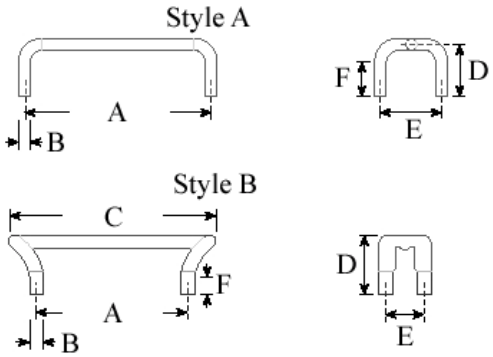
Features:

- Values from 0.003 to 0.1
- Suitable for high current applications where standard current sense resistor will not survive
- Current handling up to 100 amps
- Handles 1W to 5W of power
- Various wire alloys and sizes allow for value, tolerance, and TC flexibility; contact factory for specific combination of alloy and Temperature Coefficient of Resistance.

Electrical Specifications

Type / Code	Power Rating (Watts) @ 25ºC	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance	
			2%	5%, 10%
HLD1	1W	±100 ppm/ºC - ±50 ppm/ºC	0.03 - 0.1	0.003 - 0.1
HLD3	3W	±100 ppm/ºC - ±50 ppm/ºC	0.03 - 0.1	0.003 - 0.1
HLD5	5W	±100 ppm/ºC - ±50 ppm/ºC	0.03 - 0.1	0.003 - 0.1



Mechanical Specifications

Type / Code	Style	A Lead Spacing	B Lead Diameter	C Total Length	D Height	E Lead Width	F Type to Bend	Unit
HLD1	A	1.100 ± 0.100 27.94 ± 2.54	0.040 1.02	- -	0.200 ± 0.150 5.08 ± 3.81	0.200 ± 0.010 5.08 ± 0.25	0.100 2.54	inches mm
HLD3	B	1.000 ± 0.100 25.40 ± 2.54	0.081 2.06	1.400 max 35.56 max	0.450 ± 0.100 11.43 ± 2.54	0.250 ± 0.010 6.35 ± 0.25	0.100 2.54	inches mm
HLD5	B	1.000 ± 0.100 25.40 ± 2.54	0.081 2.06	1.400 max 35.56 max	0.450 ± 0.100 11.43 ± 2.54	0.250 ± 0.010 6.35 ± 0.25	0.100 2.54	inches mm

Performance Characteristics

Test	Test Method	Test Specification	Typical
Load Life	MIL-STD-502F-Method 108A RCWW at 70°C; 1.5hr ON, 0.5hr OFF Total 1024 ± 24hrs	± 5%	≤ 5%
Short Time Overload	JIS-C-5202-5.5 5x rated power for 5 sec	± 2%	≤ 2%
Thermal EMF(1)	-	± 40 µV/°C	-

Operating Temperature Range: -55°C to +275°C

(1) Thermal EMF dependant on Alloy selection; Contact Factory

How to Order

1	2	3	4	5	6	7	8	9	10
H	L	D	1	G	B	R	1	0	0

Product Series	
HLD	Current Shunt

Size	Power
1	1W
3	3W
5	5W

Tolerance	
Code	Tol
G	2%
J	5%
K	10%

Packaging			
Code	Description	Size	Quantity
B	Bulk	All Sizes	100

Resistance Value
Four characters with the multiplier used as the decimal holder. "L" used as multiplier of 10^{-3} for any value under 0.1 ohm.
0.03 ohm = 30L0 0.1 ohm = R100

Legacy Part Number (before January 3, 2011):

SEI Type	Code	Nominal Resistance	Tolerance	Packaging
HLD	1	0.1	2%	A

Type	Description
HLD	Current Shunt

Code	Wattage
1	1W
3	3W
5	5W

Tolerance
2%
5%
10%

SEI Types	Pkg Qty	Description	Code
all	100	bulk	A