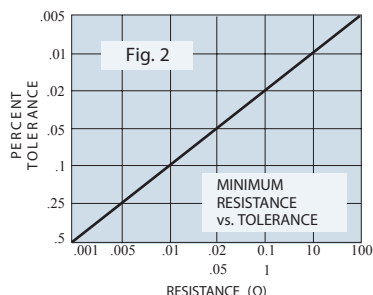


# PLV SHUNTS



**How You Can Profit From PLV Shunts:**  
 Variable lead sizes ..... for current-sensing to 45 Amps  
 Resistance values ..... to 0.001Ω  
 Voltage drop or ohmic tolerances ..... to ±0.005%  
 TCR characteristics ..... 15ppm/°C (std.) to 10 ppm/°C  
 Temperature Span ..... -65 to +275°C @ 1% tolerance  
 For closer tolerance see Derating Curve Fig. 3

## ELECTRICAL & PHYSICAL SPECIFICATIONS

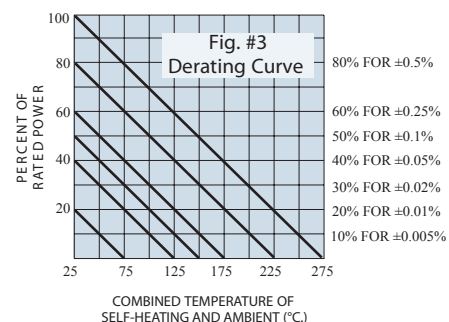
PRC Type	Max. Rating Watts Amps	Body Dimensions ±.787mm (.031")			1" L * Lead Diam. Tinned Copper	Std. Min. Res @ Max. Watts Special Min. Res @ Derated Power		
		(H) mm ins.	(L) mm ins.	(W) mm ins.				
PLV 1/2	0.5W 3A	4.95 .195"	8.64 .340"	3.18 .125"	.028" #21 AWG	.055Ω @ 0.5W .001Ω @ 0.009W		
PLV 1	1W 5A	5.97 .235"	9.53 .375"	4.32 .170"	.028" #21 AWG	.04Ω @ 1W .001Ω @ 0.025W		
PLV 2	2W 8A	6.35 .250"	9.78 .385"	5.72 .225"	.028" #21 AWG	.03Ω @ 2W .001Ω @ 0.64W		
PLV 3	3W 15A	6.35 .250"	12.7 .500"	6.35 .250"	.032" #20 AWG	.013Ω @ 3W .001Ω @ .225W		
PLV 5	5W 15A	7.87 .310"	15.88 .625"	7.87 .310"	.032" #20 AWG	.022Ω @ 5W .001Ω @ .225W		
PLV 7	7W 18A	12.7 .500"	38.1 1.500"	12.7 .500"	.036" #19 AWG	.022Ω @ 7W .001Ω @ .324W		
PLV7AL	7W 38A	12.7 .500"	38.1 1.500"	12.7 .500"	To # 10 AWG	.001Ω @ 1.444W		
PLV10	10W 20A	25.4 1.000"	38.1 1.500"	25.4 1.000"	.040" #18 AWG	.025Ω @ 10W .001Ω @ 0.4W		
PLV10AL	10W 45A	25.4 1.000"	38.1 1.500"	25.4 1.000"	To # 8 AWG	.001Ω @ 2W		

\*Precision 4-Lead design eliminates contact and lead-out resistance.  
 2 concentrically located current leads and 2 offset potential leads. Suffix letters "AL" = Aluminum Case

## ENGINEERING DATA:

- RESISTANCE VS. TOLERANCE**  
You can select any value from 1 milliohms to 100Ω. Please refer to Fig. #2 for Resistance vs. Tolerance ratios.
- TCR: 0±15 ppm/ °C (Std.)**  
Specify - LTC for 0±10ppm to +150°C
- POWER & CURRENT RATINGS**  
Full power ratings are based upon ±1% res. tols. at 25°C. Derating is required for closer tolerances, higher temperatures (Fig. #3) and lower values. Refer to Std. Min. Res. @ Max. watts in above column.
- STABILITY**  
To ±0.001%/yr. at 25°C (no load).
- TERMINALS**  
All PLVs have solderable "hot-tinned" pure copper wire leads. Higher current-carrying capacity leads to #8 AWG are available for full power ratings on values below the Std. Min. Res. listed. PRC's unique "single-joint" design on the four (4) terminal parts makes tab identification academic.
- PROTECTIVE ENCAPSULATION**  
PLVs are sealed in high temp/solvent resistant epoxy. Epoxy/aluminum cases are available on 7 watt & 10 watt sizes.
- MARKING**  
PRC symbol, type ohmic value and tolerance. Custom marking is available.

FULL RATED POWER & CURRENT FOR ± 1% RES. TOL.  
 BOTH MAX POWER & MAX CURRENT PUBLISHED MUST  
 BE DE-RATED FOR TOLERANCES CLOSER THAN ± 1%



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