5W TO 50 WATT POWER RESISTORS CERAMIC ENCASED, RADIAL LEADS







WLL & PWH SERIES

□ Low cost, fireproof construction

 \square 0.1 Ω to 150K Ω , ±5% is standard (0.5% to 10% avail.)

OPTIONS

☐ Option X: Non-Inductive

□ Option P: Increased pulse capability

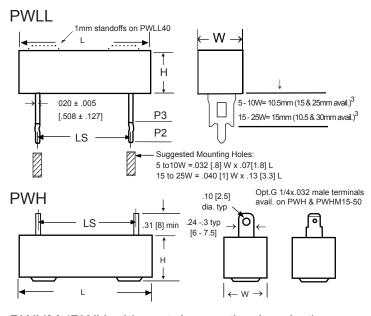
☐ Option G: 1/4x.032" male fast-on terminals (PWH&PWHM15-50)

PWLL and PWH resistors are designed for general purpose and semi-precision power applications. The ceramic construction is fireproof and resistant to moisture & solvents. The internal element is wirewound on lower values, power film on higher values (depending on options, e.g. opt. P parts are always WW). If a specific construction is preferred, specify opt.'WW' for wirewound, opt.'M' for power film (not available in all values).

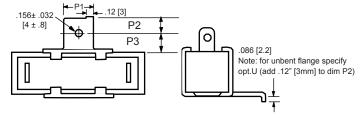
SPECIFICATIONS

RCD Type	Wattage (25°C)	Resis. Range ⁶	Max. Continuous Voltage¹	DIMENSIONS: Inch (mm)						
				L (Max)	W (Max)	H (Max)	LS	P1	P2	P3 ³ ±.06 [1.5]
PWLL5	5	.1Ω-50K	350	1.10 [28]	.413 [10.5]	.413 [10.5]	.59±.06 [15±1.5]	.055±.01 [1.4±.25]	.11 [2.8] min	.413 [10.5] ³
PWLL7	7	.1Ω-100K	500	1.42 [36]	.413 [10.5]	.413 [10.5]	.89±.06 [22.5±1.5]	.055±.01 [1.4±.25]	.11 [2.8] min	.413 [10.5] ³
PWLL10	10	.2Ω-100K	700	1.93 [49]	.413 [10.5]	.413 [10.5]	1.26±.064 [32±1.5]	.055±.01 [1.4±.25]	.11 [2.8] min	.413 [10.5] ³
PWLL15	15	.5Ω-100Κ	750	1.95 [49.5]	.532 [13.5]	.532 [13.5]	1.26±.08 [32±2]	.108±.012 [2.75±.3]	.15 [3.8] min	.591 [15] ³
PWLL25	25	.5Ω-100K	1000	2.54 [64.5]	.591 [15]	.591 [15]	1.69±.1 [43±2.5]	.108±.012 [2.75±.3]	.15 [3.8] min	.591 [15] ³
PWLL40	40 - 50 ⁵	1Ω-2K	1000	3.62 [92]	.787 [20.0]	.847 [21.5]	2.68±.08 [68±2]	.118±.012 [3±.3]	.197 [5] min	.59±12 [15±3]
PWH10, PWHM10	10 ²	.5Ω-50K	700	1.97 [50]	.433 [11.0]	.473 [12.5]	1.30±.08 [33±2]	.470±.04 [12±1]	.22 ±.04 [5.5±1]	.275 [7]
PWH15, PWHM15	15²	.5Ω-150K	750	1.97 [50]	.531 [13.5]	.572 [14.5]	1.30±.08 [33±2]	.470±.04 [12±1]	.24 ±.04 [6 ±1]	.315 [8]
PWH25, PWHM25	25 ²	.5Ω-150K	1000	2.56 [65]	.598 [15.2]	.591 [15]	1.69±.1 [43±2.5]	.470±.04 [12±1]	.24 ±.04 [6 ±1]	.315 [8]
PWH40, PWHM40	40 ²	1Ω-2K	1000	3.03 [77]	.787 [20.0]	.847 [21.5]	2.17±.12 [55±3]	.69±.04 [17.5±1]	.28 ±.06 [7±1.5]	.394 [10]
PWH50, PWHM50	50 ²	1Ω-2K	1000	3.62 [92]	.787 [20.0]	.847 [21.5]	2.72±.12 [69±3]	.69±.04 [17.5±1]	.28 ±.06 [7±1.5]	.394 [10]

¹ Max voltage determined by E=(PR)1/2, E not to exceed MCWV (increased voltage levels avail). When mounted on suitable heatsink, PWHM wattage may be increased by 25% (use thermal grease).



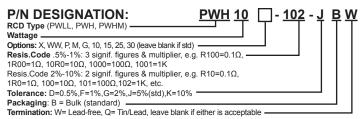
PWHM (PWH with metal mounting bracket)



PERFORMANCE (typ.)

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Temperature	1Ω & above	100ppm/°C typ., 300ppm max *					
Coef _{T25 toT100}	Below 1Ω	200ppm/°C typ., 600ppm max. *					
Operating Temp.		-55° to +235° C (275° C avail)					
Terminal Strength		5 lbs. minimum					
Dielectric Strength		1000V					
5 Sec. overload (≤1.5	5x max V)	3X rated wattage (Opt. WW = 5X)					
Moisture Resistance		3.0%					
High Temp. Exposure		1.0%					
Load Life (1000 hours	s)	3.0%					
Temperature Cycling		2.0%					
Shock and Vibration		1.0%					
Inductance (standard inductive, specify opt. inductance version)	parts are X for low	Opt.X 25W & smaller: ≤50Ω=0.3uH max, >50Ω= 0.6uH max. Opt. X 30W & larger: >50Ω= 1uH max. >50Ω= 2uH max). Reduced induc. avail.					
Temperature Rise		100 to 140°C typ at 50% rated power, 200 to 250°C typ at full rated power					
Derating		Derate wattage and voltage by .48%/°C above 25° C					

^{*} Tightened TC's available, consult factory



PW5LL,7LL,10LL also avail. with 15 or 25mm standoff terminals (specify opt.15 or 25); PW15LL & 25LL avail. with 10.5mm or 30mm, specify options 10 or 30.

1.39"[35mm] avail., specify opt. 35.

5 PWLL40 is rated 40W at 70°C, 50W at 25°C.
6 Expanded range is available; consult factory.