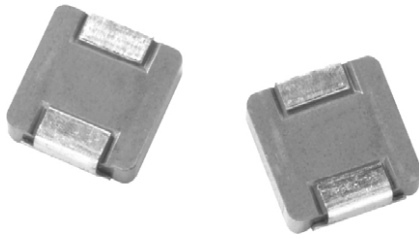


# IHLP® Commercial Inductors, High Saturation Series



## LINKS TO ADDITIONAL RESOURCES



STANDARD ELECTRICAL SPECIFICATIONS				
$L_0$ INDUCTANCE $\pm 20\%$ AT 100 kHz, 0.25 V, 0 A ( $\mu\text{H}$ )	DCR TYP. 25 °C (m $\Omega$ )	DCR MAX. 25 °C (m $\Omega$ )	HEAT RATING CURRENT DC TYP. (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(2)</sup>
0.1	1.5	1.7	30	50
0.22	2.9	3.2	21	34
0.33	3.7	4.1	18	22
0.47	6.0	6.5	13.5	21
0.68	8.7	9.4	11	18
0.82	10.6	11.8	10	17
1.0	13.1	14.2	9.0	16
1.5	18.5	21.2	7.5	15
2.2	28.0	34.0	6.5	14
3.3	36.5	51.6	5.0	13
4.7	45.2	63.0	4.5	10
6.8	72.5	95.0	3.5	9
8.2	84.2	106	3.0	8
10	115.6	129	2.5	7

### 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
- <sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta T$  of 40 °C
- <sup>(2)</sup> DC current (A) that will cause  $L_0$  to drop approximately 20 %

## FEATURES

- Lowest height (2.4 mm) in this package footprint
- Shielded construction
- Frequency range up to 5.0 MHz
- 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](http://www.vishay.com/doc?99912)

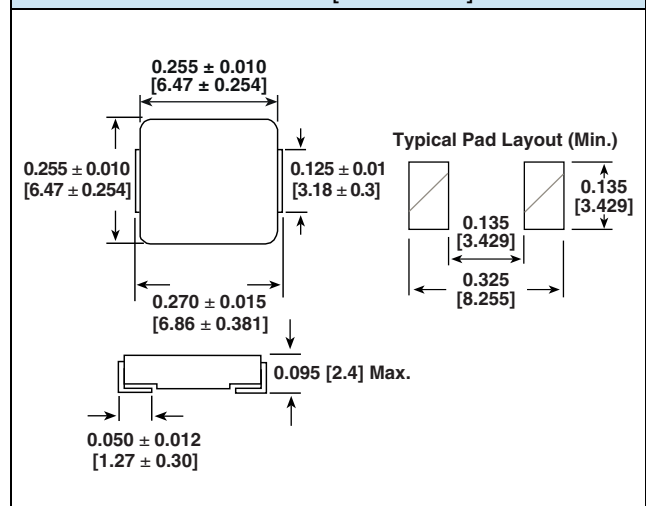


**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

## 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]



### Notes

- Coplanarity of terminals: 0.004" = 0.1 mm max.
- Terminal standoff: the leads extend a minimum of 0.001" = 0.025 mm below the bottom surface of the part



DESCRIPTION					
IHLP-2525BD-01	1.0 $\mu$ H	$\pm 20\%$	EK	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD	

GLOBAL PART NUMBER					
I H L P	2 5 2 5 B D	E K	1 R 0	M	0 1
PRODUCT FAMILY		SIZE	PACKAGE CODE	INDUCTANCE	INDUCTANCE TOLERANCE
			EK = tape and reel	1R0 = 1.0 $\mu$ H	M = $\pm 20\%$
					SERIES

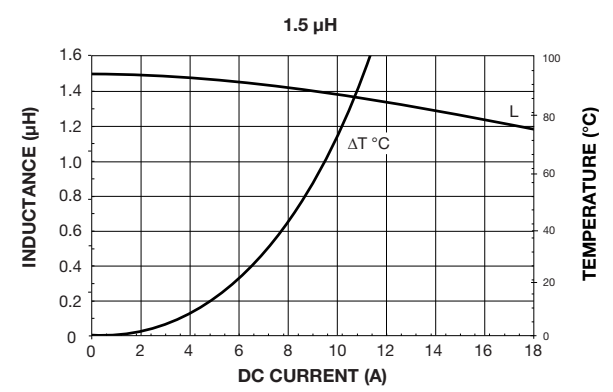
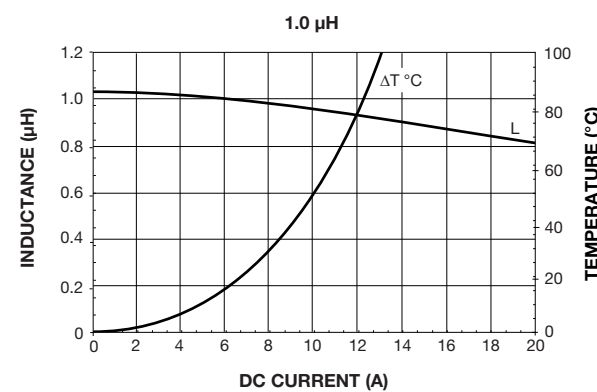
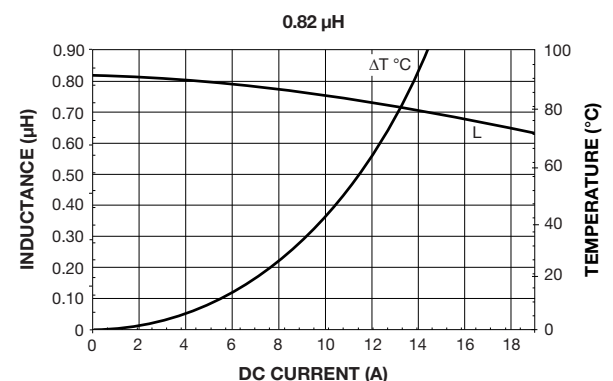
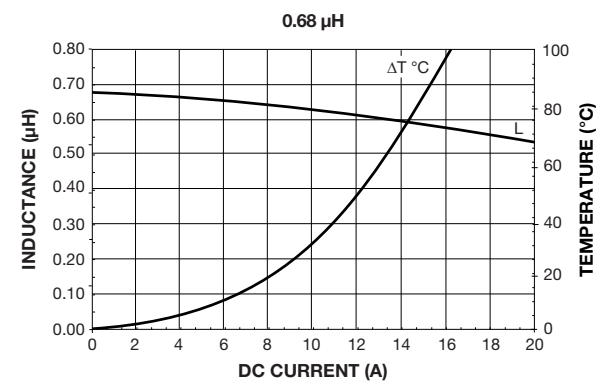
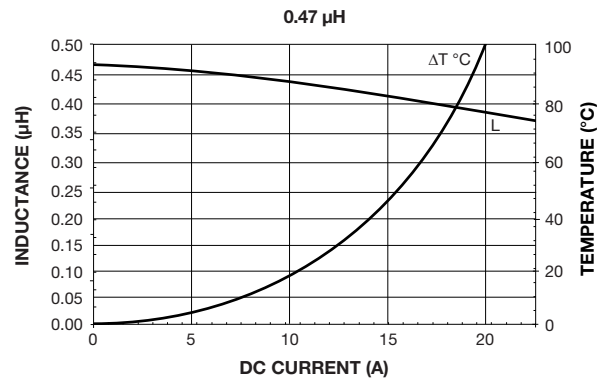
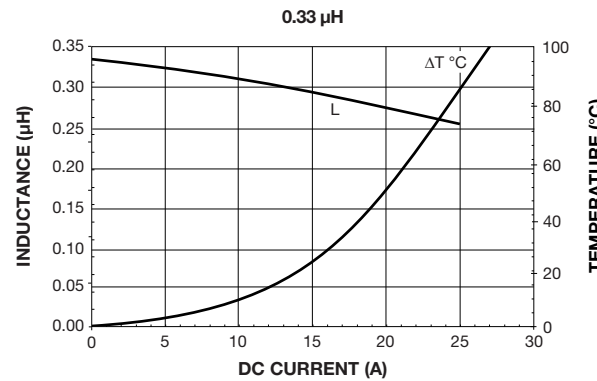
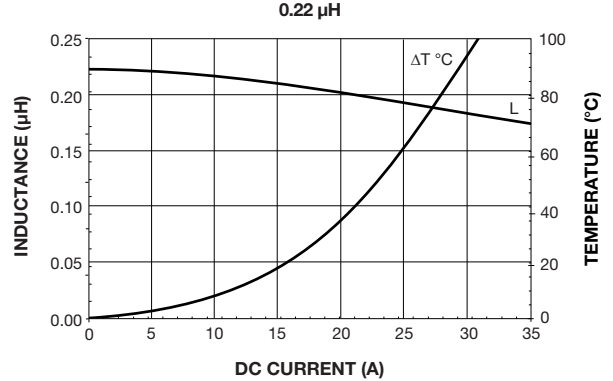
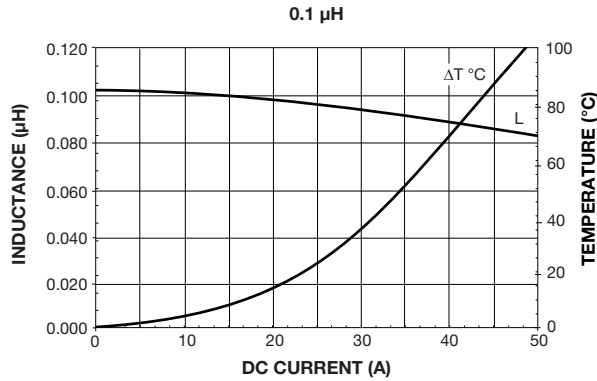
PACKAGE CODE OPTIONS
EK = tape and reel packaging (2700 pcs on 13-inch reel)
ER = tape and reel packaging (2000 pcs on 13-inch reel)

Note

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

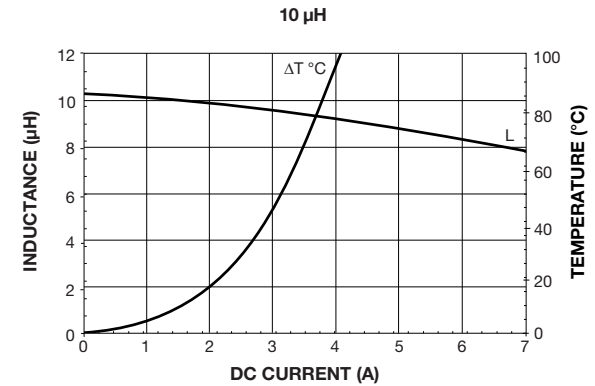
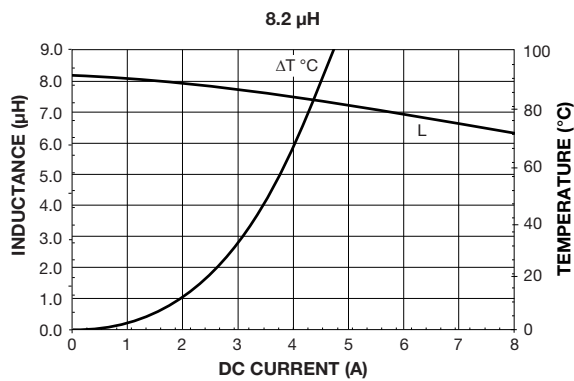
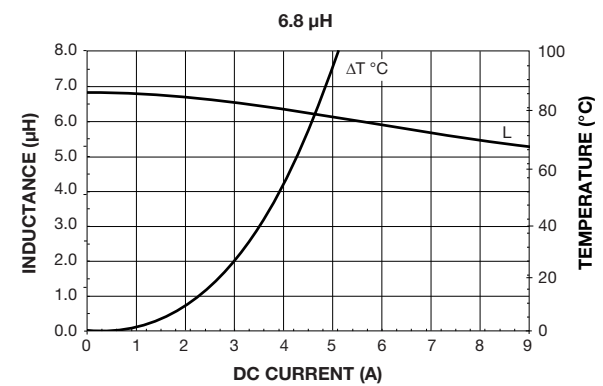
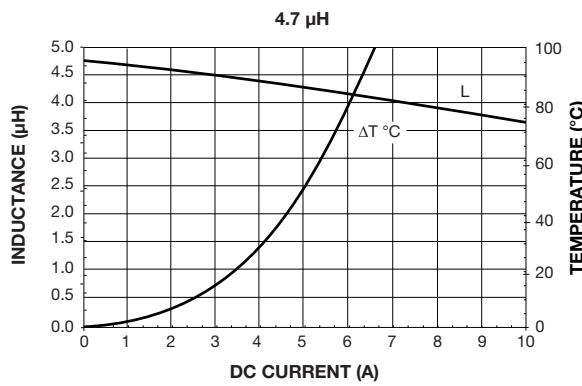
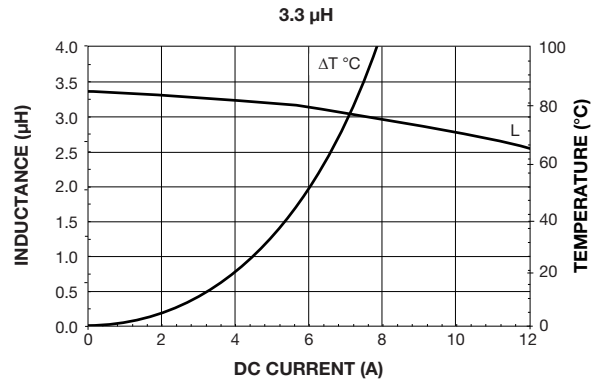
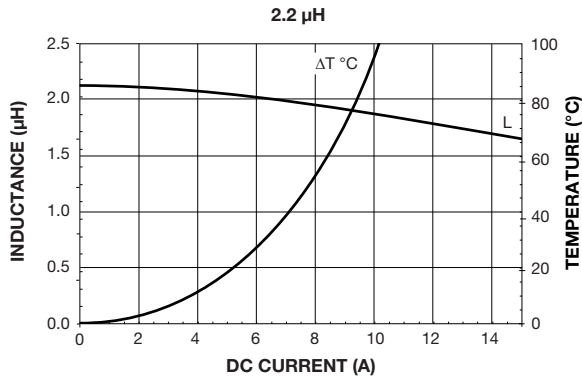


PERFORMANCE GRAPHS





PERFORMANCE GRAPHS





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