

Flameproof Power Resistors PW Series

CONFIGURATIONS



fig 1



fig 2



fig 3



fig 4



fig 5

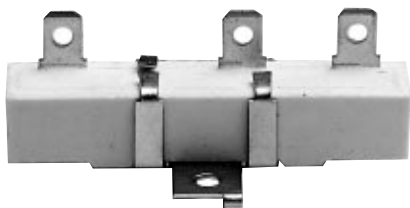


fig 6



fig 7



fig 8

PW Series wire wound resistors are available in four power ratings of 5, 10, 20 and 50 Watts. They are designated Types PW5, PW10, PW20 and PW50. Combining a unique design with a high degree of automatic assembly, they offer practical possibilities for cost saving.

APPLICATIONS:

PW Series wire wound resistors are particularly recommended for the following situations :

(a) A low cost, easily installed power resistor is required. e.g. dish washers, electric stoves, range hoods etc.

(b) Circuits requiring an actual wattage dissipation equal to, or less than, the wattage rating of the PW resistor selected.

(c) Operation must be reliable at high ambient temperatures.

(d) Radio, TV or industrial circuits requiring the PW wattage dissipation and where a **fireproof** resistor is essential.

(e) Medium power bridge circuits with balanced pairs.

(f) Medium power attenuator networks.

DESIGN AND CONSTRUCTION:

The resistance wire is uniformly and tightly wound on a glass fibre core. Types PW5 and 10 have alloy plated copper leads securely fastened to the winding by special terminations, while the PW20 and PW50 have 6.3 QC terminals.

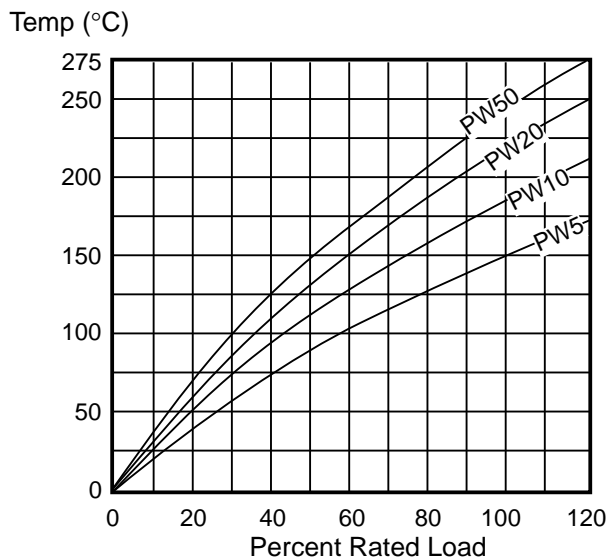
The resistance winding is housed in a rectangular ceramic case which is filled with an inert and *non-flammable* compound, unaffected by solvents. Having high thermal conductivity, this filling compound maintains a lower surface temperature.

TYPE				RATING W @ 40° C	RESISTANCE RANGE (Ω)		DIMENSIONS L X W (mm)
STD.	FIG.	SPECIAL	FIG.		±10% TOL. E12	±5% TOL. E24	
PW5	1 ²	PW5-V	2	5	0R1 - 0R27	0R33 - 4K7	22.4 x 9.6
PW10	1 ²	PW 10-V	2	10	1R—18K	1R—18K	48 x 9.6
PW20	3	PW20-T*	4	20	0R47 - 27K	—	63.5 x 12.7
		PW20-H	5				
		PW20-V	7				
		PW20-TH*	6				
		PW20-TV*	8				
PW50	3	PW50-T*	4	50	2R2 - 47K	—	90 x 19
		PW50-H	5				
		PW50-V	7				
		PW50-TH*	6				
		PW50-TV*	8				

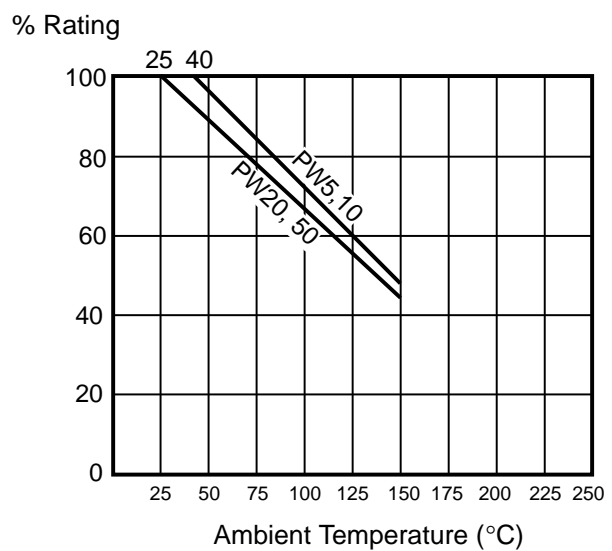
* NOTE : 1. The use of a tap results in a small reduction in power rating
 2. Types PW5 and PW10 have lead wires 30mm (minimum) x ø 0.9mm (±0.01)

TEMPERATURE AND DERATING CHARTS

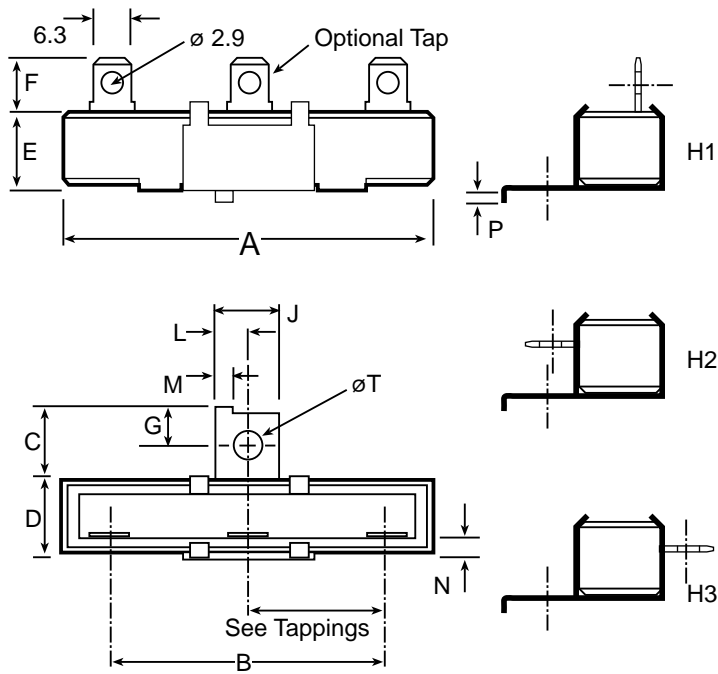
Average Temperature Rise v. Load Curve at 25°C ambient



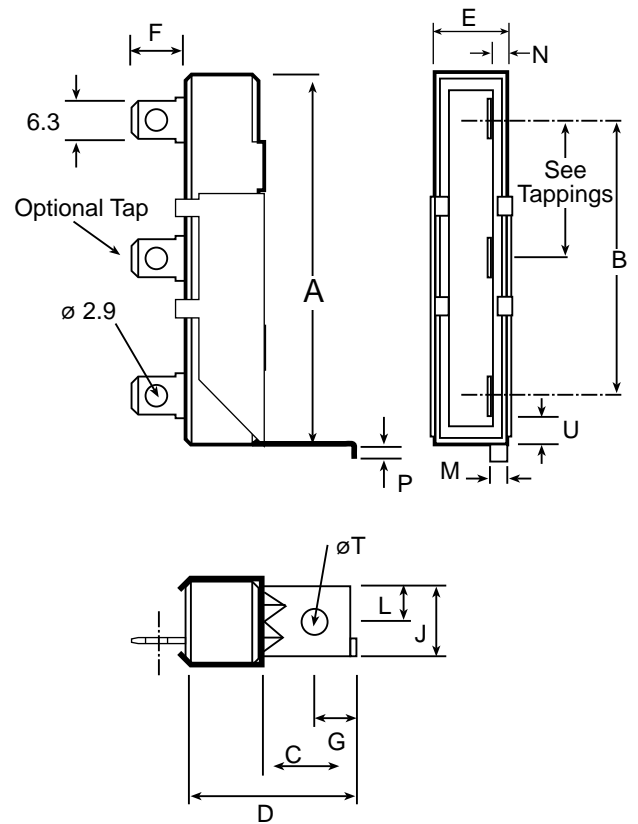
Derating curve for Ambient Temperatures above 25°C



TECHNICAL DATA
DIMENSIONS
PW20H, PW50H



PW20V, PW50V



Dimension	PW20		PW50	
	H	V	H	V
A	63.5	63.5	90	93.8
B	46.6	46.6	73	73
C	12.9	16.0	19.5	19.0
D	12.7	28.7	19.0	38.0
E	13.5	14.5	20.0	20.5
F	10.0	10.0	10.0	9.5
G	6.5	7.0	8.6	9.0
J	11.2	12.0	18.2	18.5
L	5.6	6.0	9.0	9.25
M	3.0	3.1	3.2	3.3
N	3.6	3.7	7.0	5.0
P	1.8	2.2	2.5	2.3
∅T	4.1	3.8	4.2	3.8
U	—	3.0	—	7.2

Tappings

Type		Mounting Styles
PW20	Between 21 and 79% of resistance	H1, H2, V
PW50	Between 11 and 89% of resistance	H1, H2, V