

IHLP® Commercial Inductors, High Saturation Series



LINKS TO ADDITIONAL RESOURCES



3D Models



Calculators

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	4.32	4.60	13.5	35	256
0.47	18.2	19.2	6.5	18	108
1.0	44.3	46.5	4.4	10.2	64
2.2	73.6	77.3	3.4	6	47
3.3	98.4	103	2.8	5	33
4.7	159	168	2.2	4.4	30

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) = 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 %

FEATURES

- Shielded construction
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Excellent temperature stability for inductance and saturation
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to SRF (see “Standard Electrical Specifications” table)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

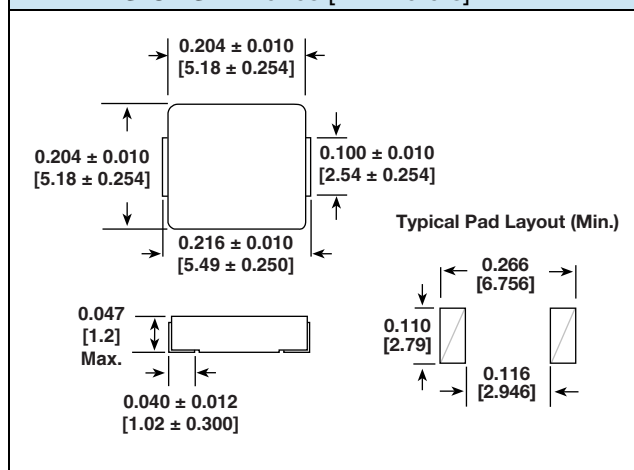


RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

APPLICATIONS

- PDA / notebook / desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

DIMENSIONS in inches [millimeters]





DESCRIPTION

IHLP2020AB-01	4.7 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 A B	E K	4 R 7	M	0 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EK = tape and reel	4R7 = 4.7 μ H	M = $\pm 20\%$ N = $\pm 30\%$	

PACKAGE CODE OPTIONS

EK = tape and reel packaging (4800 pcs on 13-inch reel)

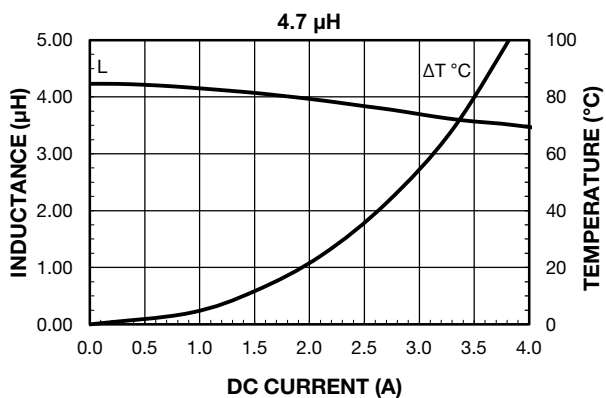
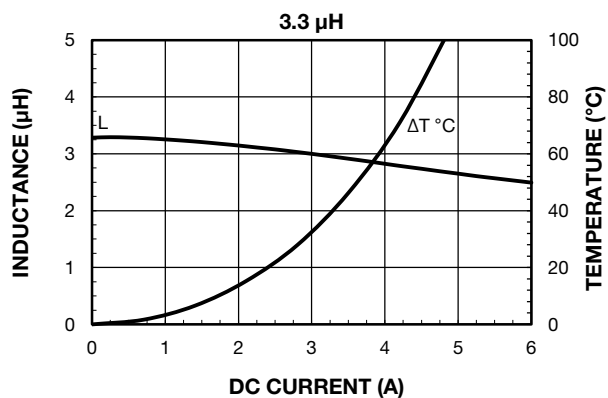
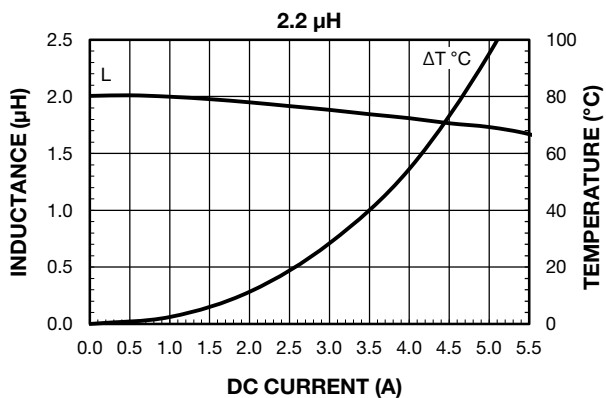
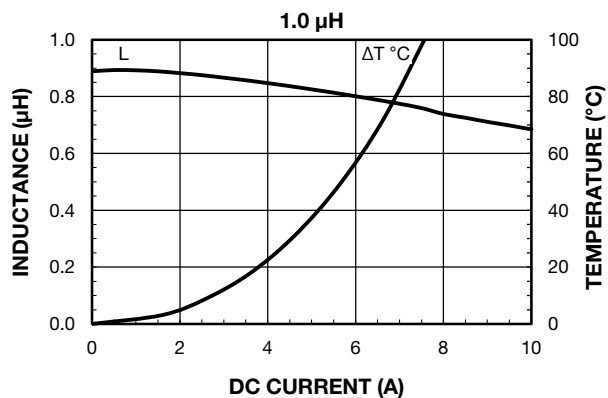
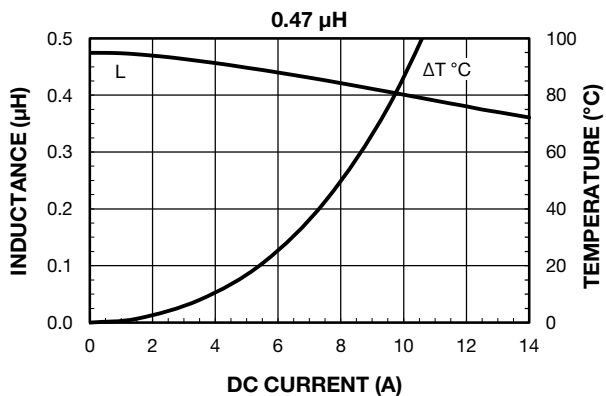
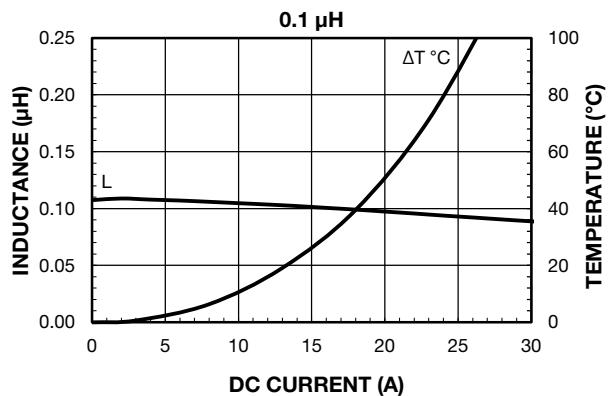
ER = tape and reel packaging (4000 pcs on 13-inch reel)

Note

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

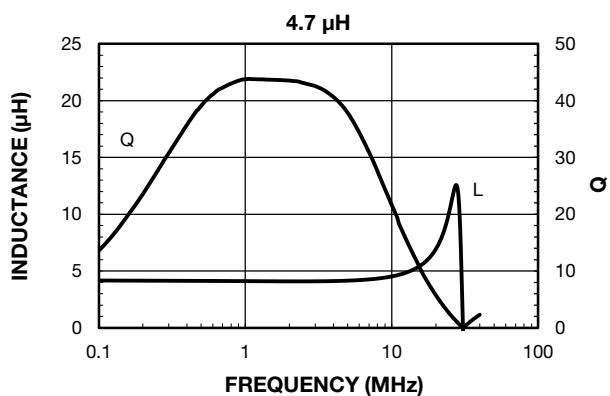
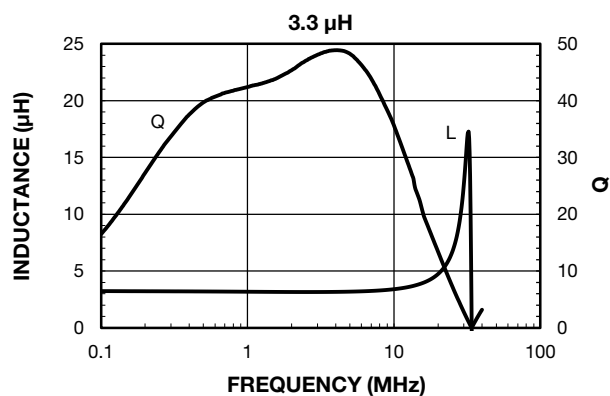
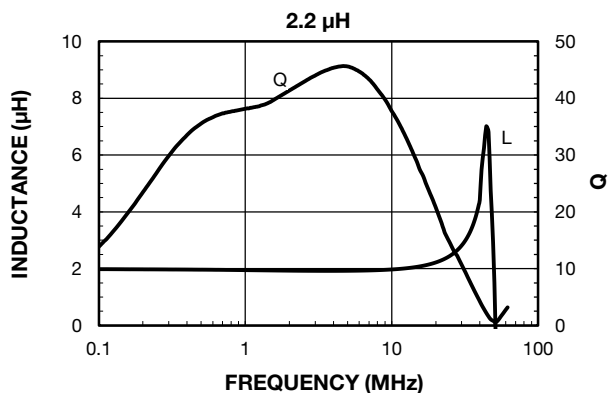
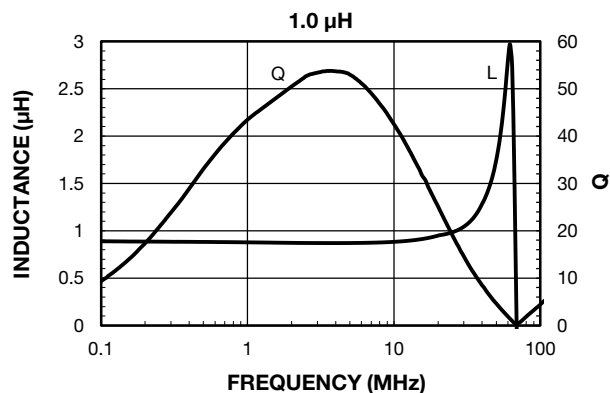
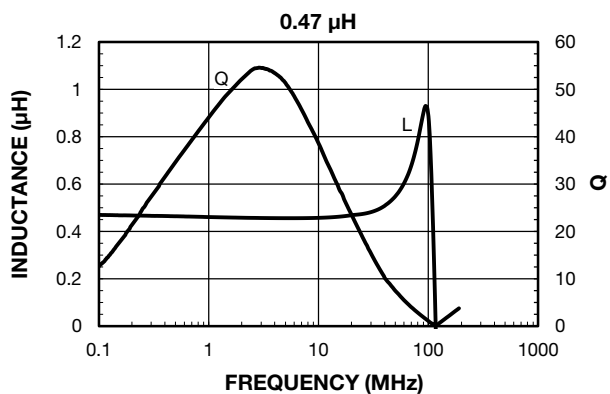
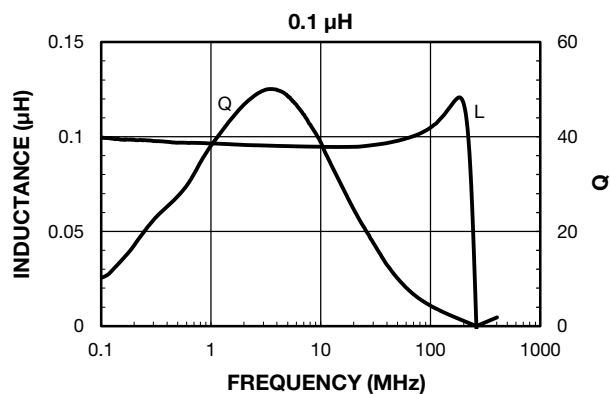


PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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