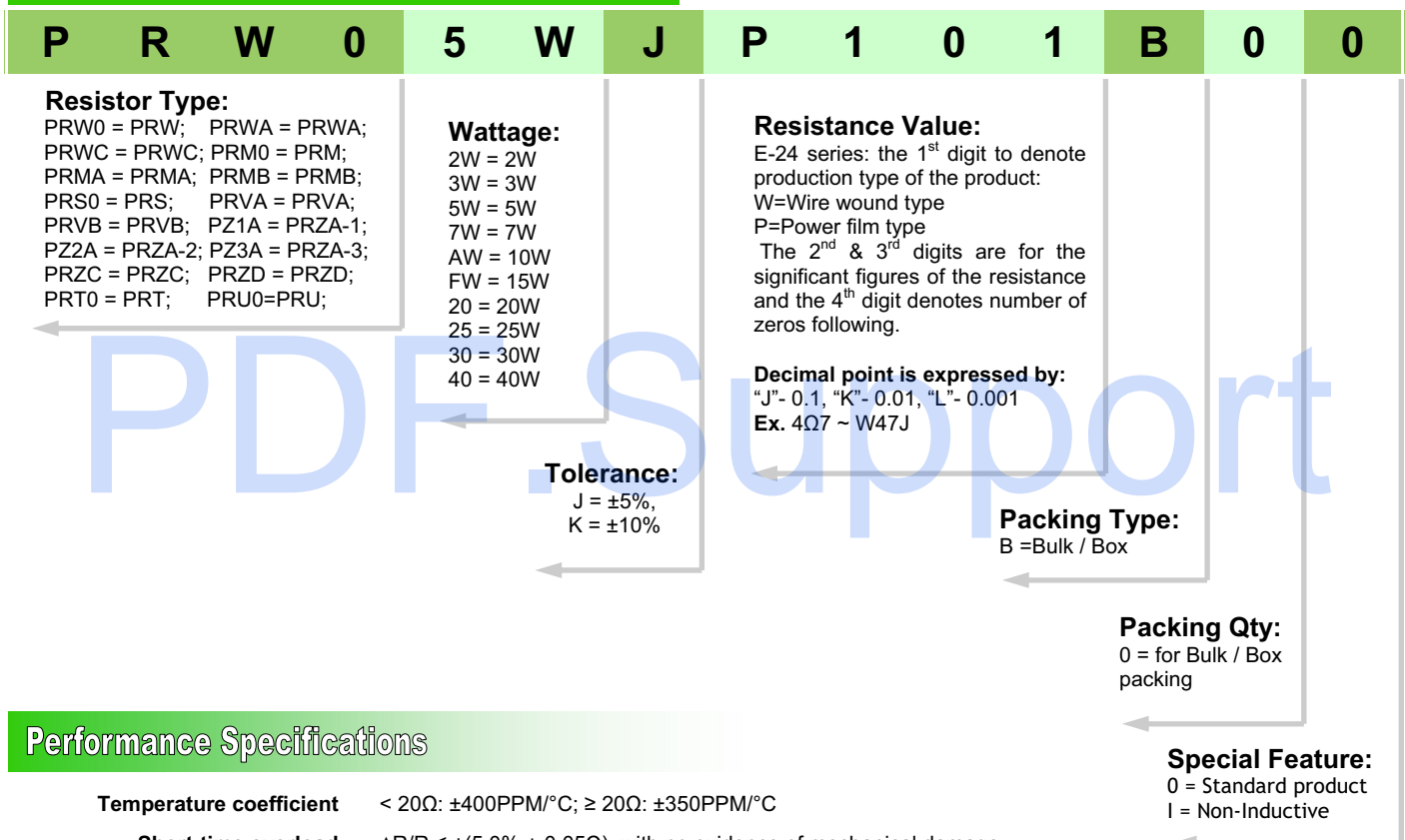


CEMENT FIXED RESISTOR

Features

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

Ordering Procedure: (Ex.: PRW 5W, 5%, 100Ω, B/B)



Performance Specifications

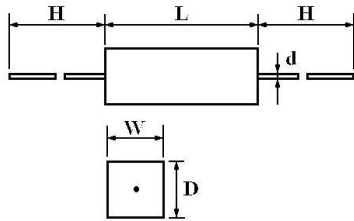
Temperature coefficient	< 20Ω: ±400PPM/°C; ≥ 20Ω: ±350PPM/°C
Short-time overload	$\Delta R/R \leq \pm(5.0\% + 0.05\Omega)$, with no evidence of mechanical damage.
Dielectric withstanding voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Terminal strength	No evidence of mechanical damage.
Solderability	Min. 95% coverage
Temperature cycling	$\Delta R/R \leq \pm(2.0\% + 0.05\Omega)$, with no evidence of mechanical damage.
Humidity (Steady State)	$\Delta R/R \leq \pm(5.0\% + 0.05\Omega)$, with no evidence of mechanical damage.
Load life in humidity	For Wire-wound range, the $\Delta R/R$ is ±5% For Power film range, <100KΩ, the $\Delta R/R$ is ±5% For Power film range, ≥100KΩ, the $\Delta R/R$ is ±10%
Load life	For Wire-wound range, the $\Delta R/R$ is ±5% For Power film range, <100KΩ, the $\Delta R/R$ is ±5% For Power film range, ≥100KΩ, the $\Delta R/R$ is ±10%
Resistance to soldering heat	$\Delta R/R \pm(1.0\% + 0.05\Omega)$, with no evidence of mechanical damage.

* For complete details, please see Page 69.

CEMENT FIXED RESISTOR

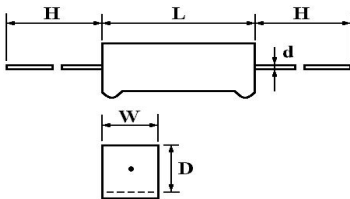


(1) PRW Type



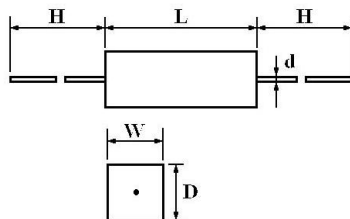
Part No.	Style	Dimension (mm)					Resistance Range	
		W ± 1	D ± 1	L ± 1	d ^{+0.02} _{-0.05}	H ± 5	Wire-wound	Power Film
PRW02W	PRW - 2W	7	7	18	0.8	28	0.1Ω ~ 27Ω	28Ω ~ 33KΩ
PRW03W	PRW - 3W	8	8	22	0.8	32	0.1Ω ~ 39Ω	40Ω ~ 56KΩ
PRW05W	PRW - 5W	10	9	22	0.8	35	0.1Ω ~ 47Ω	48Ω ~ 100KΩ
PRW07W	PRW - 7W	10	9	35	0.8	35	0.1Ω ~ 680Ω	681Ω ~ 200KΩ
PRW0AW	PRW - 10W	10	9	49	0.8	35	0.1Ω ~ 910Ω	911Ω ~ 200KΩ
PRW0FW	PRW - 15W	12.5	11.5	49	0.8	35	1Ω ~ 1KΩ	
PRW020	PRW - 20W	14.5	13.5	60	0.8	35	2Ω ~ 1.2KΩ	
PRW025	PRW - 25W	14.5	13.5	64	0.8	35	2Ω ~ 1.2KΩ	

(1-1) PRWA Type



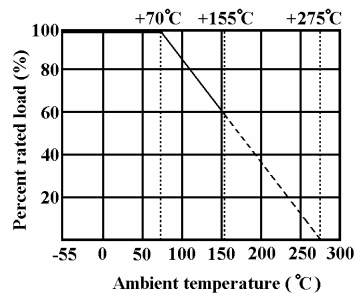
Part No.	Style	Dimension (mm)					Resistance Range	
		W ± 1	D ± 1	L ± 1	d ^{+0.02} _{-0.05}	H ± 5	Wire-wound	Power Film
PRWA2W	PRWA - 2W	7	7	18	0.8	28	0.1Ω ~ 27Ω	28Ω ~ 33KΩ
PRWA5W	PRWA - 5W	10	9	22	0.8	35	0.1Ω ~ 47Ω	48Ω ~ 100KΩ
PRWA7W	PRWA - 7W	10	9	35	0.8	35	0.1Ω ~ 680Ω	681Ω ~ 200KΩ
PRWAAW	PRWA - 10W	10	9	49	0.8	35	0.1Ω ~ 910Ω	911Ω ~ 200KΩ

(1-2) PRWC Type

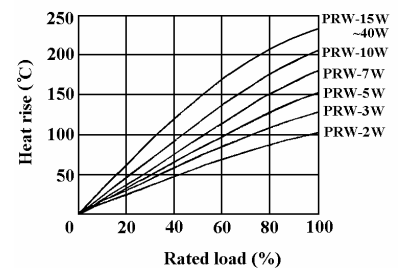


Part No.	Style	Dimension (mm)					Resistance Range	
		W ± 1	D ± 1	L ± 1	d ^{+0.02} _{-0.05}	H ± 5	Wire-wound	Power Film
PRWC3W	PRWC - 3W	6	6	20	0.8	28	1Ω ~ 27Ω	28Ω ~ 33KΩ
PRWC5W	PRWC - 5W	6	6	25	0.8	35	1Ω ~ 200Ω	201Ω ~ 100KΩ
PRWC7W	PRWC - 7W	9	9	25	0.8	35	1Ω ~ 200Ω	201Ω ~ 100KΩ

Derating Curve

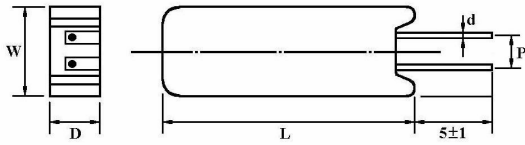


Heat Rise Chart



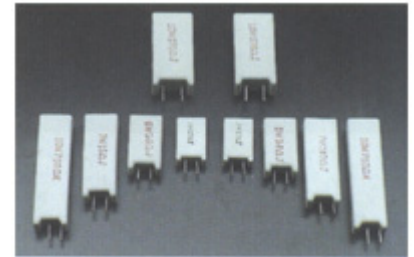
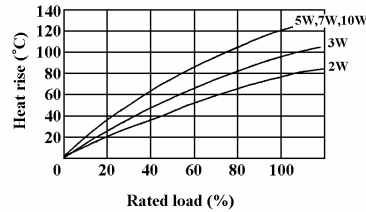
CEMENT FIXED RESISTOR

(2) PRM Type



* PRM 7W: Lead not centered

Heat Rise Chart

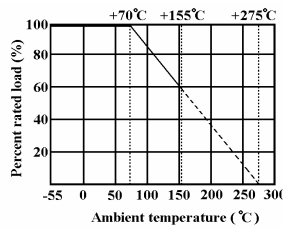


Part No.	Style	Dimension (mm)					Resistance Range	
		W ± 1	D ± 1	L ± 1	d ^{+0.02} _{-0.05}	P ± 1	Wire-wound	Power Film
PRM02W	PRM-2W	11.5	7.5	20	0.8	5	0.1Ω-27Ω	28Ω -33KΩ
PRM03W	PRM-3W	12.5	8.5	25	0.8	5	0.1Ω -39Ω	40Ω -56KΩ
PRM05W	PRM-5W	12.5	9	25	0.8	5	0.1Ω -47Ω	48Ω -100KΩ
PRM07W	PRM-7W	12.5	9	38	0.8	5	0.1Ω -680Ω	681Ω -200KΩ
PRM0AW	PRM-10W	12.5	9	50	0.8	5	0.1Ω -910Ω	911Ω -200KΩ
PRMA5W	PRMA-5W	12.5	9	25	0.8	7.5	0.1Ω -47Ω	48Ω-100KΩ
PRMAAW	PRMA-10W	16	12	35	0.8	7.5	0.1Ω -560Ω	561Ω -100KΩ
PRMB7W	PRMB-7W	12.5	9	38	0.8	5	0.1Ω -680Ω	681Ω -200KΩ

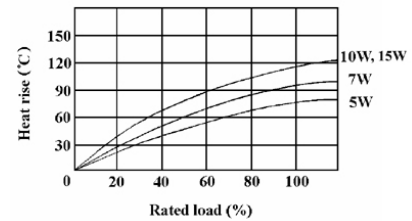
(3) PRS Type



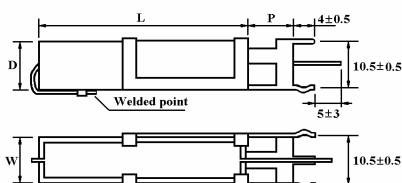
Derating Curve



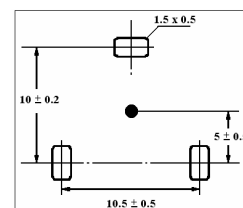
Heat Rise Chart



Part No.	Style	Dimension (mm) ± 1				Resistance Range	
		W	D	L	P	Wire-wound	Power Film
PRS05W	PRS-5W	10	9	22	5	0.1Ω -47Ω	48Ω -100KΩ
PRS07W	PRS-7W	10	9	35	10	0.1Ω -680Ω	681Ω -200KΩ
PRS0AW	PRS-10W	10	9	49	10	0.1Ω -910Ω	911Ω -200KΩ
PRS0FW	PRS-15W	12.5	11.5	49	11	1Ω -1KΩ	



Recommendable hole:



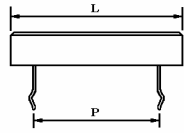
CEMENT FIXED RESISTOR

(4) PRZA-1, PRZA-2, PRZA-3, PRZC, PRZD Type

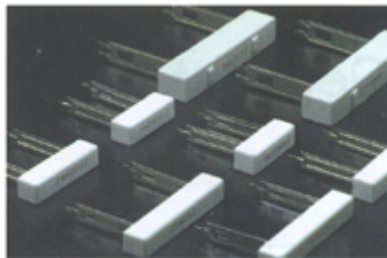
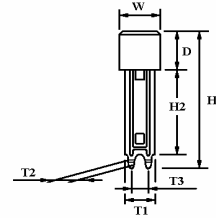
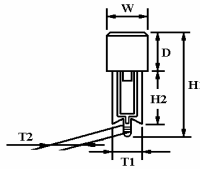
PRZA-1, PRZA-2, PRZA-3, PRZC, PRZD

PRZA-1, PRZA-2, PRZA-3

PRZC, PRZD



* Physical Specifications



Recommendable Hole

Power Rating	Dimension (mm)		P
	PRZA-1, PRZA-2, PRZA-3	PRZC, PRZD	
5W			9.5 / 15
7W			22
10W			32 / 35
15W			32
20W			45

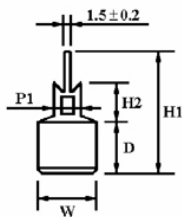
CEMENT FIXED RESISTOR

Dimension

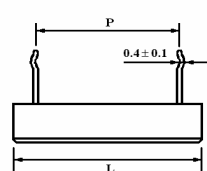
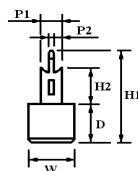
Part No.	Power Rating	Type	Dimension (mm)									Resistance Range	
			W ± 1	D ± 1	L	P ± 1.5	T ₁ ± 1	T ₂ ± 0.2	T ₃ ± 0.5	H ₁ ⁺² / ₋₁	H ₂ ⁺² / ₋₁	Wire-wound	Power Film
PZ1A5W	5W	PRZA-1	10	9	25 ± 1	9.5	7	1.6		24	10	0.1Ω - 120Ω	121Ω - 56KΩ
					27 ± 1	15							
PZ2A5W		PRZA-2	10	9	27 ± 1	15	7	1.6		39	25		
PZ3A5W		PRZA-3	10	9	27 ± 1	15	7	1.3		39	25		
PRZC5W		PRZC	10	9	27 ± 1	*15	7	1.5	3.5	36	22		
PRZD5W	PRZD	10	9	27 ± 1	15	7	1.5	3.5	24	10			
PZ1A7W	7W	PRZA-1	10	9	35 ± 1	22	7	1.6		24	10	0.1Ω - 560Ω	561Ω - 100KΩ
PZ2A7W		PRZA-2	10	9	35 ± 1	22	7	1.6		39	25		
PRZC7W		PRZC	10	9	35 ± 1	*22	7	1.5	3.5	36	22		
PRZD7W		PRZD	10	9	35 ± 1	22	7	1.5	3.5	24	10		
PZ1AAW	10W	PRZA-1	10	9	48 ± 1.5	32 / 35	7	1.6		24	10	1Ω - 820Ω	821Ω - 100KΩ
PZ2AAW		PRZA-2	10	9	48 ± 1.5	32 / 35	7	1.6		39	25		
PRZCAW		PRZC	10	9	48 ± 1.5	*32 / *35	7	1.5	3.5	36	22		
PRZDAW		PRZD	10	9	48 ± 1.5	32 / 35	7	1.5	3.5	24	10		
PZ1AFW	15W	PRZA-1	12.5	11.5	48 ± 1.5	32	10	3		35	15	1Ω - 1KΩ	
PZ2AFW		PRZA-2	12.5	11.5	48 ± 1.5	32	10	3		47	30		
PRZCFW		PRZC	12.5	11.5	48 ± 1.5	*32	10	2	5	47	30		
PZ1A20	20W	PRZA-1	12.5	13.5	63 ± 1.5	45	10	3		35	15	2Ω - 1.2KΩ	
PZ2A20		PRZA-2	12.5	13.5	63 ± 1.5	45	10	3		47	30		
PRZC20		PRZC	12.5	13.5	63 ± 1.5	*45	10	2	5	47	30		

*PRZC type Pitch Tolerance = +2 ~ +6

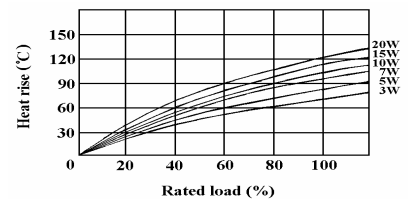
(5) PRVA Type



(6) PRVB Type



Heat Rise Chart (PRVA / PRVB)

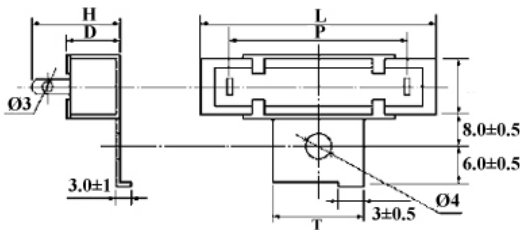


CEMENT FIXED RESISTOR

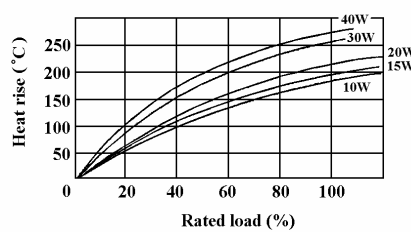
Part No.	Style PRVA+PRVB	Dimension (mm) ± 1								Resistance Range	
		W	D	L	P	P ₁	H ₁	H ₂	*P ₂ ± 0.2	Wire-wound	Power Film
PRVA3W/ PRVB3W	3W	10.0	9.0	22	9.5	5	25.0	10.5	1.3	0.1Ω ~ 47Ω	48Ω ~ 33KΩ
PRVA5W/ PRVB5W	5W	10.0	9.0	27 / 25	15 / 9.5	5	25.0	10.5	1.3	0.1Ω ~ 120Ω	121Ω ~ 56KΩ
PRVA7W/ PRVB7W	7W	10.0	9.0	35	22	5	25.0	10.5	1.3	0.1Ω ~ 560Ω	561Ω ~ 100KΩ
PRVAAW/ PRVBAW	10W	10.0	9.0	48	35 / 32	5	25.0	10.5	1.3	1Ω ~ 820Ω	821Ω ~ 100KΩ
PRVAFW/ PRVBFW	15W	12.5	11.5	48	32	5	27.5	10.5	1.5	1Ω ~ 1KΩ	
PRVA20/ PRVB20	20W	12.5	13.5	63	45	5	29.5	10.5	1.5	1Ω ~ 1.2KΩ	

*P₂ for PRVB

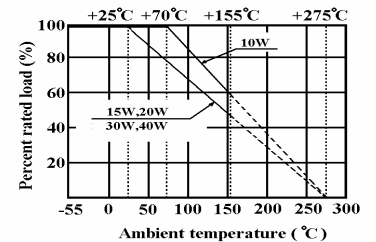
(7) PRT Type



Heat Rise Chart (PRT)

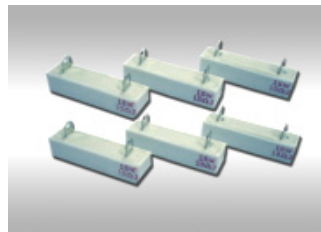
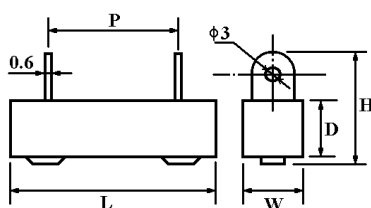


Derating Curve



Part No.	Style	Power Rating	Dimension (mm) ± 1						Resistance Range	
			W	D	L	P	H	T	Wire-wound	Power Film
PRT0AW	PRT - 10W	10W	10	9	48	32	18	12	1Ω ~ 820Ω	821Ω ~ 100KΩ
PRT0FW	PRT - 15W	15W	12.5	11.5	48	32	21	12	1Ω ~ 1KΩ	
PRT020	PRT - 20W	20W	12.5	13.5	63	45	21	12	2Ω ~ 1.2KΩ	
PRT030	PRT - 30W	30W	19	19	75	56	32 Max	18	3Ω ~ 1.5KΩ	
PRT040	PRT - 40W	40W	19	19	90	70	32 Max	18	6Ω ~ 1.5KΩ	

(8) PRU Type



Part No.	Style	Power Rating	Dimension (mm) ± 1					Resistance Range	
			W	D	L	P	H	Wire-wound	Power Film
PRU0AW	PRU - 10W	10W	10.0	9	48	32	18	1Ω ~ 820Ω	821Ω ~ 100KΩ
PRU0FW	PRU - 15W	15W	12.5	11.5	48	32	21	1Ω ~ 1KΩ	
PRU020	PRU - 20W	20W	12.5	13.5	63	45	21	2Ω ~ 1.2KΩ	
PRU030	PRU - 30W	30W	19.0	19	75	56	32 Max	3Ω ~ 1.5KΩ	
PRU040	PRU - 40W	40W	19.0	19	90	70	32 Max	6Ω ~ 1.5KΩ	