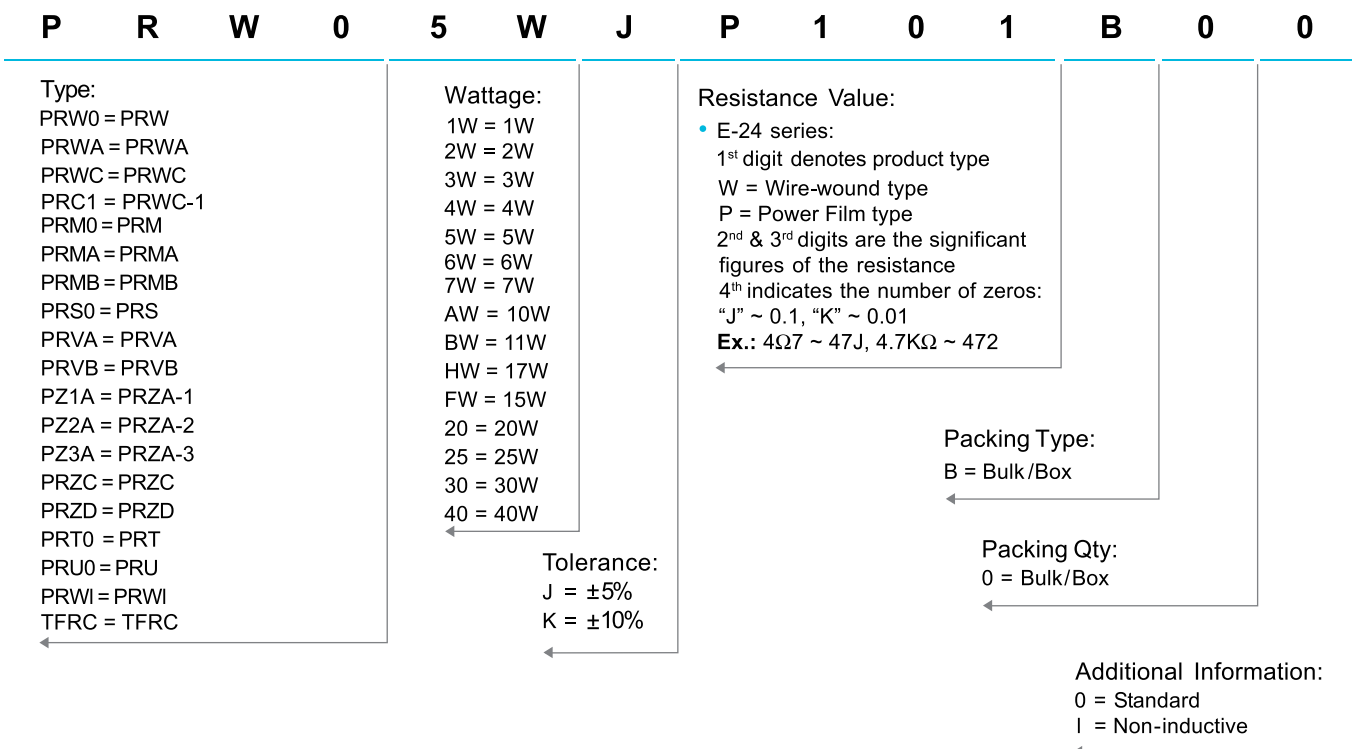


## Cement Fixed Resistors

### Performance Specification

|                                 |   |
|---------------------------------|---|
| Temperature Coefficient         | <20Ω: ±400PPM/°C; ≥20Ω: ±350PPM/°C  |
| Short Time Overload             | ±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.  |
| Dielectric Withstanding Voltage | No evidence of flashover, mechanical damage, arcing or insulation breakdown.                          |
| Terminal Strength               | No evidence of mechanical damage.   |
| Resistance to Soldering Heat    | ±(1.0% + 0.05Ω)Max, with no evidence of mechanical damage.  |
| Solderability                   | Min. 95% coverage   |
| Temperature Cycling             | ±(2.0% + 0.05Ω)Max, with no evidence of mechanical damage.  |
| Humidity (Steady State)         | ±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.  |
| Load Life in Humidity           | Wire-wound ±(5.0% + 0.05Ω)Max<br>Power Film <100KΩ: ±(5.0% + 0.05Ω)Max<br>≥100KΩ: ±(10.0% + 0.05Ω)Max |
| Load Life                       | Wire-wound ±(5.0% + 0.05Ω)Max<br>Power Film <100KΩ: ±(5.0% + 0.05Ω)Max<br>≥100KΩ: ±(10.0% + 0.05Ω)Max |

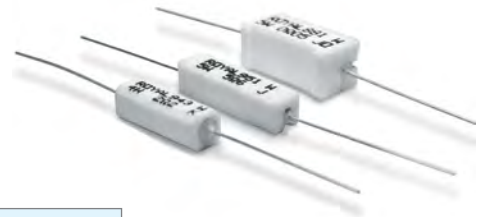
### Ordering Procedure: Ex.: PRW 5W, +/- 5%, 100Ω, B/B



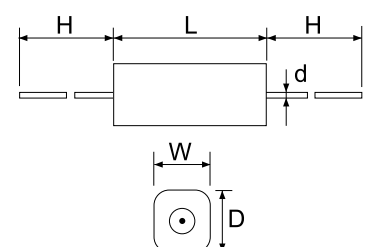
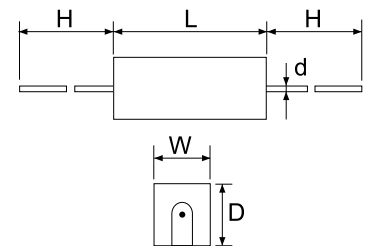
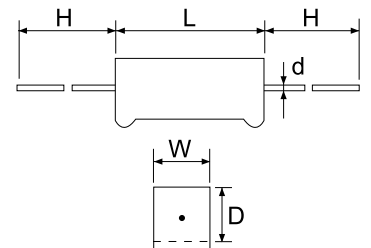
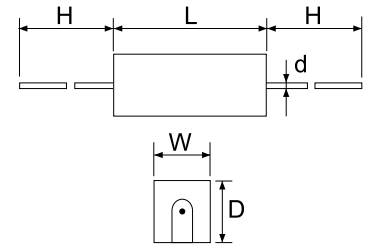
# Cement Fixed Resistors

## Features

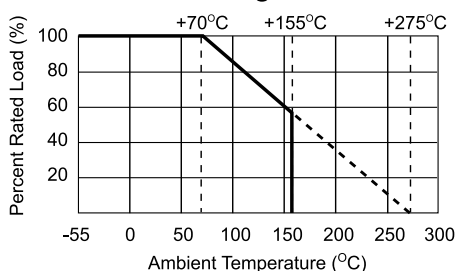
- Self extinguishing
- Excellent flame and moisture resistance
- Extremely small sturdy and mechanically safe
- Non-inductive types available for all ROYALOHM Cement Resistors
- Too low or too high ohmic values on Wire-wound & Power Film type can be supplied on a case to case basis



| Part No.  | Style     | Power Rating at 70°C | Dimension (mm) |      |     |        |     | Resistance Range |              |
|---|-----------|----------------------|----------------|------|-----|--------|-----|------------------|--------------|
|   |           |                      | W±1            | D±1  | L±1 | d±0.05 | H±5 | Wire-wound       | Power Film   |
| <b>PRW Type</b>   |           |                      |                |      |     |        |     |                  |              |
| PRW01W  | PRW 1W    | 1W                   | 6              | 6    | 14  | 0.70   | 25  | 1Ω ~ 27Ω         | 28Ω ~ 33KΩ   |
| PRW02W  | PRW 2W    | 2W                   | 7              | 7    | 18  | 0.75   | 28  | 0.1Ω ~ 27Ω       | 28Ω ~ 33KΩ   |
| PRW03W  | PRW 3W    | 3W                   | 8              | 8    | 22  | 0.75   | 32  | 0.1Ω ~ 39Ω       | 40Ω ~ 56KΩ   |
| PRW05W  | PRW 5W    | 5W                   | 10             | 9    | 22  | 0.75   | 35  | 0.1Ω ~ 47Ω       | 48Ω ~ 100KΩ  |
| PRW07W  | PRW 7W    | 7W                   | 10             | 9    | 35  | 0.75   | 35  | 0.1Ω ~ 680Ω      | 681Ω ~ 200KΩ |
| PRW0AW  | PRW 10W   | 10W                  | 10             | 9    | 49  | 0.75   | 35  | 0.1Ω ~ 910Ω      | 911Ω ~ 200KΩ |
| PRW0FW  | PRW 15W   | 15W                  | 12.5           | 11.5 | 49  | 0.75   | 35  | 1Ω ~ 1KΩ         |              |
| PRW020  | PRW 20W   | 20W                  | 14.5           | 13.5 | 60  | 0.75   | 35  | 2Ω ~ 1.2KΩ       |              |
| PRW025  | PRW 25W   | 25W                  | 14.5           | 13.5 | 64  | 0.75   | 35  | 2Ω ~ 1.2KΩ       |              |
| <b>PRWA Type</b>  |           |                      |                |      |     |        |     |                  |              |
| PRWA2W  | PRWA 2W   | 2W                   | 7              | 7    | 18  | 0.75   | 28  | 0.1Ω ~ 27Ω       | 28Ω ~ 33KΩ   |
| PRWA3W  | PRWA 3W   | 3W                   | 8              | 8    | 22  | 0.75   | 32  | 0.1Ω ~ 39Ω       | 40Ω ~ 56KΩ   |
| PRWA5W  | PRWA 5W   | 5W                   | 10             | 9    | 22  | 0.75   | 35  | 0.1Ω ~ 47Ω       | 48Ω ~ 100KΩ  |
| PRWA7W  | PRWA 7W   | 7W                   | 10             | 9    | 35  | 0.75   | 35  | 0.1Ω ~ 680Ω      | 681Ω ~ 200KΩ |
| PRWAAW  | PRWA 10W  | 10W                  | 10             | 9    | 49  | 0.75   | 35  | 0.1Ω ~ 910Ω      | 911Ω ~ 200KΩ |
| <b>PRWC Type</b>  |           |                      |                |      |     |        |     |                  |              |
| PRWC1W  | PRWC 1W   | 1W                   | 5.5            | 5.5  | 12  | 0.70   | 25  | 1Ω ~ 27Ω         | 28Ω ~ 33KΩ   |
| PRWC2W  | PRWC 2W   | 2W                   | 6              | 6    | 18  | 0.75   | 28  | 1Ω ~ 27Ω         | 28Ω ~ 33KΩ   |
| PRWC3W  | PRWC 3W   | 3W                   | 6              | 6    | 20  | 0.75   | 28  | 1Ω ~ 27Ω         | 28Ω ~ 33KΩ   |
| PRWC5W  | PRWC 5W   | 5W                   | 6              | 6    | 25  | 0.75   | 35  | 1Ω ~ 200Ω        | 201Ω ~ 100KΩ |
| PRWC7W  | PRWC 7W   | 7W                   | 9              | 9    | 25  | 0.75   | 35  | 1Ω ~ 200Ω        | 201Ω ~ 100KΩ |
| <b>PRWC-1 Type</b>  |           |                      |                |      |     |        |     |                  |              |
| PRC14W  | PRWC-1 4W | 4W                   | 6.4            | 6.4  | 20  | 0.70   | 28  | 1Ω ~ 200Ω        | 201Ω ~ 100KΩ |
| PRC15W  | PRWC-1 5W | 5W                   | 6.4            | 6.4  | 25  | 0.70   | 28  | 1Ω ~ 200Ω        | 201Ω ~ 100KΩ |
| PRC16W  | PRWC-1 6W | 6W                   | 6.4            | 6.4  | 38  | 0.75   | 35  | 1Ω ~ 200Ω        | 201Ω ~ 100KΩ |
| Remark: Max Working Voltage: 500V<br>Max Overload Voltage: 1,000V |           |                      |                |      |     |        |     |                  |              |



**Derating Curve**



**Heat Rise Chart**

