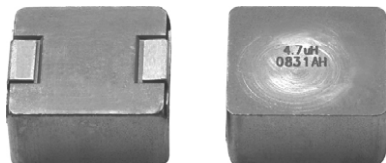


IHLP® Automotive Inductors, High Saturation Series



LINKS TO ADDITIONAL RESOURCES



RoHS
COMPLIANT
HALOGEN
FREE

STANDARD ELECTRICAL SPECIFICATIONS				
L ₀ 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⁾
0.10	0.47	0.50	60.0	120.0
0.15	0.53	0.60	55.0	118.0
0.22	0.63	0.70	53.0	112.0
0.30	0.70	0.80	48.0	72.0
0.33	0.83	0.90	46.0	65.0
0.40	0.90	1.0	44.0	64.0
0.47	1.0	1.2	41.0	63.0
0.56	1.2	1.4	37.0	62.0
0.68	1.4	1.6	35.0	60.0
0.82	1.6	1.9	33.0	50.0
1.0	1.7	2.0	32.0	49.0
1.2	2.1	2.5	30.0	48.0
1.5	2.5	3.0	27.0	45.0
1.8	2.8	3.2	24.0	41.0
2.2	3.5	4.2	22.0	40.0
3.3	5.7	6.8	18.0	35.0
4.7	9.3	11.2	13.5	30.0
5.6	9.3	10	13.5	26.5
6.8	13.1	14	11.5	16.5
8.2	14.5	15.5	10.5	16.0
10	16.4	17.2	10.0	15.5
15	27.6	29.7	7.7	15.0

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 L₀ to drop approximately 20 %

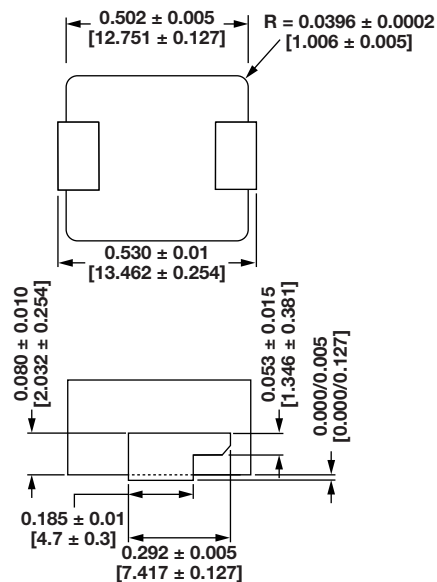
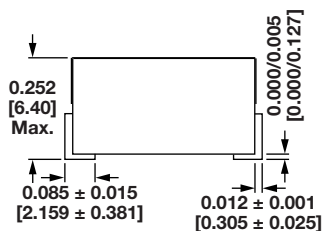
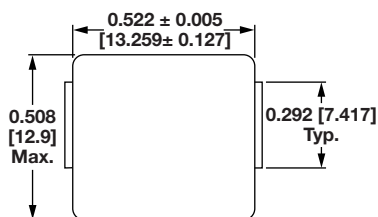
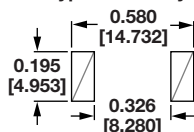
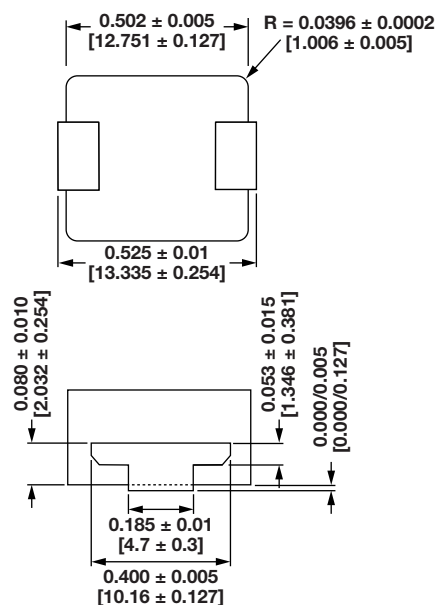
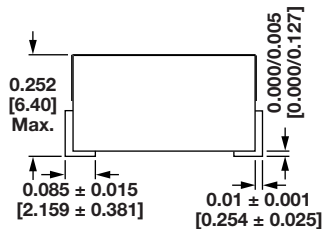
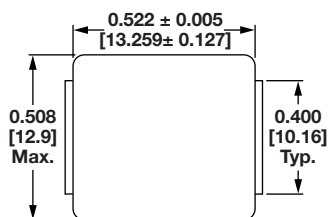
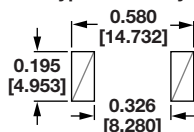
DESCRIPTION											
IHLP-5050FD-A1	1.0 µH	± 20 %	ER	e3							
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD							

GLOBAL PART NUMBER											
I	H	L	P	5	0	5	0	F	D	E	R
PRODUCT FAMILY				SIZE				PACKAGE CODE	INDUCTANCE VALUE	TOL.	SERIES

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

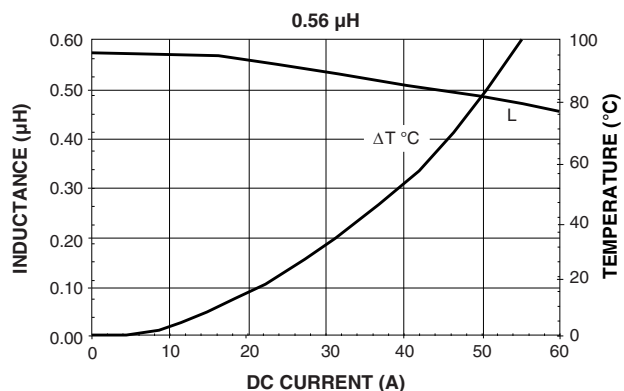
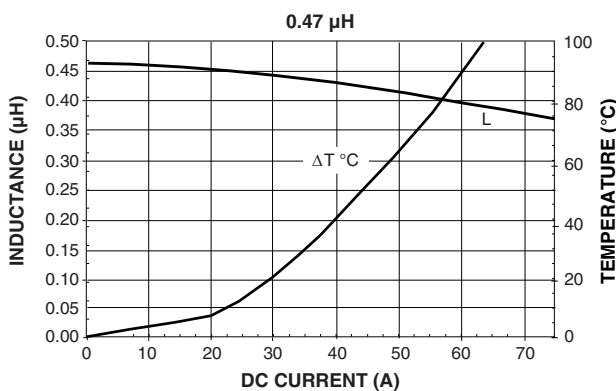
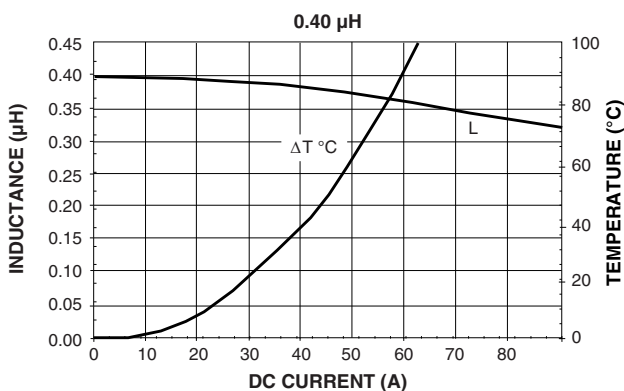
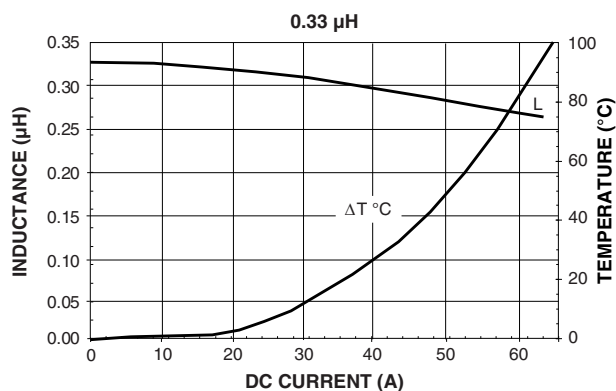
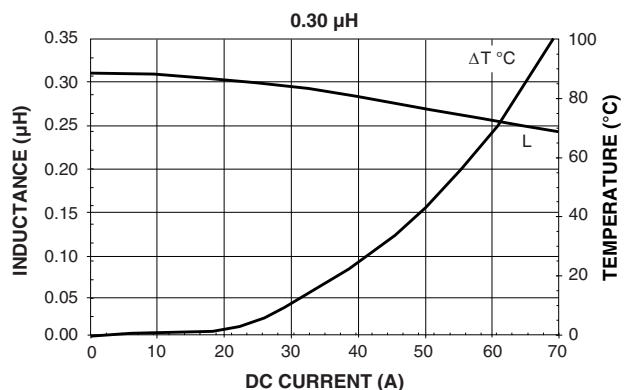
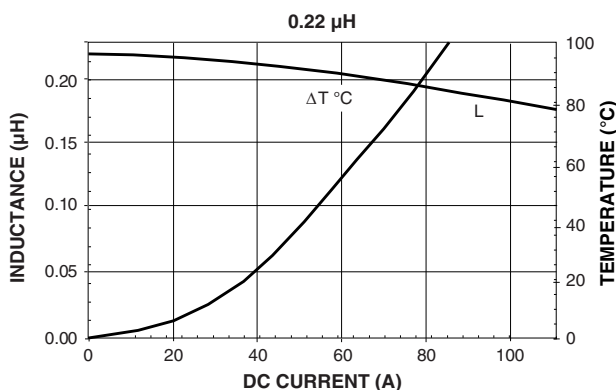
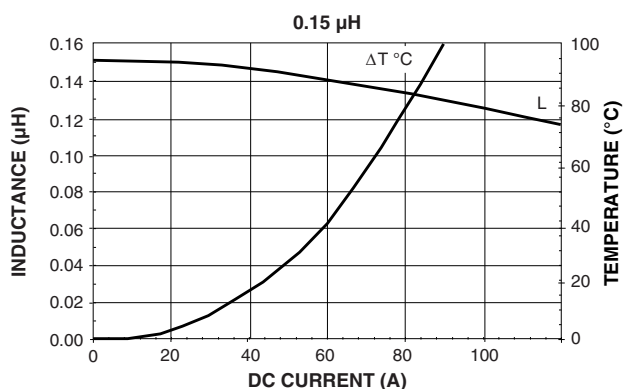
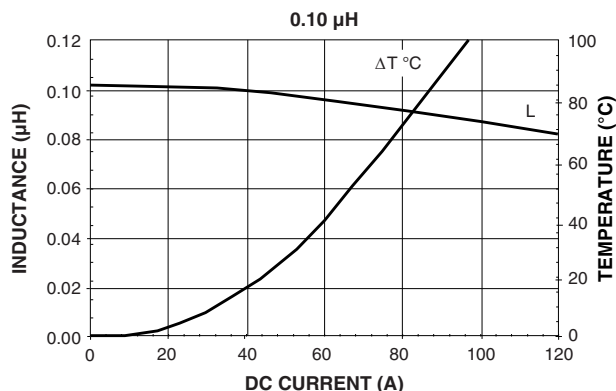
This Vishay product is protected by one or more United States and international patents.

DIMENSIONS in inches [millimeters]

Values 0.82 μ H and lower
Typical Pad Layout

Values 1.0 μ H and higher
Typical Pad Layout


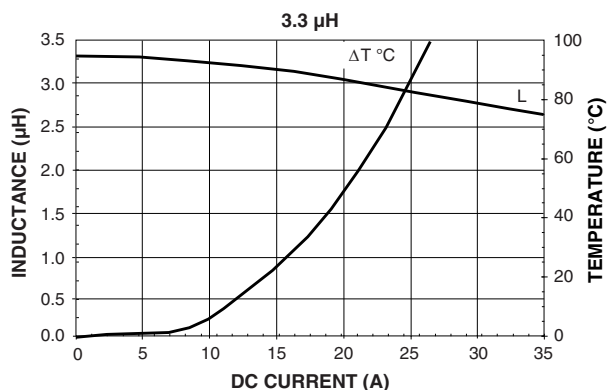
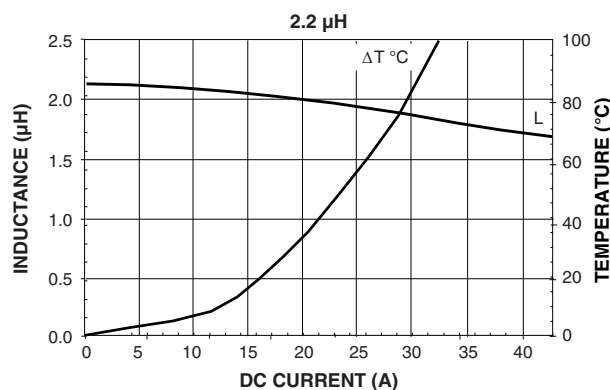
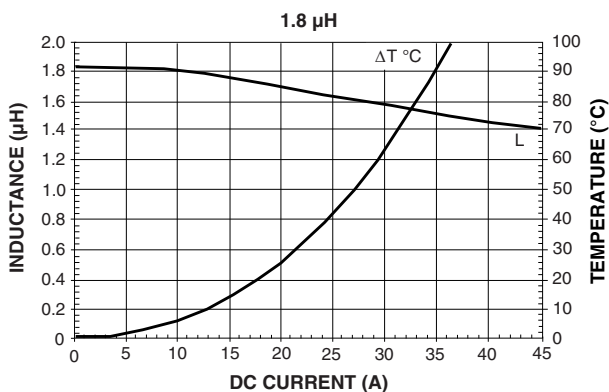
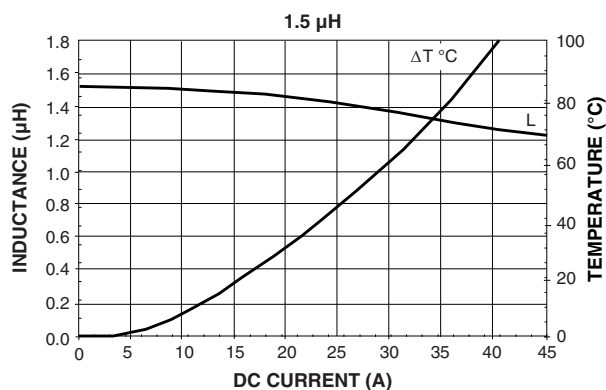
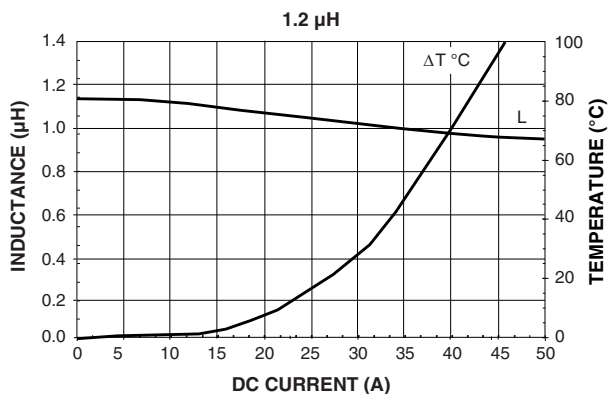
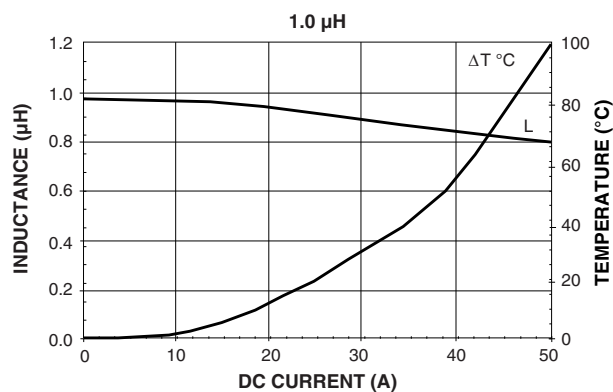
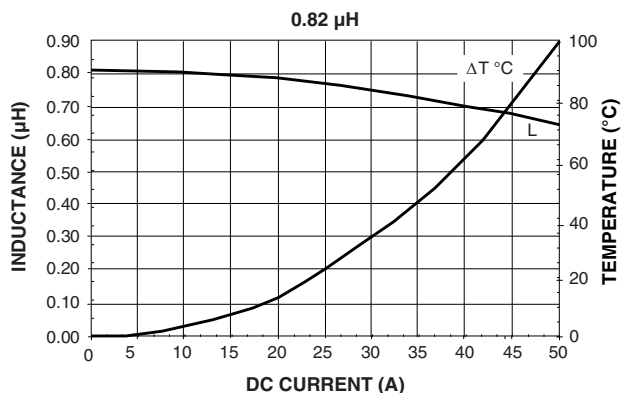
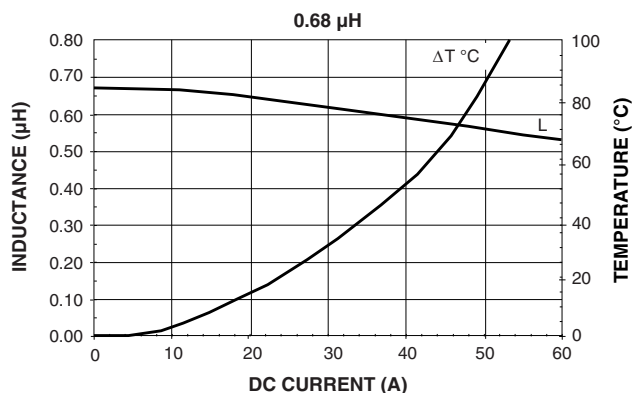


PERFORMANCE GRAPHS



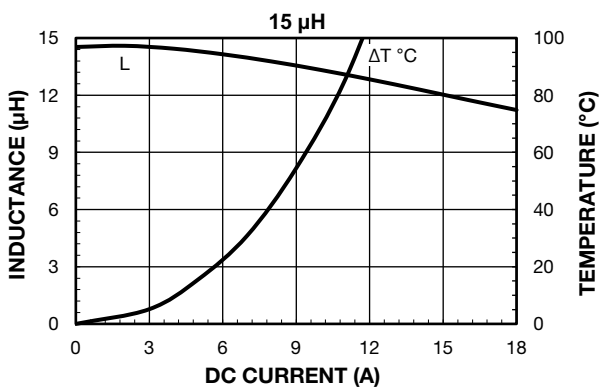
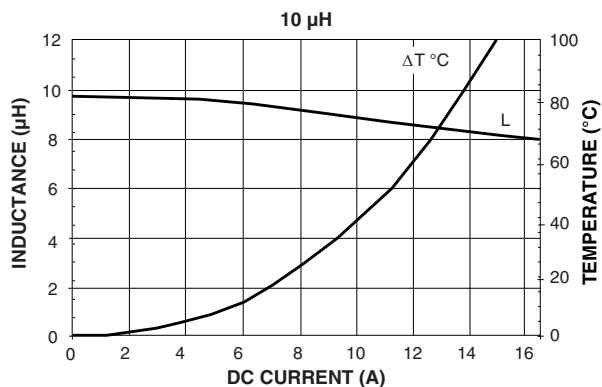
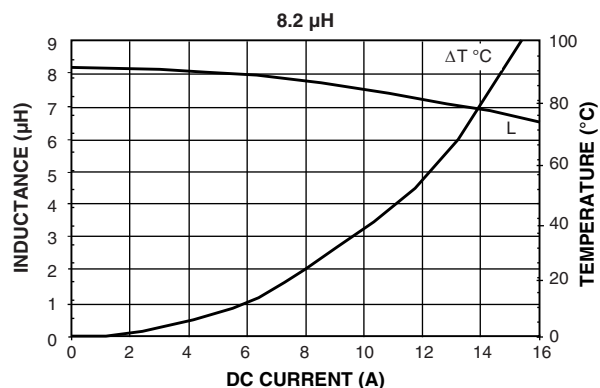
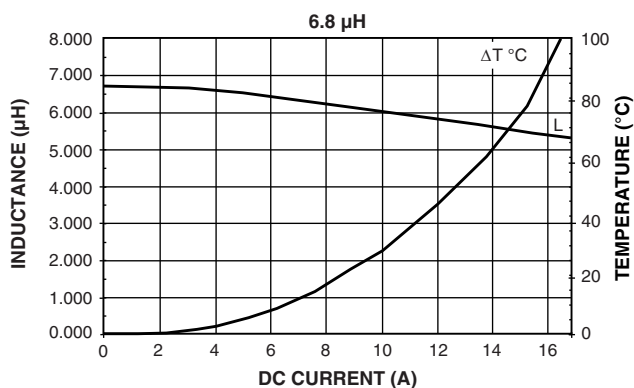
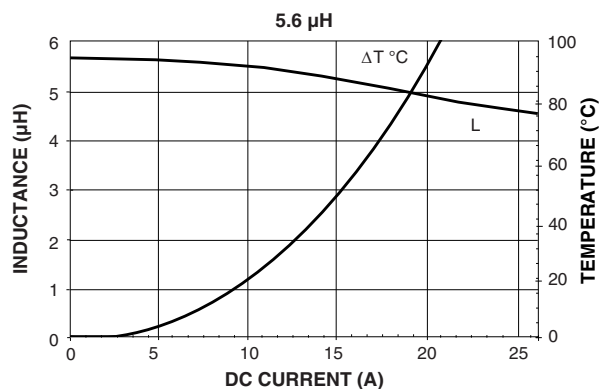
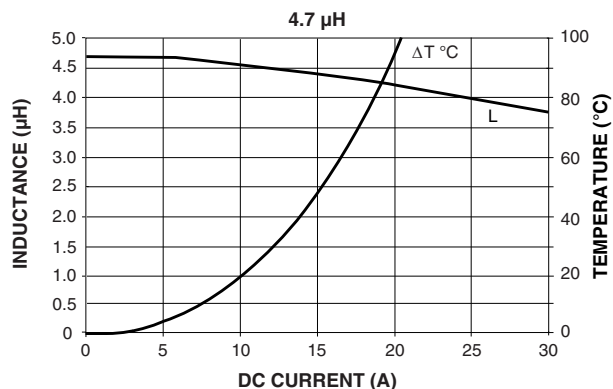


PERFORMANCE GRAPHS





PERFORMANCE GRAPHS





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