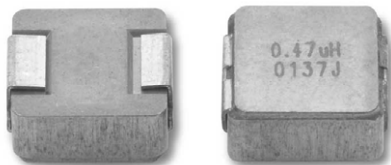


IHLP® Automotive Inductors, High Temperature (155 °C) Series



LINKS TO ADDITIONAL RESOURCES



FEATURES

- High temperature, up to 155 °C
- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 Mhz. Filter inductor applications up the SRF (see Standard Electrical Specifications table)
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc299912

APPLICATIONS

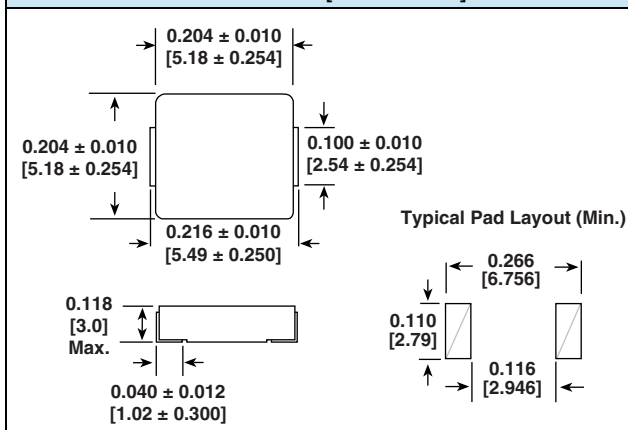
- Engine and transmission control units
- Diesel injection drivers
- DC/DC converter for entertainment / navigation systems
- Noise suppression for motors: windshield wipers / power seats / power mirrors / heating and ventilation blower / HID lighting
- LED drivers

STANDARD ELECTRICAL SPECIFICATIONS					
L₀ 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⁾	SRF TYP. (MHz)
0.22	3.95	4.23	18	11	190
0.33	4.9	5.34	16	9.8	117
0.47	6.58	7.04	14.2	7.8	92
0.68	9.1	9.74	11.3	8.2	77.7
1	11.5	12.1	10.8	8	60.7
1.5	18	19.8	7.9	7.1	49.2
2.2	24.7	26	6.6	6.3	39.8
3.3	44.0	47.0	5.3	5.5	33.4
4.7	72.8	78.3	4.1	3.7	23.8
6.8	104	111	3.2	2.2	18.8
10	132	138	2.8	1.6	15.9
15	195	208	2.4	1.6	14.1

Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °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) = 50 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 %

DIMENSIONS in inches [millimeters]



DESCRIPTION					
IHLP-2020CZ-5A	1.5 μH	± 20 %	EK	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD	

GLOBAL PART NUMBER											
I	H	L	P	2	0	2	0	C	Z	E	K
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE	
										TOL.	
										SERIES	

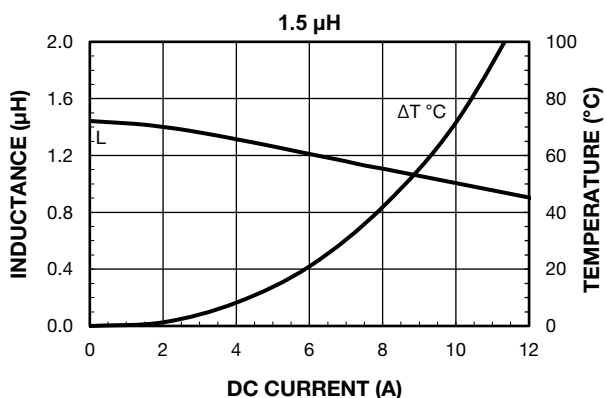
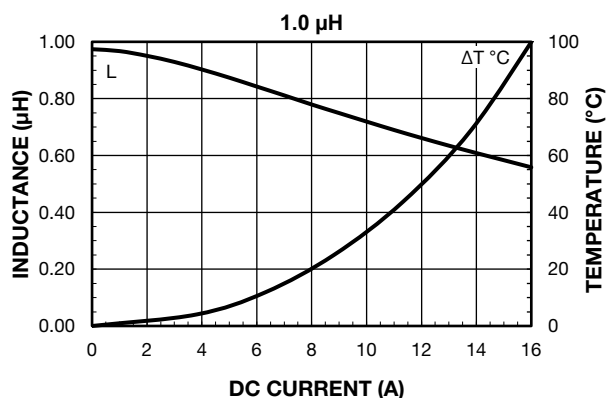
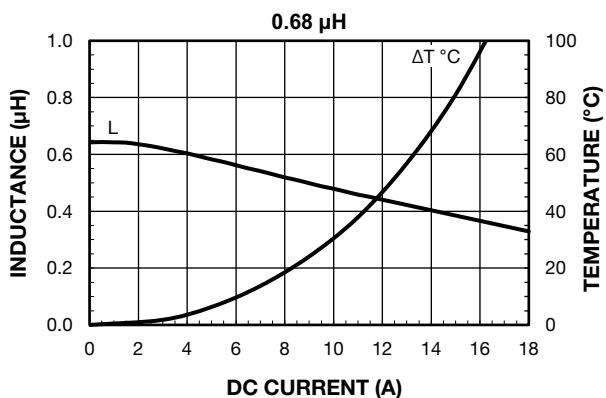
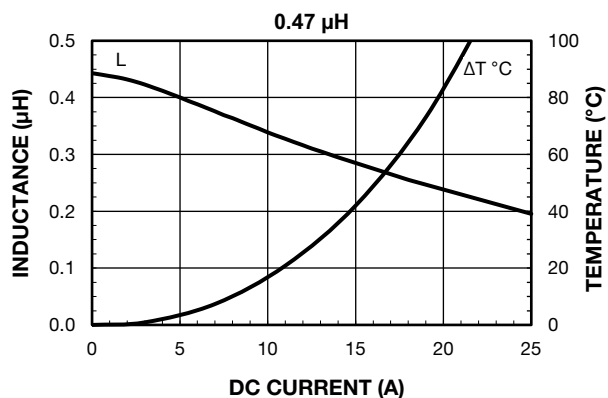
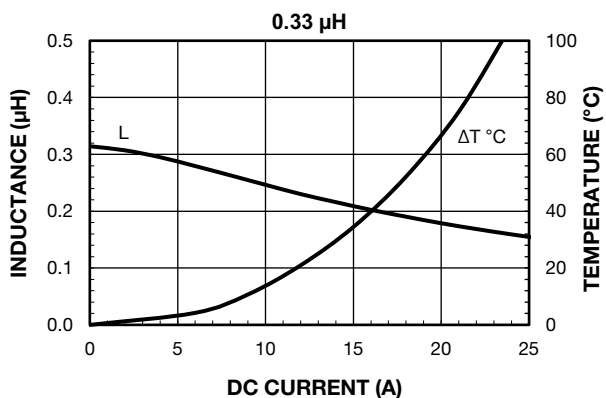
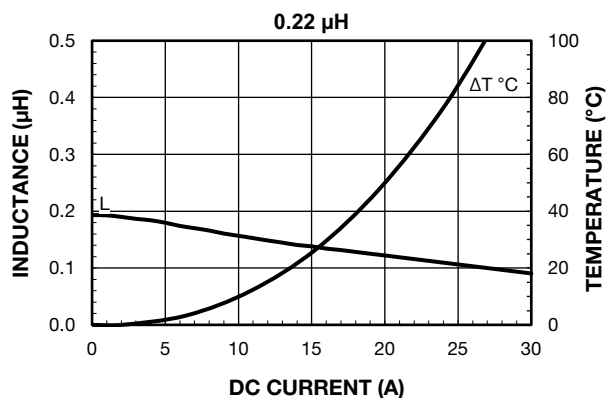
PACKAGE CODE OPTIONS
EK = tape and reel packaging (2500 pcs on 13-inch reel)
ER = tape and reel packaging (2000 pcs on 13-inch reel)

Note

- For additional packaging details see "[Packaging Methods](#)"

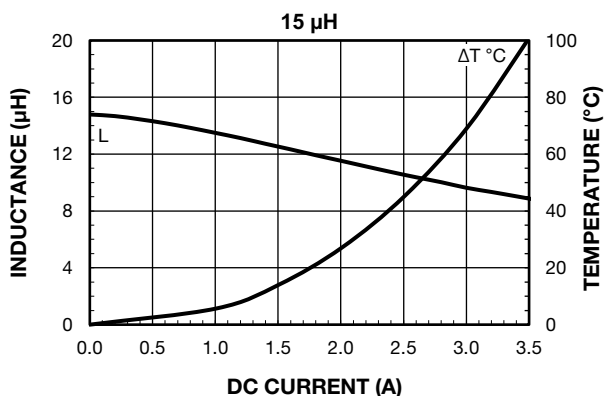
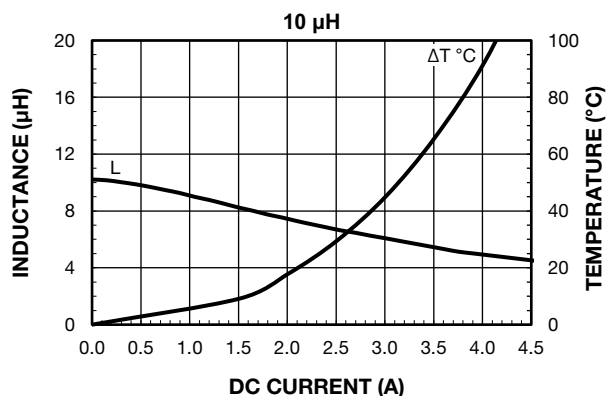
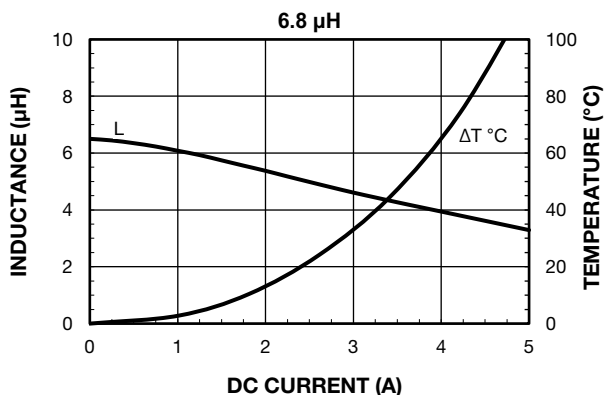
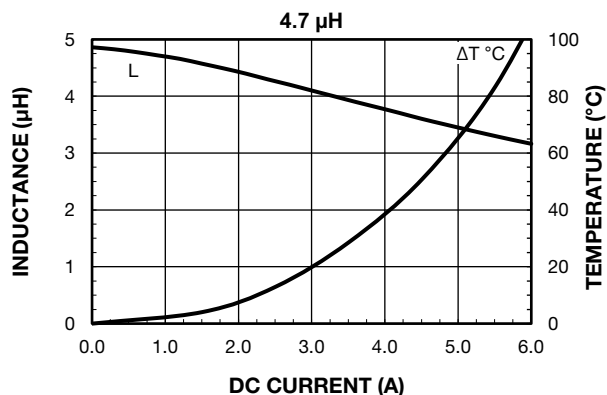
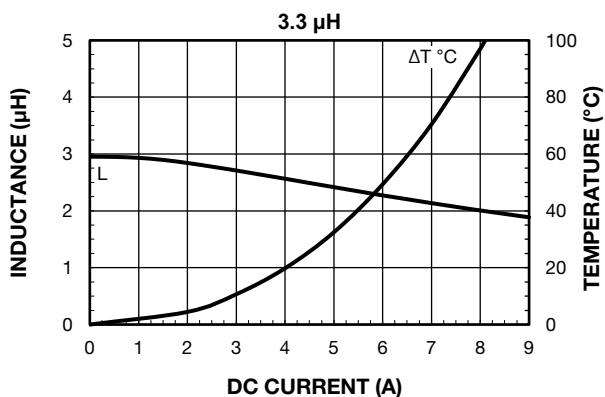
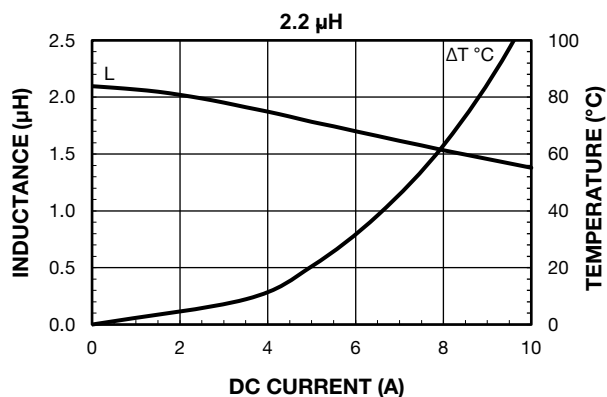


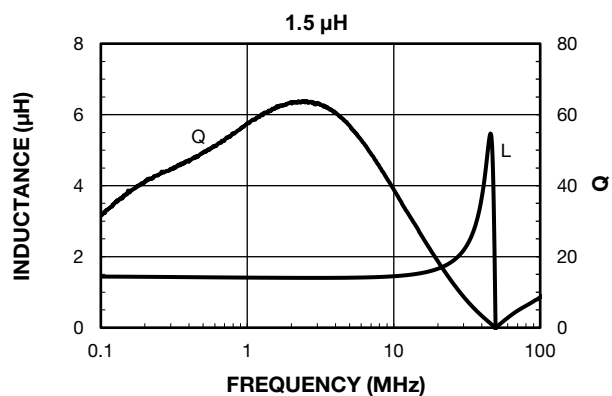
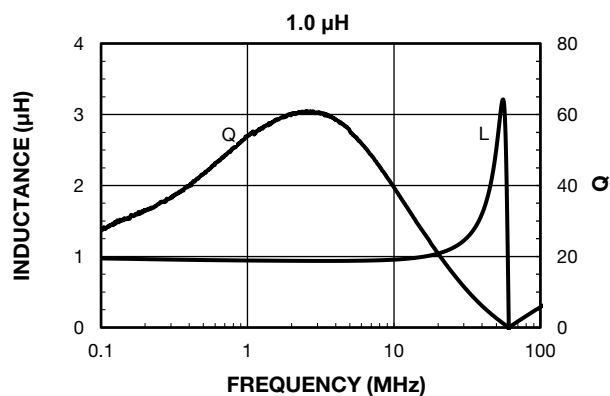
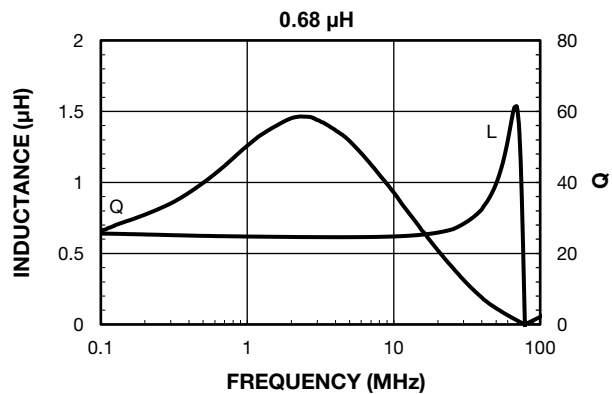
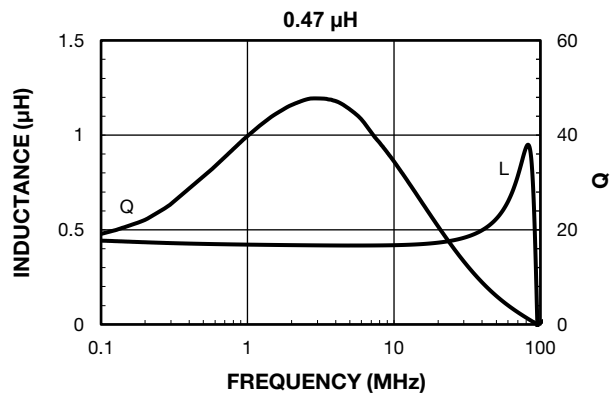
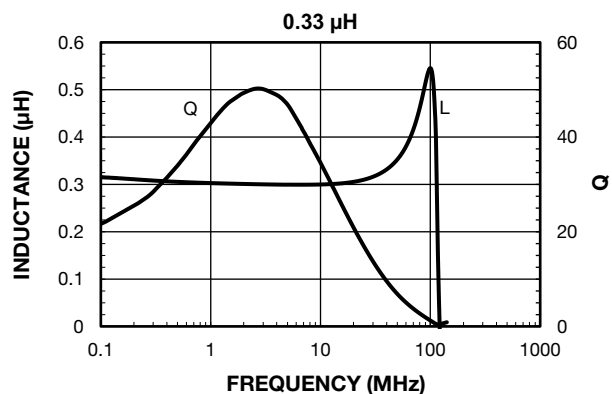
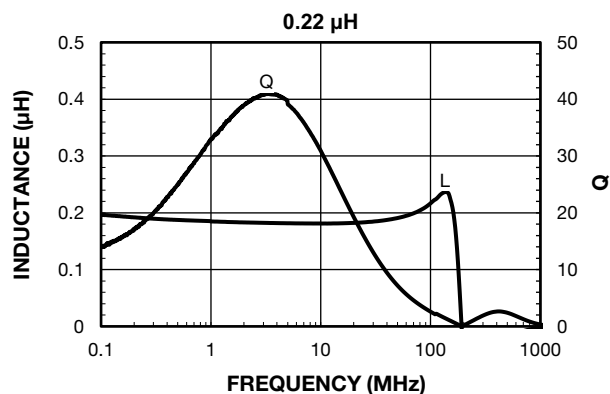
PERFORMANCE GRAPHS

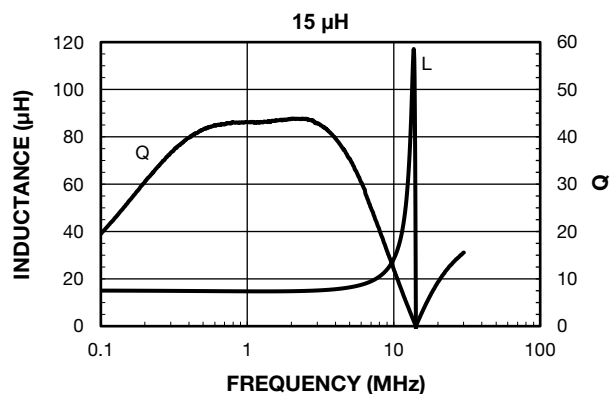
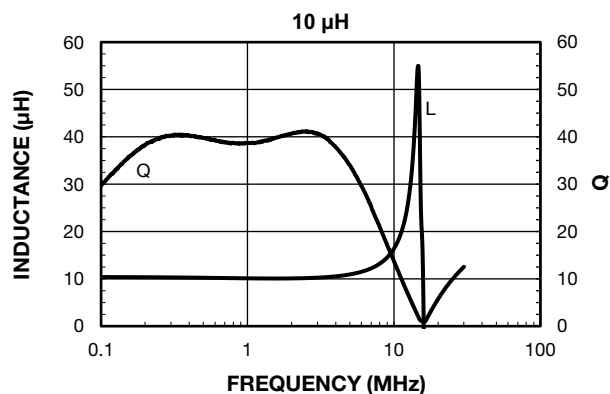
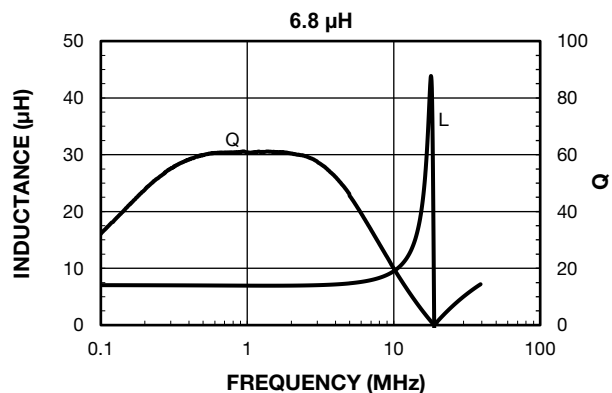
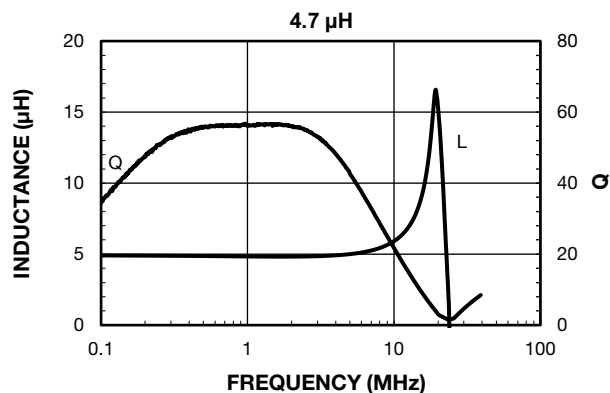
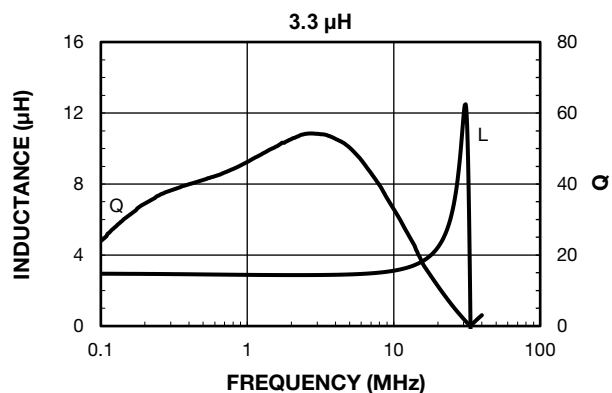
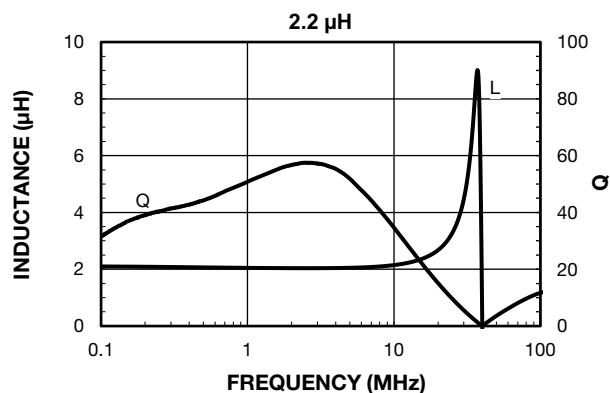




PERFORMANCE GRAPHS



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY




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