | 3000 |
| | 33 | 13 ± 1.0 | 26 ± 1.0 | 5 ± 0.5 | 0.6 ± 0.05 | 5000 |
| | 55 | 18 ± 1.0 | 26 ± 1.0 | 5 ± 0.5 | 0.8 ± 0.05 | 6000 |
| | 77 | 18 ± 1.0 | 26 ± 1.0 | 5 ± 0.5 | 0.8 ± 0.05 | 6000 |

● Reference Standards

JISC 5201-1

Ordering Information

Example:

| | | | | | |
|-------------|--------------|----------------------|------------|--------------------|-----------|
| BPR | 5 | F | R10 | 8 | CP |
| (1) | (2) | (3) | (4) | (5) | (6) |
| Series Name | Power Rating | Resistance Tolerance | Resistance | Lead wire Diameter | Lead wire |

(1)Type: BPR SERIES

(2)Power Rating: 2=2W、3=3W、5=5W、10=10W、55=5W+5W、77=7W+7W

(3)Tolerance: F=±1%、G=±2%、J=±5%、K=±10%

(4)Resistance Value:Ex=※1、R10=0.1Ω、47L=47mΩ

(5)Lead wire diameter: 6=Φ0.6mm、8=Φ0.8mm

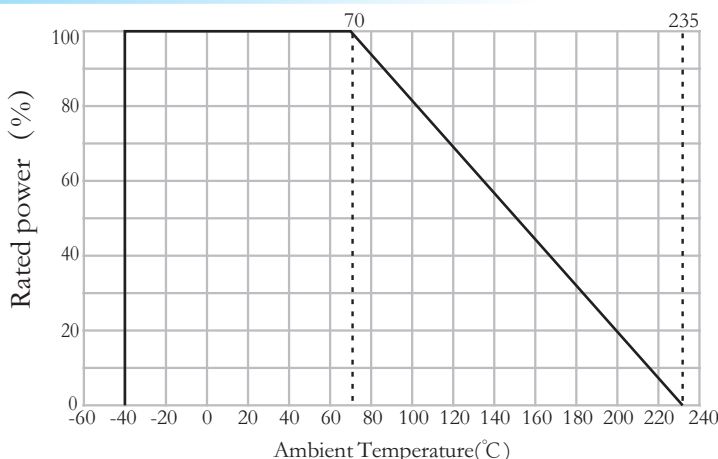
(6)Lead wire: C=SnCu、CP=Cp wire

| | | | |
|----|---------------------|----------|--|
| ※1 | Resistance Value(Ω) | 3 Digits | 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. |
| | 10m~82m | 10L~82L | |
| | 0.1~0.82 | R10~R82 | |
| | 1 | 1R0 | |

Applications And Ratings

| Type | Rated power(w) | Resistance Range(Ω) | Tolerance | Dielectric Withstanding Voltage | T.C.R | Pack(pcs) | |
|--------|----------------|---------------------|-------------------------------|---------------------------------|------------|-----------|---------|
| | | | | | | Straight | Forming |
| BPR18 | 1 | 0.01~0.5 | F±1% G±2% J±5% K±10% | 500V | ±350ppm/°C | 1000 | --- |
| BPR26 | 2 | 0.01~1.0 | | | | | |
| BPR28 | 2 | 0.01~1.0 | | | | | |
| BPR36 | 3 | 0.01~1.0 | | | | 500 | 500 |
| BPR38 | 3 | 0.01~1.0 | | | | | |
| BPR56 | 5 | 0.01~3.3 | | | | | |
| BPR58 | 5 | 0.01~3.3 | | | | | |
| BPR108 | 10 | 0.01~6.6 | | | | --- | |
| BPR22 | 2+2 | 0.01~1.0 | | | | | |
| BPR33 | 3+3 | 0.01~1.0 | | | | | |
| BPR55 | 5+5 | 0.01~1.0 | | | | | |
| BPR77 | 7+7 | 0.01~1.0 | | | | | |

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.

● Performance

| Test Items | Performance Requirements | Test Methods(JIS C 5201-1) |
|------------------------------|----------------------------|---|
| Resistance | Within specified tolerance | Measuring points are 1.6mm from the endcap |
| T.C.R. | Within specified T.C.R. | Room temperature +100°C |
| Start time overload | $\pm (2\% + 0.05\Omega)$ | 6.25 times the rated power for 5seconds |
| Load life | $\pm (5\% + 0.1\Omega)$ | Rated voltage at 70°C for 1,000hours 1.5hr ON/0.5hr OFF Cycles |
| Load life in humidity | $\pm (5\% + 0.1\Omega)$ | Rated voltage at 40°C, 95%RH for 1,000hours |
| Moisture resistance | $\pm (2\% + 0.05\Omega)$ | 40°C , 95%RH for 240 hours |
| Temperature cycle | $\pm (1\% + 0.05\Omega)$ | 5cycles for -25°C (30min); room temp.(30min) ~ +85°C (30min) room temp.(30min) |
| Resistance to soldering heat | $\pm (2\% + 0.05\Omega)$ | 260°C +5°C for 10 seconds 350°C +10°C for 3.5 seconds |
| Insulation resistance | >10M Ω | 500V insulation test 1 min |

● Precautions for Use

- In the resistance values of 50m Ω 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 \pm 5°C Peak time: 5~10s