

NEW PRODUCT INFORMATION Product Group: Vishay Custom Magnetics, Inductors / April 2018

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Industry's First IHLP[®] Inductor Series Qualified to MIL-STD-981 Class S for Space-Grade Applications

SGIHLP Devices Feature High Operating Temperatures to +180 °C in a Rugged Package

Product Benefits:

- Meets the requirements of MIL-STD-981 class S
- High operating temperatures to +180 °C
- Rugged package
- Offered in five case sizes
- Typical DCR from 0.56 m Ω to 240 m Ω
- Wide range of inductance values from 0.22 μH to 100 μH
- Rated currents to 100 A



Market Applications:

- DC/DC converters and high current noise suppression filters in satellites and defense systems
- Low profile, high current power supplies and point of load (POL) converters; "flight-ready" solar inverters; high current filters; and DC/DC converters in distributed power systems

The News:

Vishay Intertechnology introduces a new series of low profile, high current IHLP inductors that are the industry's first to meet the requirements of MIL-STD-981 class S. Designed to provide high reliability in space-grade applications, devices in the Vishay Custom Magnetics SGIHLP series offer high operating temperatures to +180 °C in a ruggedized package.

- Feature a magnetically shielded construction
- Offer high efficiency
- Handle high transient current spikes without saturation
- Excellent inductance and saturation stability over the complete operating temperature range





The Key Specifications:

Part number	SGIHLP-	SGIHLP-	SGIHLP-	SGIHLP-	SGIHLP-
	24DC-8	48FA-8	60HE-8	73HF-8	97OZ-8
Case size	24DC	48FA	60HE	73HF	97OZ
Dimensions (mm)	6.2 x 6.7	12.2 x 12.9	15.5 x 15.2	18.8 x 19.2 x	27.2 x 24.5
	x 4.3	x 6.1	x 8.5	8.6	x 15.0
Inductance (µH)	0.22 to 15	0.47 to 68	0.22 to 22	0.47 to 47.0	0.47 to 100
DCR typ. (mΩ)	3.95 to 195	1.55 to 240	0.73 to 31.30	0.89 to 52.7	0.56 to 36.25
DCR max. (mΩ)	4.23 to 208	1.66 to 252	0.81 to 33.49	0.95 to 56.4	0.67 to 39.40
Heat rating current	2.4 to 18	2.4 to 30	8.3 to 66	7.25 to 65.0	9.1 to 80
(A)					
Saturation current (A)	1.6 to 11	3.5 to 28.5	5.5 to 68	7.0 to 76.0	7.0 to 100
SRF typ. (MHz)	14.1 to 190	4.02 to 72.1	6.43 to 113	3.72 to 52.3	2.01 to 47.5

Availability:

Samples and production quantities of the new inductors are available now, with lead times of 14 weeks for large orders.

To access the product datasheets on the Vishay Website, go to:

http://www.vishay.com/ppg?34463 (SGIHLP-97OZ-8) http://www.vishay.com/ppg?34464 (SGIHLP-24DC-8) http://www.vishay.com/ppg?34465 (SGIHLP-73HF-8) http://www.vishay.com/ppg?34466 (SGIHLP-60HE-8) http://www.vishay.com/ppg?34467 (SGIHLP-48FA-8).

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