

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
- 100% RoHS compliant and lead free without exemption
- Halogen free
- REACH compliant



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

Mechanical Specifications								
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Style A</p> </div> <div style="text-align: center;"> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;"> <p>Style B</p> </div> <div style="text-align: center;"> </div> </div>								
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 \pm 0.100	0.040	-	0.200 \pm 0.150	0.200 \pm 0.010	0.100	inches
		27.94 \pm 2.54	1.02	-	5.08 \pm 3.81	5.08 \pm 0.25	2.54	mm
HLD3	B	1.000 \pm 0.100	0.081	1.400 max	0.450 \pm 0.100	0.250 \pm 0.010	0.100	inches
		25.40 \pm 2.54	2.06	35.56 max	11.43 \pm 2.54	6.35 \pm 0.25	2.54	mm
HLD5	B	1.000 \pm 0.100	0.081	1.400 max	0.450 \pm 0.100	0.250 \pm 0.010	0.100	inches
		25.40 \pm 2.54	2.06	35.56 max	11.43 \pm 2.54	6.35 \pm 0.25	2.54	mm

Performance Characteristics			
Test	Test Method	Test Specification	Typical
Load Life	MIL-STD-502F-Method 108A RCWW at 70 °C; 1.5 hours ON, 0.5 hour OFF Total 1024 \pm 24hrs	$\pm 5\%$	$\leq 5\%$
Short Time Overload	JIS-C-5202-5.5 5x rated power for 5 sec	$\pm 2\%$	$\leq 2\%$
Thermal EMF(1)	-	$\pm 40 \mu V / ^\circ C$	-

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

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

RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status						
Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
HLD	Open air Bare Element Current Shunt / Sensing Resistor	Special (4 Leads)	YES	100% Matte Sn	Always	Always

"Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to "REACH"

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, "The Registration, Evaluation, Authorization and Restriction of Chemicals", otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

