

IHLP[®] Tin / Lead Inductors, High Saturation Series



ADDITIONAL RESOURCES



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⁾	SRF TYP. (MHz)		
0.10	1.5	1.7	32.5	60	400		
0.15	1.9	2.5	26	52	180		
0.20	2.4	3.0	24	41	150		
0.22	2.5	2.8	23	40	126		
0.33	3.5	3.9	20	30	100		
0.47	4	4.2	17.5	26	75		
0.68	5	5.5	15.5	25	62		
0.82	6.7	8	13	24	60		
1.0	9	10	11	22	55		
1.5	14	15	9	18	40		
2.2	18	20	8	14	38		
3.3	28	30	6	13.5	30		
4.7	37	40	5.5	10	25		
6.8	54	60	4.5	8	21		
8.2	64	68	4	7.5	17		
10	102	105	3	7.0	16		

Notes

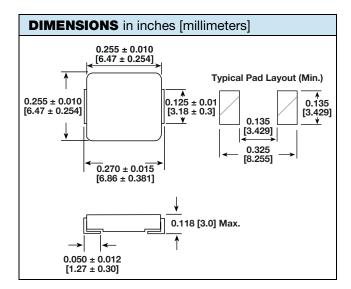
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +125 °C
- The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions 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 L₂ to drop approximately 20 %
- $^{(2)}$ DC current (A) that will cause L_0 to drop approximately 20 %

FEATURES

- · Lowest height (3.0 mm) in this package footprint
- Shielded construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to 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
- 60 / 40 tin / lead terminations
- IHLP design. PATENT(S): www.vishay.com/patents

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)



DESCRIPTION				
IHLP-2525CZ-L1	1.0 µH	± 20 %	RZ	
MODEL	INDUCTANCE VALUE	NDUCTANCE TOLERANCE	PACKAGE CODE	
GLOBAL PART NUMBER				
I H L P 2 PRODUCT FAMILY P	5 2 5 C Z SIZE	R Z 1 R PACKAGE CODE INDUCTANC VALUE	0 M L 1 E TOL. SERIES	

PATENT(S): <u>www.vishay.com/patents</u> This Vishay product is protected by one or more United States and international patents.

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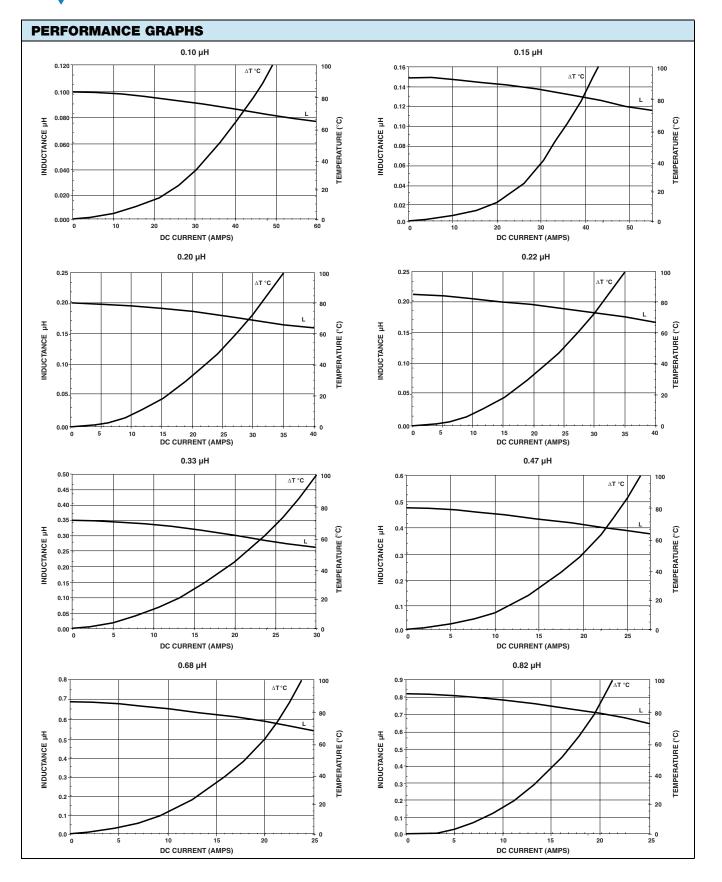
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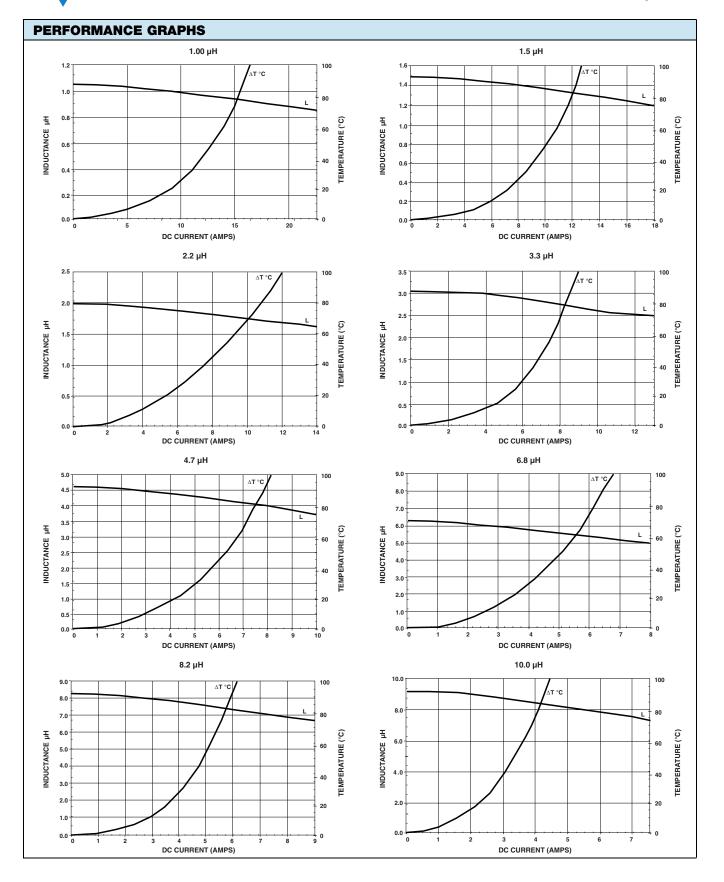
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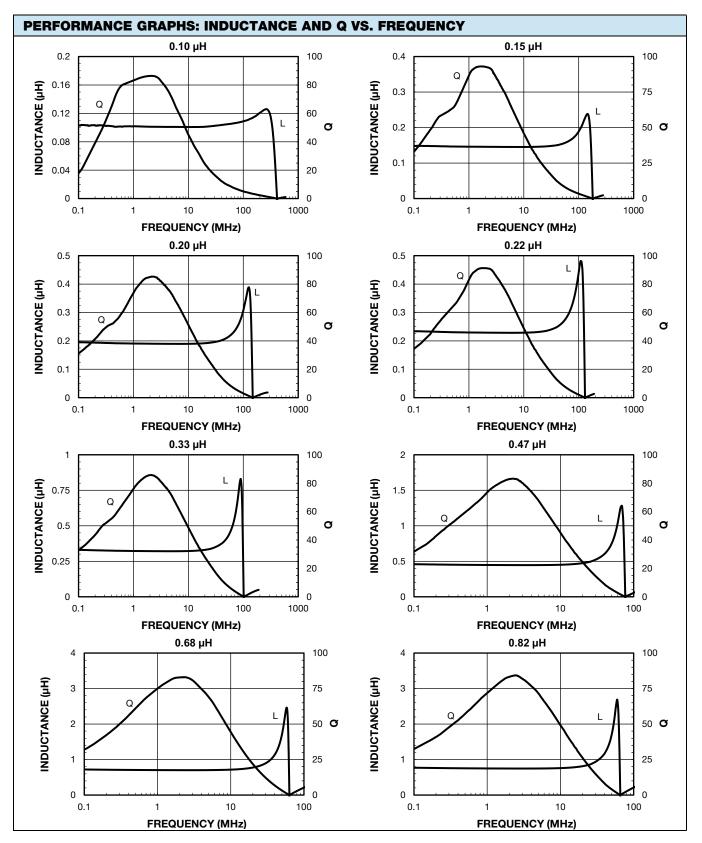
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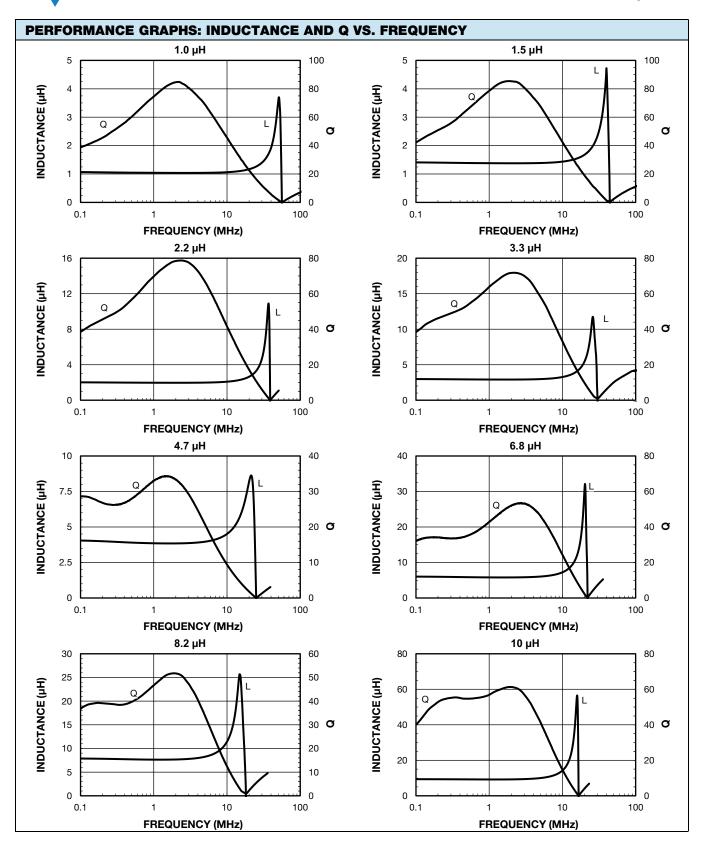
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