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
	Power film	<100KΩ: ±(5.0% + 0.05Ω)Max
		≥100KΩ: ±(10.0% + 0.05Ω)Max
Load Life	Wire-wound	±(5.0% + 0.05Ω)Max
	Power film	<100KΩ: ±(5.0% + 0.05Ω)Max
		≥100KΩ:±(10.0% + 0.05Ω)Max

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

P R W 0 5 W J P 1 0 1 B 0 0

Type:
PRW0 = PRW
PRWA = PRWA
PRWC = PRWC
PRM0 = PRM
PRMA = PRMA
PRMB = PRMB
PRS0 = PRS
PRVA = PRVA
PRVB = PRVB
PZ1A = PRZA-1
PZ2A = PRZA-2
PZ3A = PRZA-3
PRZC = PRZC
PRZD = PRZD
PRT0 = PRT
PRU0 = PRU
PRWI = PRWI

Wattage:
1W = 1W
2W = 2W
3W = 3W
4W = 4W
5W = 5W
7W = 7W
AW = 10W
BW = 11W
HW = 17W
FW = 15W
20 = 20W
25 = 25W
30 = 30W
40 = 40W

Tolerance:
J = ±5%
K = ±10%

Resistance Value:
- E-24 series:
  1st digit denotes product type
  W = Wire-wound type
  P = Power Film type
  2nd & 3rd digits are the significant figures of the resistance
  4th indicates the number of zeros:
  "J" ~ 0.1, "K" ~ 0.01
  Ex.: 4Ω7 ~ 47J, 4.7KΩ ~ 472

Packing Type:
B = Bulk/Box

Packing Qty:
0 = Bulk/Box

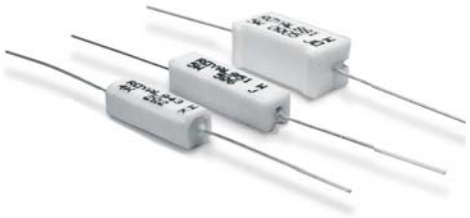
Additional Information:
0 = Standard
I = Non-inductive

RoHS Compliant

Cement Fixed Resistors

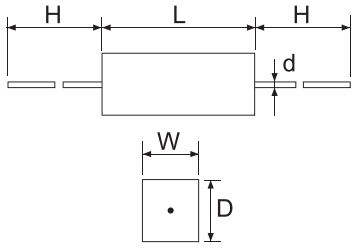
Features

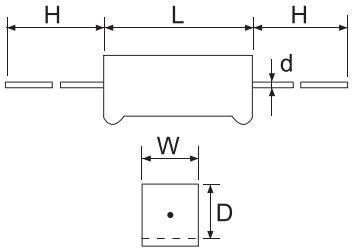
- Self extinguishing
- Excellent flame and moisture resistance
- Extremely small sturdy and mechanically safe
- Non-inductive types available for all ROYALOHM Cement Resistors
- Too low or too high ohmic values on Wire-wound & Power Film type can be supplied on a case to case basis

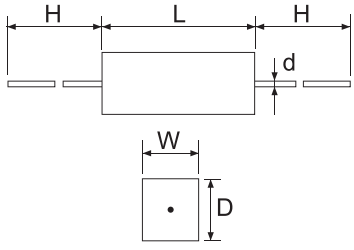


Part No.	Style	Power Rating at 70°C	Dimension (mm)					Resistance Range	
			W±1	D±1	L±1	d±0.05	H±5	Wire-wound	Power Film
PRW Type									
PRW01W	PRW 1W	1W	6	6	14	0.70	25	1Ω ~ 27Ω	28Ω ~ 33KΩ
PRW02W	PRW 2W	2W	7	7	18	0.75	28	0.1Ω ~ 27Ω	28Ω ~ 33KΩ
PRW03W	PRW 3W	3W	8	8	22	0.75	32	0.1Ω ~ 39Ω	40Ω ~ 56KΩ
PRW05W	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	
PRWA Type									
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
PRWC Type									
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

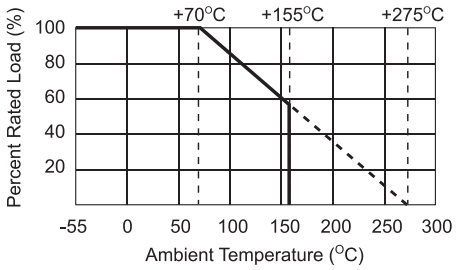
Remark: Max Working Voltage: 500V
Max Overload Voltage: 1,000V







Derating Curve
(PRW, PRM, PRS, PRZ, PRV, PRU)



Heat Rise Chart
(PRW, PRWA, PRWC, PRU)