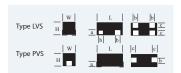
# LVS/PVS - CURRENT SENSING

### How LVS/PVS Shunts Will Benefit You: SMD current-sensing ..... to 15 amperes Ohmic/voltage drop tolerances ..... Values ...... from 1 miliohm to $100 K\Omega$ Temperature Span .....-65 to +250°C For closer tolerances, see Fig. # 3 De-rating Curve . -65 to +250°C (@ 1%)

## Fig. #3 Derating Curve 60% FOR ±0.25% 50% FOR ±0.1% 40% FOR ±0.05% 30% FOR ±0.02% 20% FOR ±0.01% COMBINED TEMPERATURE OF SELF-HEATING AND AMBIENT (°C.)

### Precautionary Statement applies to all SMDs /SMTs

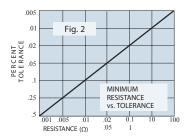
\*Not to be exposed to temps above 150°C for ±0.1% Tol. And 125°C for tolerances closer than ±0.1% without prior heat testing qualification approval procedures. Re-flow solder methods not recommended closer than ±0.25%



PRC's unique "single joint" design on the 4-tab LVS Series makes tab I.D. academic so you may select the pair closest to the top as your sense leads & the bottom pair for the current leads or vice versa

### **ELECTRICAL & PHYSICAL SPECIFICATIONS**

ELECTRICAL & THISICAL SI ECITICATIONS												
DDC	Max.	PAD LAYOUT  e  d	DIMENSIONS ± .787 MM (.031")								Max.	Std. Min. Res. @ Max. Watts
PRC TYPE	<u>Watt</u> Amp		H <u>mm</u> ins.	L <u>mm</u> ins.	W <u>mm</u> ins.	a <u>mm</u> ins.	b <u>mm</u> ins.	c <u>mm</u> ins.	d <u>mm</u> ins.	e <u>mm</u> ins.	Res. (Ω)	Special Min. Res. @ Derated Watts
PVS1	1 <u>W</u> 3A	PVS1	3.30 .130"	9.14 .360"	3.18 .125"	<u>1.91</u> .075"	1.91 .075"	2.54 .100"	6.60 .260"		5K	.111Ω @ 1W .001Ω @ .009 W
LVS2	<u>2W</u>	LVS2	6.35	9.78	5.72	3.18	2.84	2.54	4.90 .193"	3.81 .150"	100	.03Ω @ 2W
PVS2	8A	PVS2	.250"	.385"	.225"	.125"	.112"	.100"	7.87 .310"		15K	.001Ω @ 0.064W
LVS3	3W		6.35 .250"	12.7 .500"	6.35 .250"	<u>2.54</u> .100"	<u>2.84</u> .112"	<u>2.54</u> .100"	6.99 .275"	4.70 .185"	100	.013Ω @ 3W
PVS3	15A								10.8 .425"		50K	.001Ω @ 0.225W
LVS5	5W		<u>7.87</u> .310"	15.88 .625"	<u>7.87</u> .310"	1.91 .075"	<u>2.84</u> .112"	2.54 .100"	8.08 .318"	6.10 .240"	100	.022Ω @ 5W
PVS5	15A								14.0 .551"		100K	.001Ω @ 0.22W



# 1. RESISTANCE AND TOLERANCES

You can select any ohmic value or decimal part of an ohm from  $0.001\Omega$  to  $100K\Omega$  with microhm/microvolt accuracies to  $\pm 0.005\%$  see Fig. 2 above.

### TCR CHARACTERISTICS

0±15 ppm/°C.(std.) Please specify temperature span of operation. Add LTC in the part # for TCR 0±10ppm/°C. to +150°C.

# $\frac{\text{STABILITY VS. TIME}}{\text{to } \pm 0.001\%/\text{yr. at } 25^{\circ}\text{C. (no load)}$

### PRECISION POWER

Standard Min. Res. @ Max. Watts based upon ±1% resistance tolerances at 25°C. (please see end column above). Derating is required for higher temperatures, closer tolerances and lower resistance values please see Fig. # 3 at top of page.

### **ENGINEERING DATA:**

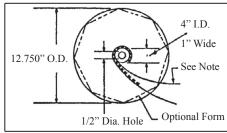
### 5. PROTECTIVE SEAL

Rectangular solvent-resistant epoxy case offers excellent thermal transfer to base.

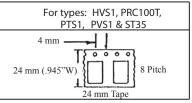
6. TERMINALS Solderable "hot-tinned" pure copper (ETP/OFHC) tab terminals and low EMF construction reduces thermal effects usually associated with low value resistors.

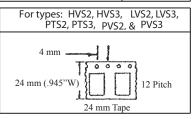
### 7. SMT "Carrier Tape" PACKAGING per IEC 286-3 (EIA 481):

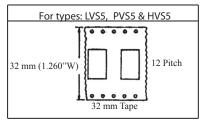
Please see Purchasing Information on pg 3.



Note: Skin packed to tape with polyfilm









# PRECISION RESISTOR CO., INC.

10601 75TH Street North, Largo, Florida 33777-1421 U.S.A.

Tel: 727-541-5771 Fax: 727-546-9515

Email: sales@precisionresistor.com Web Site: http://www.precisionresistor.com

6