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Vishay Dale

RoHS

COMPLIANT

**HALOGEN** 

FREE

# IHLP® Commercial Inductors, High Saturation Series





#### **LINKS TO ADDITIONAL RESOURCES**





STANDARD ELECTRICAL SPECIFICATIONS				
L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A) (2)
0.22	0.63	0.75	80	129
0.33	0.71	0.82	65	126
0.47	0.90	1.03	62	123
0.56	0.91	1.05	56	88
0.82	1.17	1.29	50	73
1.0	1.28	1.38	48	73
1.5	1.78	1.88	42	65
1.8	1.96	2.10	38	65
2.2	2.40	2.53	35	62
3.3	3.68	3.88	28	54
4.7	4.84	5.11	25	41
5.6	6.68	7.05	21	40
6.8	8.37	8.83	19	32
8.2	10.10	10.66	18	25
10.0	11.6	12.0	16.5	25
15.0	18.8	19.9	12.5	25
22.0	25.1	26.5	11	23

#### **Notes**

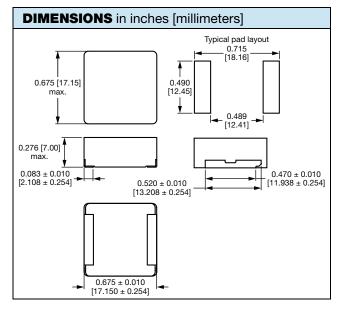
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +125 °C
- The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Rated operating voltage (across inductor) = 75 V
- (1) DC current (A) that will cause an approximate ΔT of 40 °C
- (2) DC current (A) that will cause L<sub>0</sub> to drop approximately 20 %

#### **FEATURES**

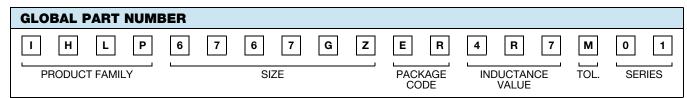
- Shielded construction
- Frequency range up to 2.0 MHz
- Lowest DCR/µH, in this package size
- · Handles high transient current spikes without saturation
- Saturation and inductance extremely stable over temperature
- GREEN (5-2008)
- Ultra low buzz noise, due to composite construction
- IHLP design; PATENT(S): <a href="https://www.vishav.com/patents">www.vishav.com/patents</a>
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

#### **APPLICATIONS**

- Desktop / server applications
- · High current buck and boost converters
- · Low profile, high current power supplies
- DC/DC converters in distributed power systems
- · High current noise filter







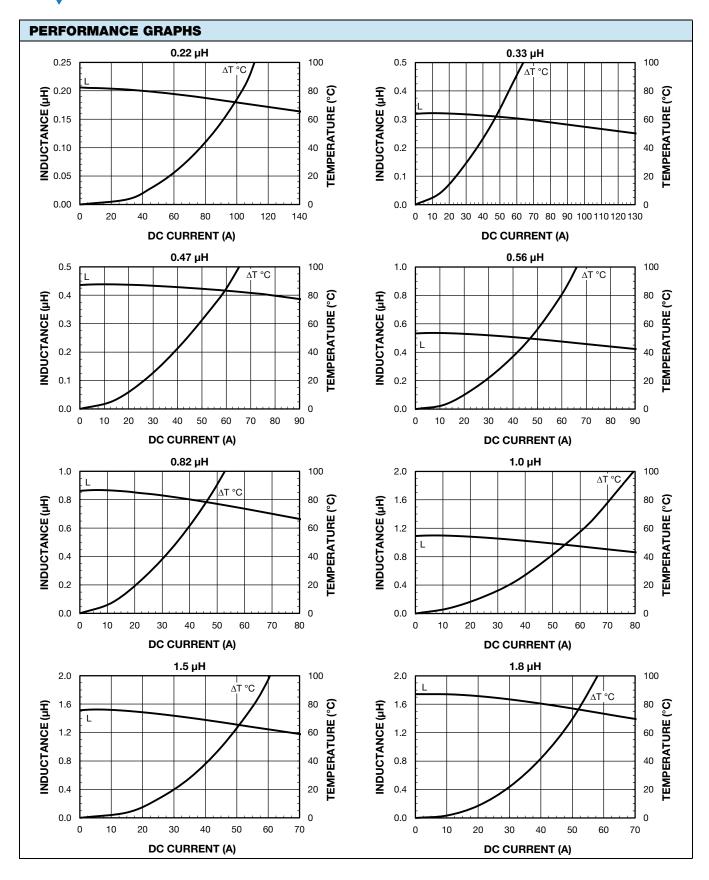
PATENT(S): www.vishay.com/patents

Revision: 24-Nov-2023

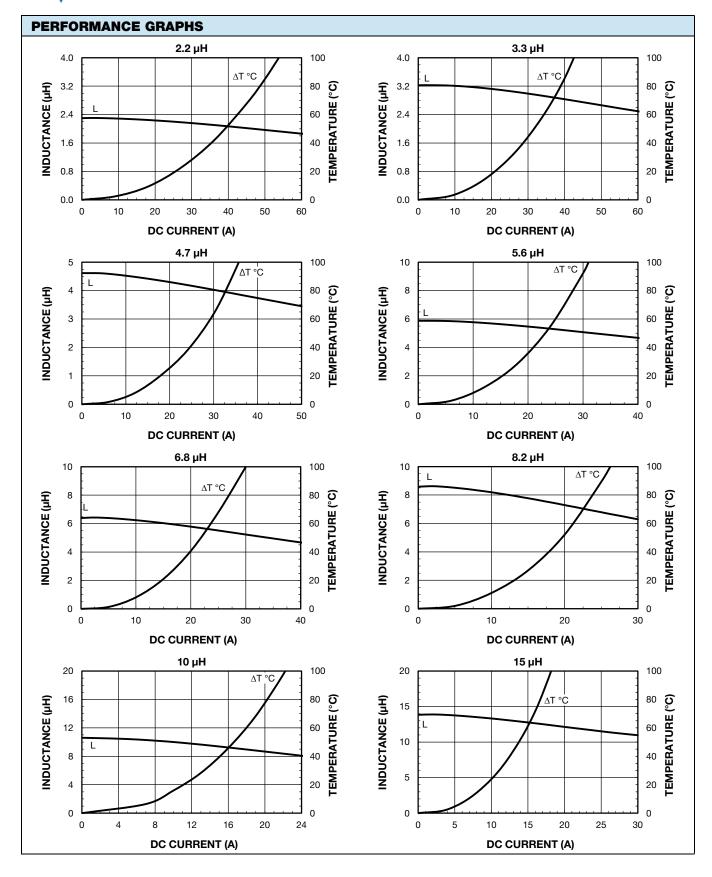
This Vishay product is protected by one or more United States and international patents.



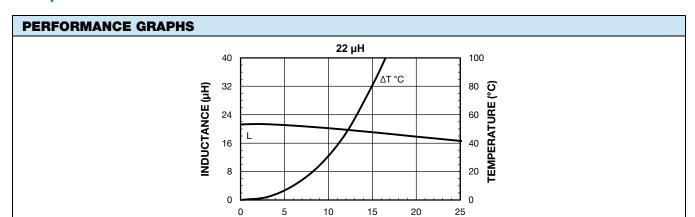
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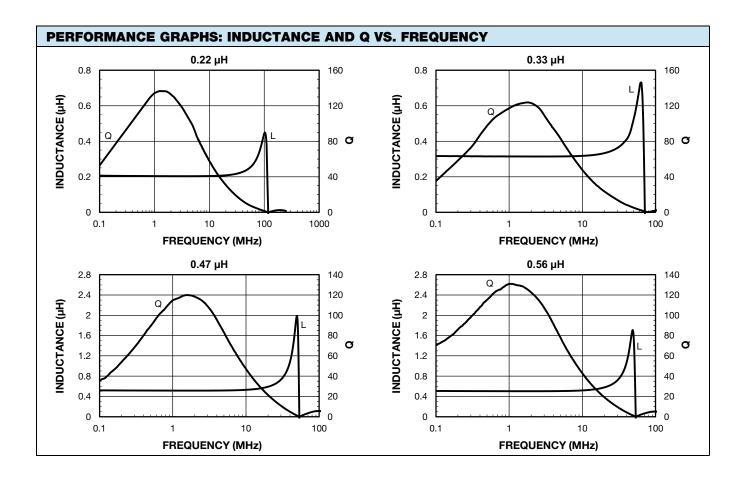


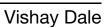






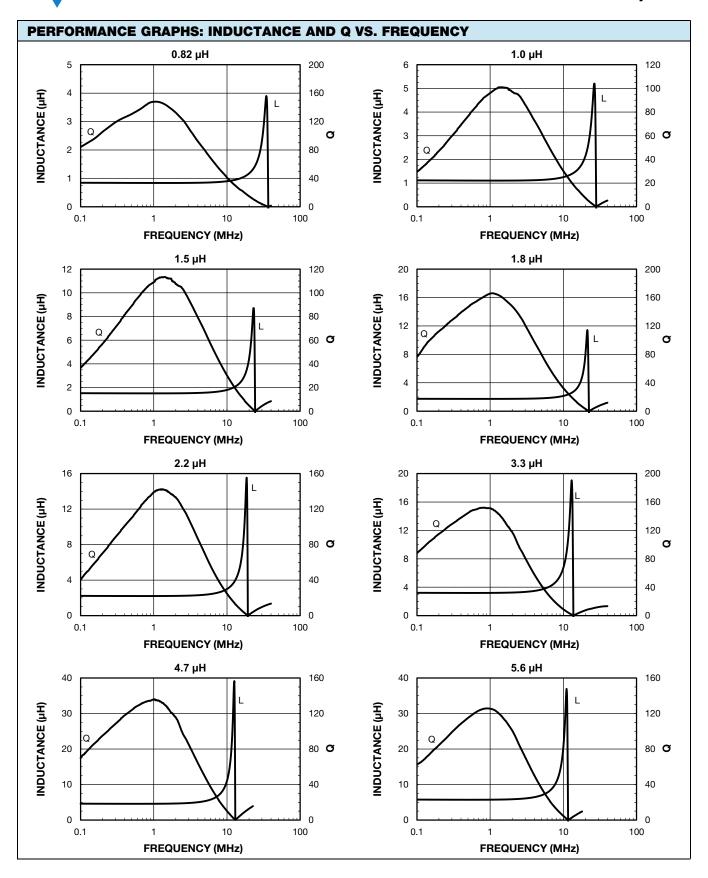
DC CURRENT (A)

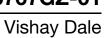




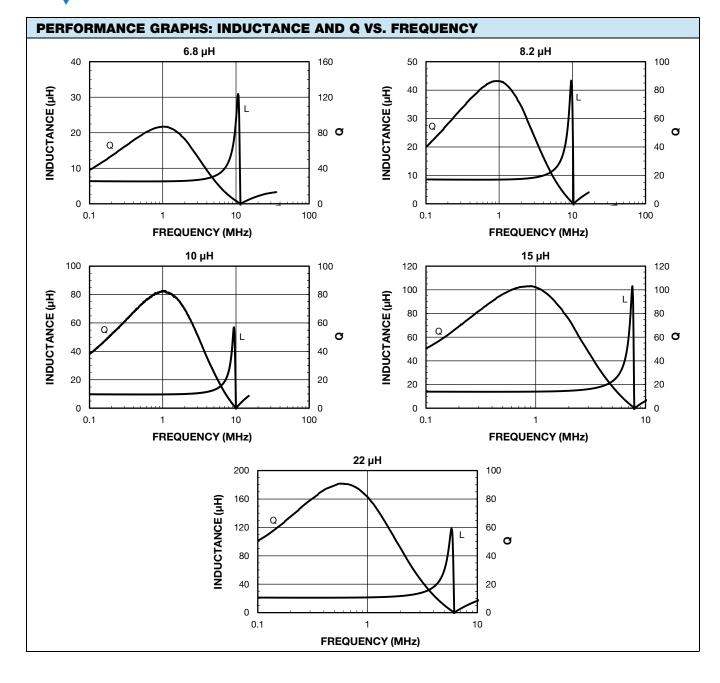


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