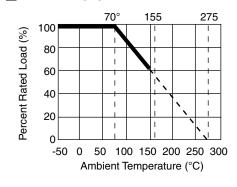
7W100.J

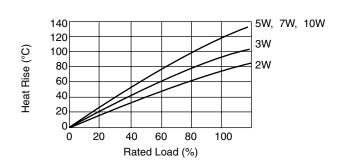
■ FEATURES

- 5% tolerance
- · Exceptionally small, sturdy, and reliable
- · Sealed with a special cement
- · Excellent moisture resistance
- · High temperature stability
- · Ceramic flame retardant package
- · Recommended wash method is alcohol

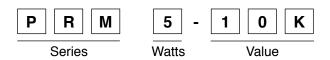
■ DERATING CHART

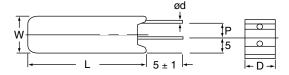


■ HEAT RISE CHART



■ PART NUMBERING SYSTEM





■ SERIES, WATTAGE, VALUE RANGE, AND DIMENSIONS

Series	Wette (M)	Range of \	Values (Ω)	Dimensions (mm)						
Series	Watts (W)	Wirewound	Power Film	W ±1	D ±1	L±1	ød ±0.05	P ±1		
* PRM	5	0.1 ~ 47	48 ~ 100K	12.5	9	25	0.75	5		
PRM	7	0.1 ~ 680	681 ~ 200K	12.5	9	38	0.75	5		
PRM	10	0.1 ~ 910	911 ~ 200K	12.5	9	50	0.75	5		

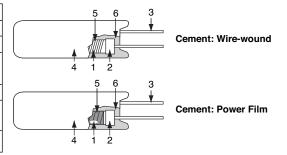
^{*} Leads are centered

\blacksquare STANDARD STOCKED VALUES (Ω) All standard E-24 values not listed are available special order.

0.1	0.3	0.51	1.0	3.0	6.8	15	33	56	68	75	100	150	200	300	330	470	680	1K	2K	4.7K	10K
0.22	0.47	0.68	2.2	4.7	10	20	47														

■ CONSTRUCTION

No.	Subpart Name	Material	Material Generic Name			
1	Body	Rod Type Ceramics	Al ₂ O ₃ , SiO ₂			
2	End Cap	Tin plated iron surface	Tin: 5%, Iron: 95%			
3	Lead	Annealed copper wire	Tin-Coated Copper wire			
		(Electrosolder plated surface) Pb Free				
4	Ceramic Case	Ceramic	Al ₂ O ₃ , SiO ₂			
5	Resistance wire	Ni-Cr Alloy	Ni-Cr Alloy			
	Resistance Film	Metal Oxide Film	Metal Oxide Film			
6	Filling Materials	Quartz mixed sand	SiO2			







Cement Power Resistors

■ CHARACTERISTICS

Characteristics	Limits		Test Methods (JIS C 5201-1)				
Temperature coefficient	± 350 PPM / °C Max. <20Ω ± 400 PPM / °C		5.2 Natural resistance change per temp. degree centigrade. R2-R1 x10° (PPM / °C) R1(t2-t1) R1: Resistance value at room temperature (t1) R2: Resistance value at room temp. plus 100 °C (t2)				
Dielectric withstanding voltage	No evidence of flashov mechanical damage, a or insulation break dov	rcing	5.7 Resistors shall be clamped in the trough of a 90° metallic V-block and shall be tested at AC potential respectively for 60 +10/ -0 secs.				
			7.4 Resistance change after continuous 5 cycles for duty shown below:				
Temperature	Resistance change rat	e is	Step Temperature Time				
cycling	± (2% + 0.05Ω) Max. v	<u> </u>	1	-55 °C ± 3 °C	30 mins		
, ,	evidence of mechanica		2	Room temp.	10 ~ 15 mins		
			3	+155 °C ± 2 °C	30 mins		
			4	Room temp.	10 ~ 15 mins		
Short time overload	Resistance change rat \pm (5% + 0.05 Ω) Max. v evidence of mechanica	vith no	5.5 Permanent resistance change after the application of a potential of 2.5 times RCWV for 5 seconds				
	Resistance value	Δ R/R	7.9 Resistance change after 1,000 hours operating at RCWV with duty cycle of				
-	Wire-wound	± 5%					
Load life in humidity	Power film: <100KΩ >100KΩ	± 5% ± 10%	(1.5 hours "on", chamber contro relative humidit				
	Resistance value	∆ R/R	7.10 Permanent resistance change after 1,000 hours operating at RCWV with duty cycle of (1.5 hours "on", 0.5 hour "off")				
Load life	Wire-wound	± 5%					
	Power film: <100KΩ	± 5%					
	>100ΚΩ	± 10%	at 70 °C ±2 °C				
Terminal strength	No evidence of mecha damage	nical	6.1 Direct load: Resistance to a 2.5 kgs direct load for 10 secs. in the direction of the longitudinal axis of the terminal leads Twist test: Terminal leads shall be bent through 90 ° at a point of about 6mm from the body of the resistor and shall be rotated through 360° about the original axis of the bent terminal in alternating direction for a total of 3 rotations				
Resistance to	Resistance change rat \pm (1% + 0.05 Ω) Max. v	vith no	6.4 Permanent resistance change when leads immersed to 3.2 to 4.8 mm from the body in				
Solderability	evidence of mechanica 95 % coverage Min.	al damage	350 °C ± 10 °C solder for 3 ± 0.5 secs. 6.5 The area covered with a new, smooth clean, shiny and continuous surface free from concentrated pinholes. Test temp. of solder: 245 °C ± 3 °C Dwell time in solder: 2 ~ 3 seconds				

