

Vishay Dale

AUTOMOTIVE GRADE

> ROHS COMPLIANT HALOGEN

FREE

<u>GREEN</u> (5-2008)

High Current Through-Hole Inductor, High Temperature



FEATURES

- High temperature, up to 155 °C
- · Shielded construction
- Frequency range up to 5.0 MHz
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>



- · Automotive high current filters
- · Switching regulators
- · In-line noise filters
- · Differential mode choke
- · Boost power factor correction choke
- 12 V, 24 V, 48 V DC/DC converters
- High current battery charging

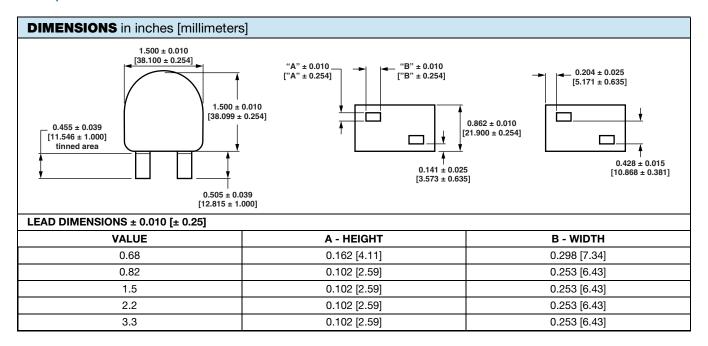
STANDARD ELECTRICAL SPECIFICATIONS								
PART NUMBER	L ₀ INDUCTANCE ± 20 % AT 500 kHz, 2 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) ⁽³⁾	HEAT RATING CURRENT DC TYP. (A) ⁽⁴⁾	SATURATION CURRENT DC TYP. (A) ⁽⁵⁾	SATURATION CURRENT DC TYP. (A) ⁽⁶⁾	
IHXL1500VZEBR68M5A	0.68	0.12	0.13	154	235	301	420	
IHXL1500VZEBR82M5A	0.82	0.17	0.18	132	196	235	332	
IHXL1500VZEB1R5M5A	1.5	0.25	0.26	120	178	138	193	
IHXL1500VZEB2R2M5A	2.2	0.32	0.34	115	168	104	150	
IHXL1500VZEB3R3M5A	3.3	0.40	0.42	96	150	87	124	

Notes

- (1) All test data is referenced to 25 °C ambient
- (2) Operating temperature range -55 °C to +155 °C
- $^{(3)}$ DC current (A) that will cause an approximate ΔT of 40 $^{\circ}$ C after one hour
- $^{(4)}\,$ DC current (A) that will cause an approximate ΔT of 100 °C after one hour
- $^{(5)}\,$ DC current (A) that will cause L_0 to drop approximately 20 %
- (6) DC current (A) that will cause L₀ to drop approximately 30 %
- (7) 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



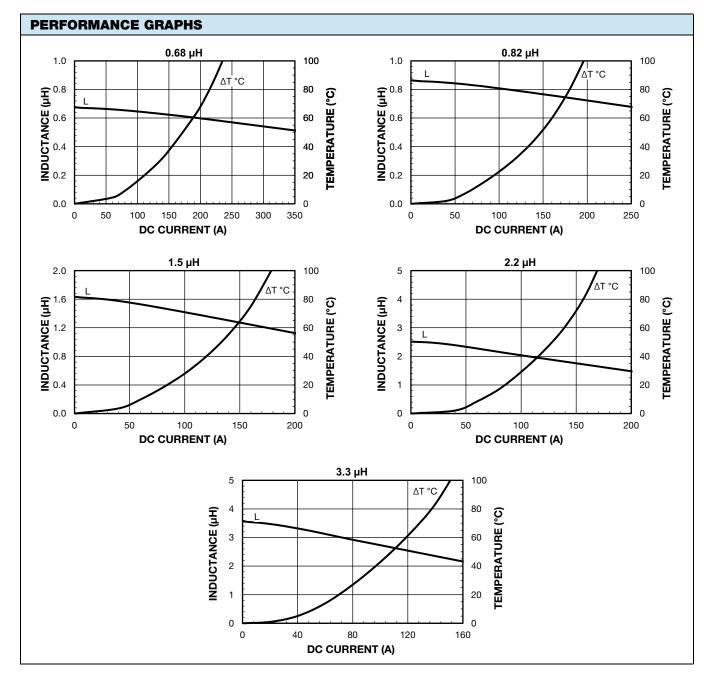
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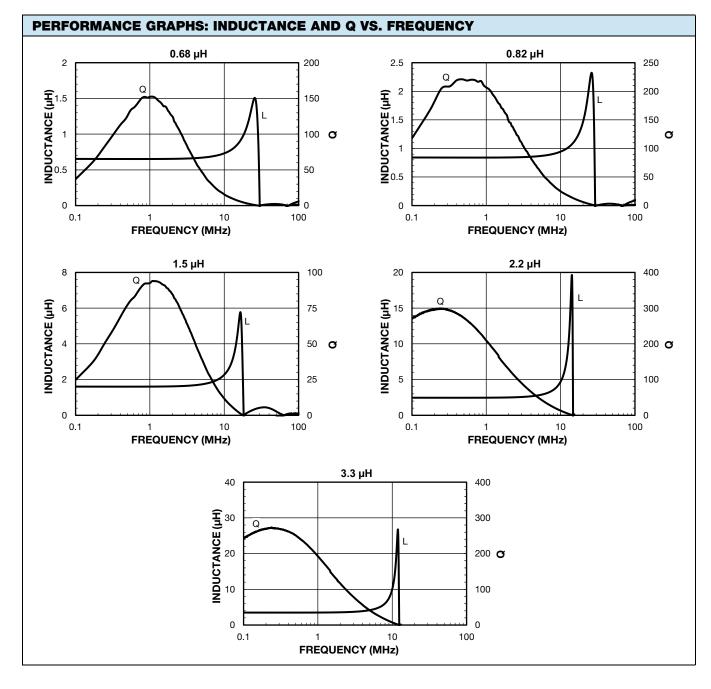
DESCRIPTION							
IHXL-1500VZ-5A	2.2 μΗ	± 20 %	ЕВ	e3			
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD			

GLOBAL PART NUMBER		
I H X L 1	5 0 0 V Z	E B 2 R 2 M 5 A
PRODUCT FAMILY	SIZE	PACKAGE INDUCTANCE TOL. SERIES CODE VALUE











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Vishay

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