

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



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

FEATURES

- High temperature, up to 155 °C
- 5.18 mm x 5.18 mm x 2.0 mm size
- Magnetically shielded iron alloy encapsulation
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

LINKS TO ADDITIONAL RESOURCES



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)
0.10	2.8	3	25.3	23.4	360
0.47	7.3	7.8	13.43	9.35	101.6
0.68	13.3	14.2	9.44	8.01	92.3
1.0	19.5	20.9	7.40	7.25	55.7
2.2	44.5	47.6	5.10	6.40	43.1
3.3	70.0	74.9	4.00	5.10	33.7
4.7	89.1	95.3	3.20	2.80	30.5
6.8	126.9	135.8	2.80	2.60	24.8
10	181.0	193.7	2.50	2.13	17.5
15	289.0	303.0	1.72	1.72	16.8
22	413.0	433.0	1.62	1.50	12.0

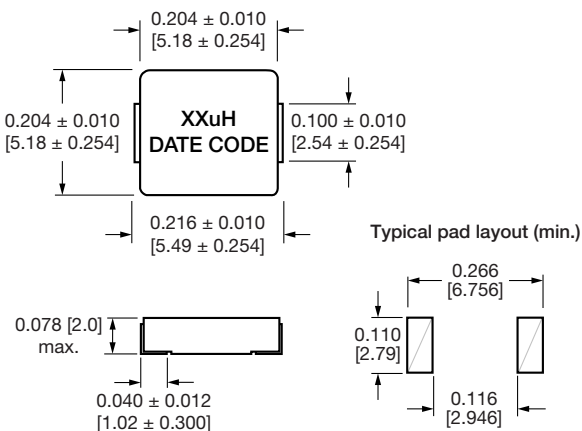
Notes

- 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, PCB 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 %

APPLICATIONS

- DC/DC converters
- Power line noise suppression and filtering
- SSD modules, USB chargers

DIMENSIONS in inches [millimeters]





DESCRIPTION

IHLP-2020BZ-51	3.3 μH	$\pm 20\%$	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 B Z	E K	3 R 3	M	5 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	TOLERANCE	SERIES
		EK = tape and reel	3R3 = 3.3 μ H	M = 20 %	

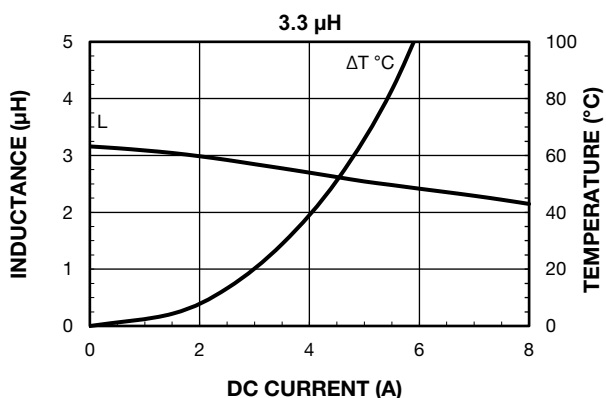
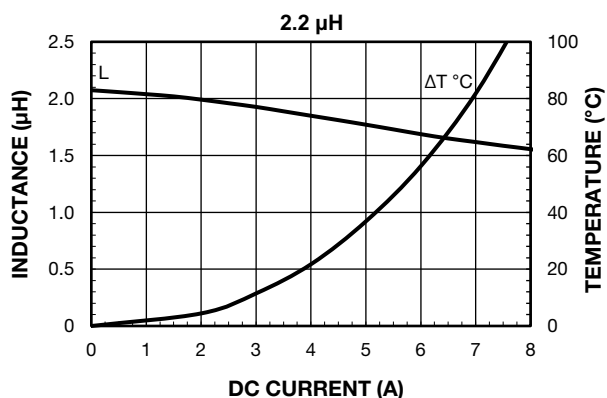
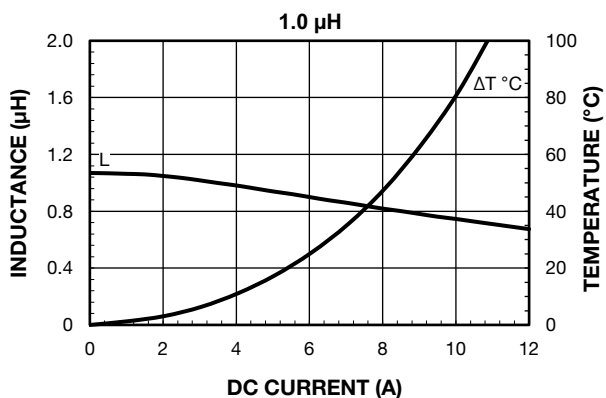
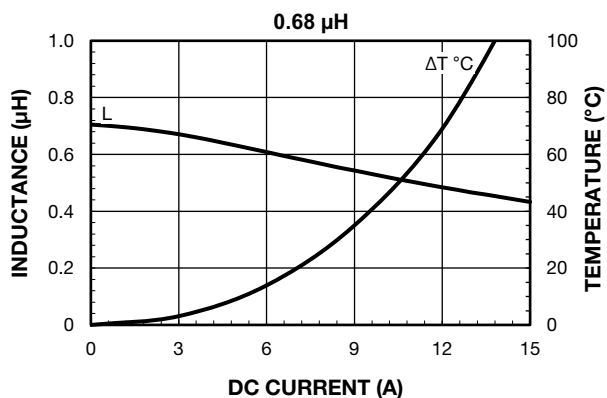
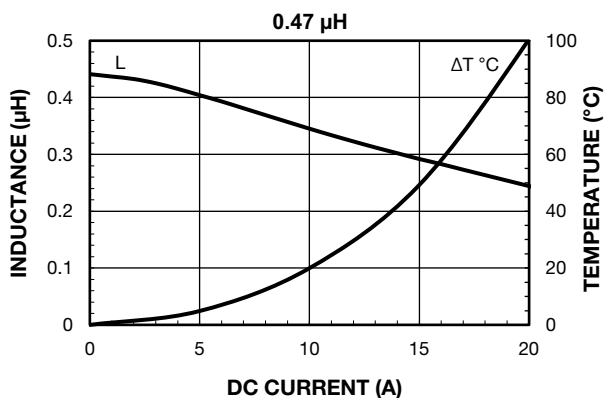
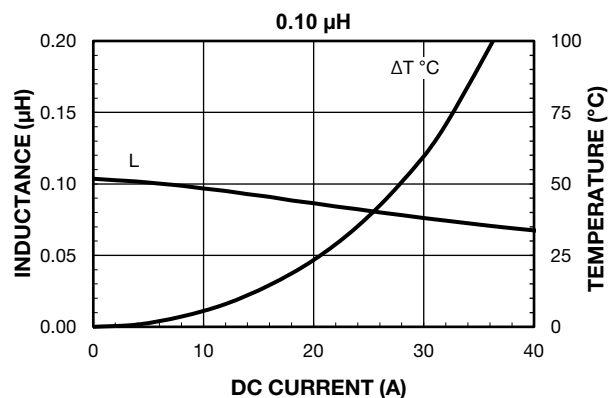
PACKAGE CODE OPTIONS

EK = tape and reel packaging (3500 pcs on 13-inch reel)

ER = tape and reel packaging (2000 pcs on 13-inch reel)

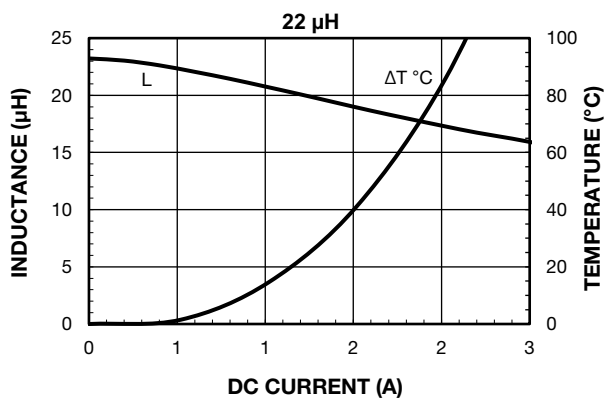
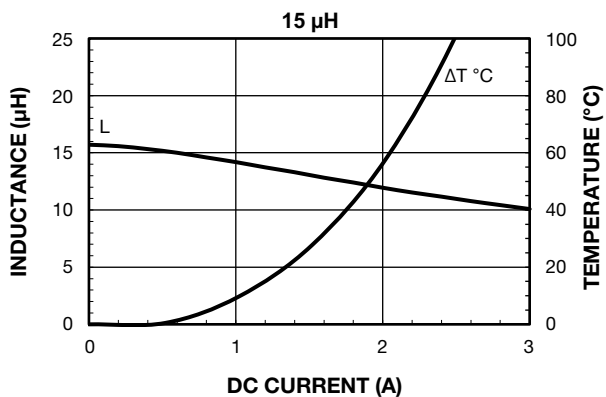
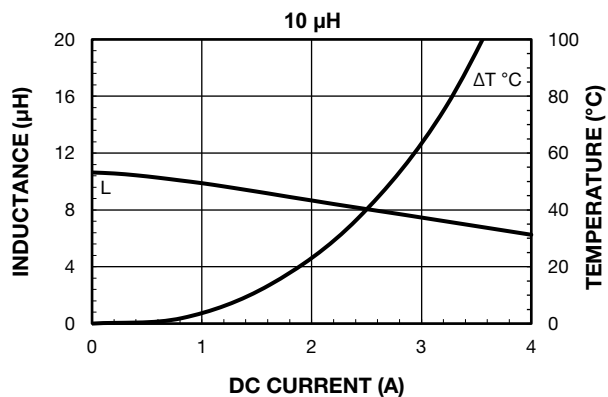
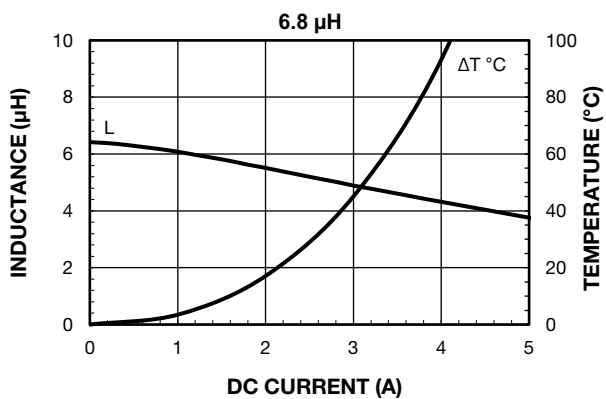
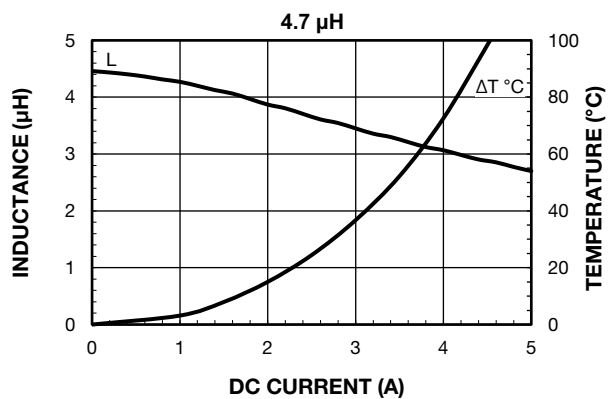


PERFORMANCE GRAPHS



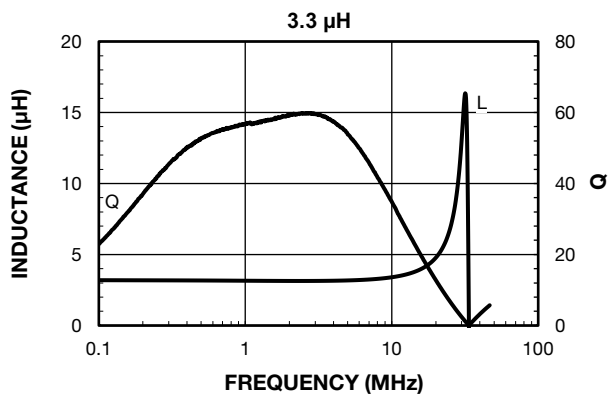
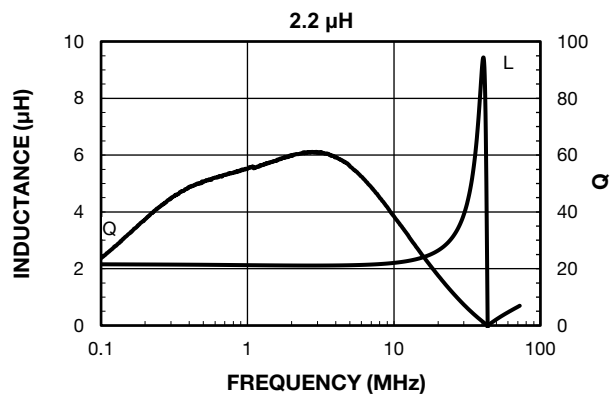
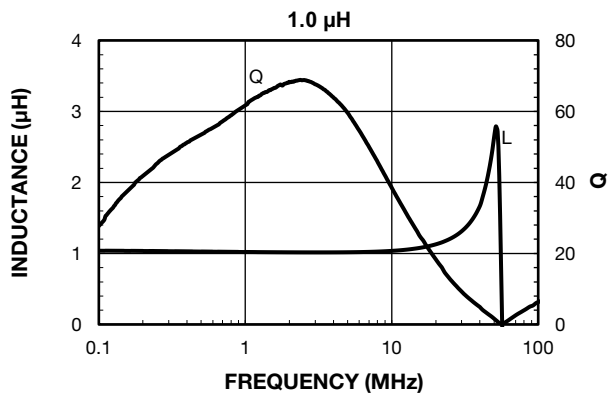
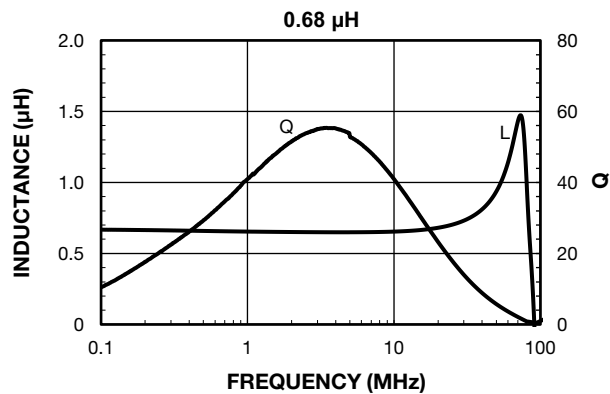
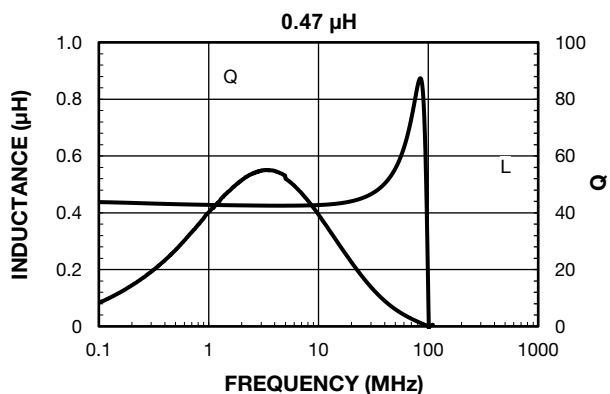
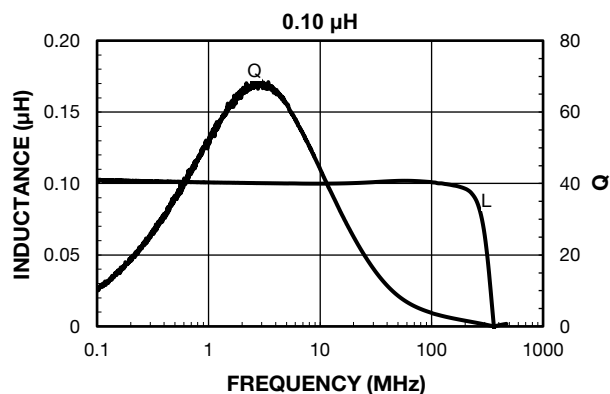


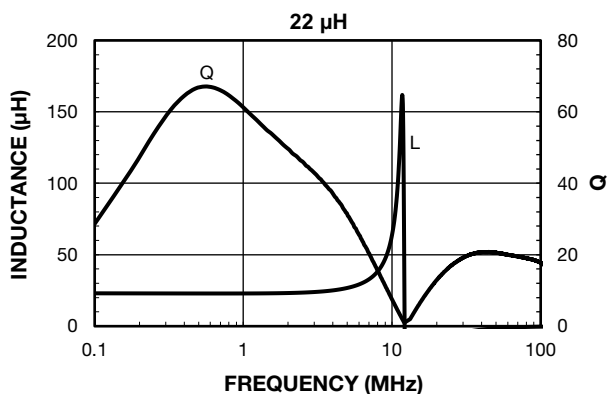
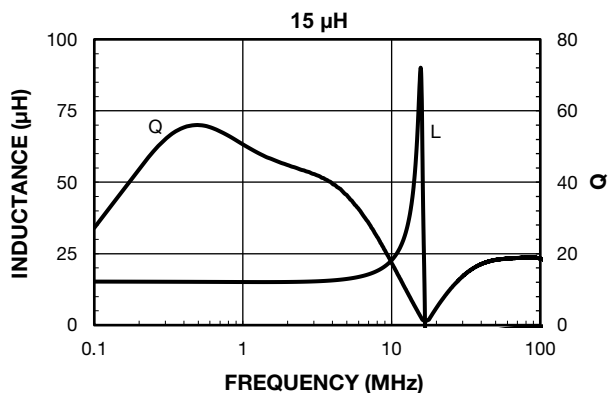
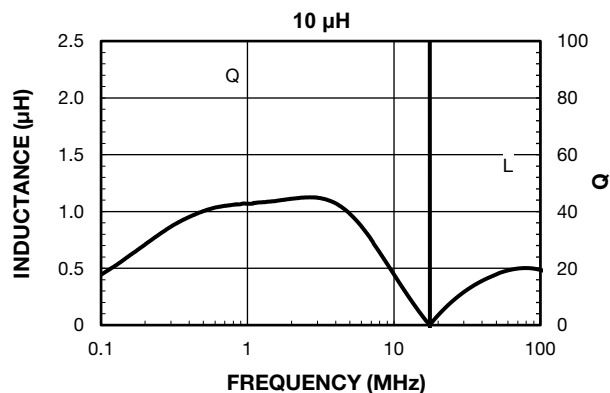
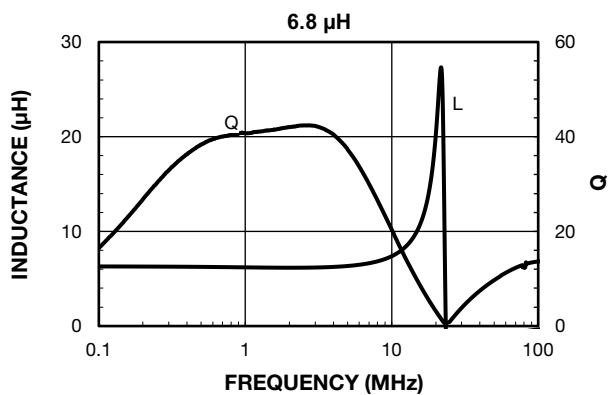
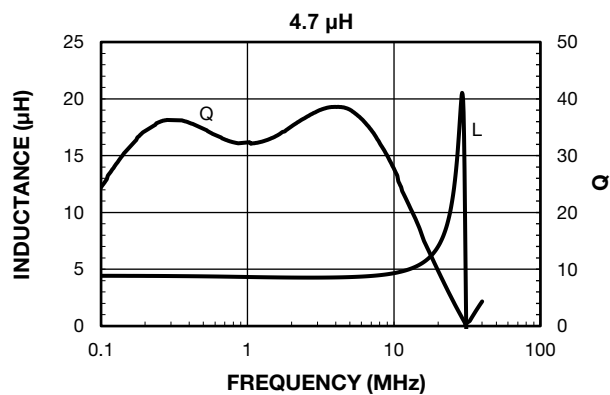
PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY




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