

Vishay Dale

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



DESIGN SUPPORT TOOLS click logo to get started



Design Tools Available

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)			
0.22	1.68	1.86	36.0	32.0	117			
0.47	2.38	2.55	27.0	19.0	77			
0.68	3.30	3.53	21.5	16.2	51			
0.82	3.70	4.00	20.0	16.0	49			
1.0	4.58	4.90	19.0	16.2	45			
1.5	6.78	7.25	15.5	14.0	35			
2.2	11.70	12.50	11.5	14.0	32			
3.3	15.40	16.48	11.3	11.8	23			
4.7	26.60	28.46	7.2	9.1	18			
5.6	29.60	31.67	6.9	9.0	18			
10	50.00	53.50	5.1	5.2	13			
15	62.00	66.34	4.8	3.6	10			
22	103.00	110.21	3.7	3.8	9			
33	149.00	159.43	3.1	3.2	6.1			

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) = 75 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 %

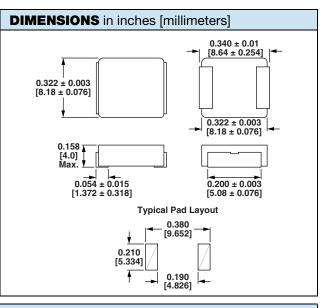
FEATURES

saturation

- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- Operating temperature up to 155 °C
- Lowest DCR/µH, in this package size
- HALOGEN • Handles high transient current spikes without
- Ultra low buzz noise, due to composite construction
- AEC-Q200 gualified
- IHLP design. PATENT(S): <u>www.vishay.com/patents</u>
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

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



DESCRIPTION							
IHLP-3232DZ-5A	10 µH	± 20 %	ER	e3			
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC [®] LEAD (Pb)-FREE STANDARD			
GLOBAL PART NUMBER							
IHL	P 3 2	3 2 D Z	E R 1	0 0 M 5 A			
MODEL		SIZE	PACKAGE IN CODE	DUCTANCE TOL. SERIES VALUE			

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

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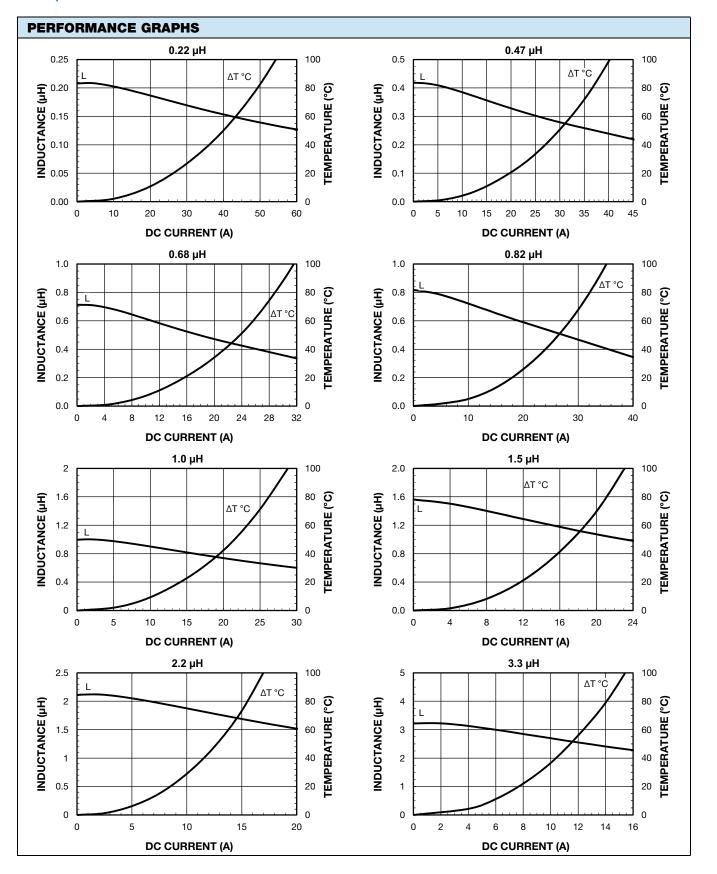
RoHS COMPLIANT

FREE **GREEN** (5-2008)

¹



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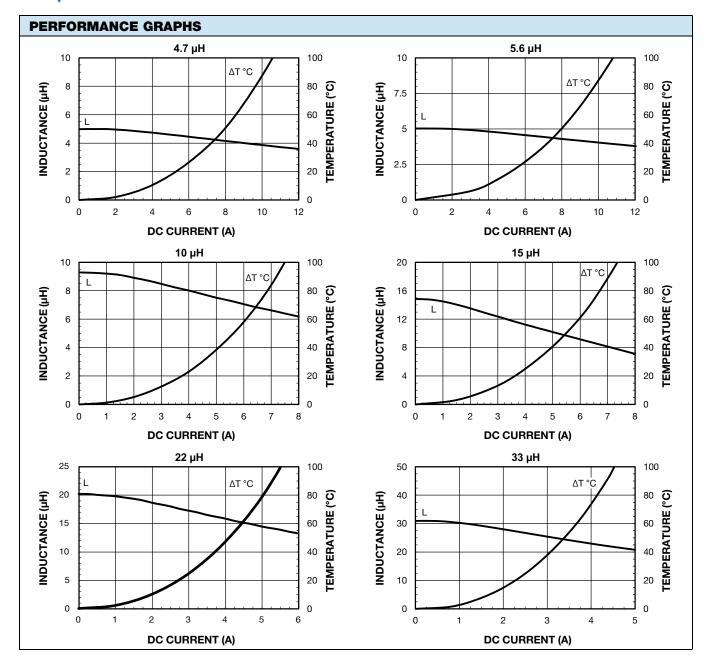
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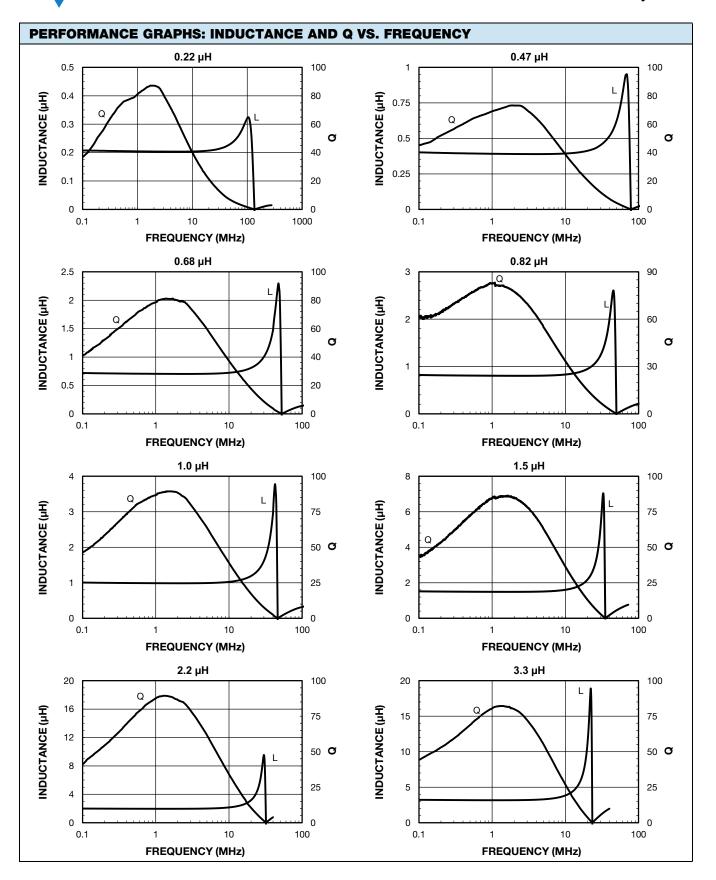
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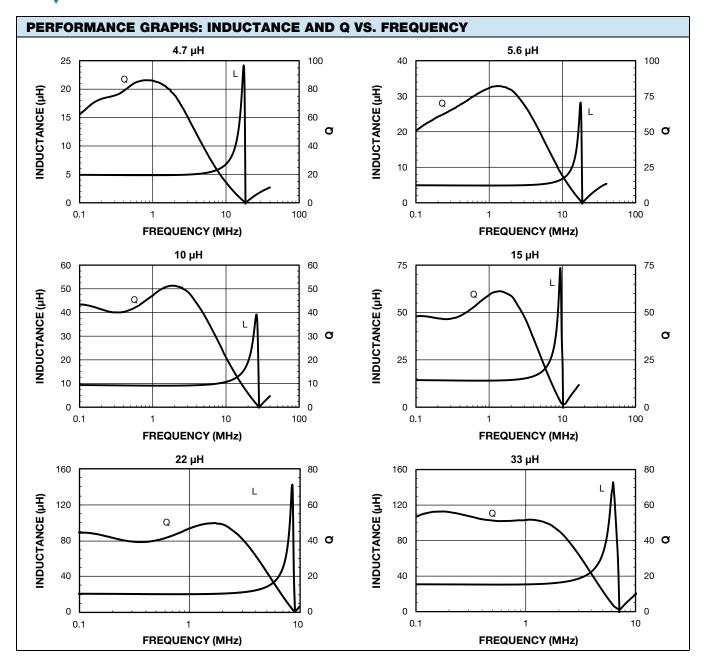
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