

Vishay Dale

AUTOMOTIVE GRADE

ROHS

HALOGEN

FREE

GREEN

High Current Through-Hole Inductor, High Temperature



FEATURES

- High temperature rating, up to 155 °C
- 10 % inductance tolerance
- · Magnetically shielded construction
- Frequency range up to 5.0 MHz
- Handles high transient current spikes without saturation
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

APPLICATIONS

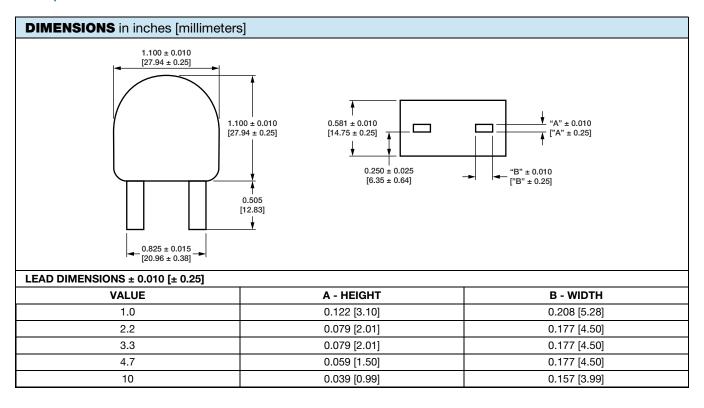
- · Automotive high current filters
- · Switching regulators
- In-line noise filters
- Differential mode choke
- · Boost power factor correction choke
- 12 V, 24 V, 48 V DC/DC converters
- · High current battery charging

STANDARD ELECTRICAL SPECIFICATIONS									
	L ₀ INDUCTANCE ± 10 % AT 100 kHz, 0.25 V. 0 A	DCR TYP. 25 °C	DCR MAX. 25 °C		G CURRENT TYP. A)	SATURATION CURRENT DC TYP. (A)		SRF TYP.	
PART NUMBER	(μH)	$(m\Omega)$	$(m\Omega)$	40 °C RISE (1)	80 °C RISE (2)	20 % DROP (3)	30 % DROP (4)	(MHz)	
IHXL1100OZEB1R0K3A	1.0	0.28	0.31	138	191	102	149	29	
IHXL1100OZEB2R2K3A	2.2	0.47	0.52	79	118	80	114	19	
IHXL1100OZEB3R3K3A	3.3	0.70	0.77	76	103	60	86	15	
IHXL1100OZEB4R7K3A	4.7	0.92	1.01	65	88	49	70	11	
IHXL1100OZEB100K3A	10.0	2.35	2.59	41	55	35	51	7	

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
- $^{(1)}$ DC current (A) that will cause an approximate ΔT of +40 $^{\circ}C$
- $^{(2)}\,$ DC current (A) that will cause an approximate ΔT of +80 °C
- (3) DC current (A) that will cause L₀ to drop approximately 20 %
- (4) DC current (A) that will cause L₀ to drop approximately 30 %

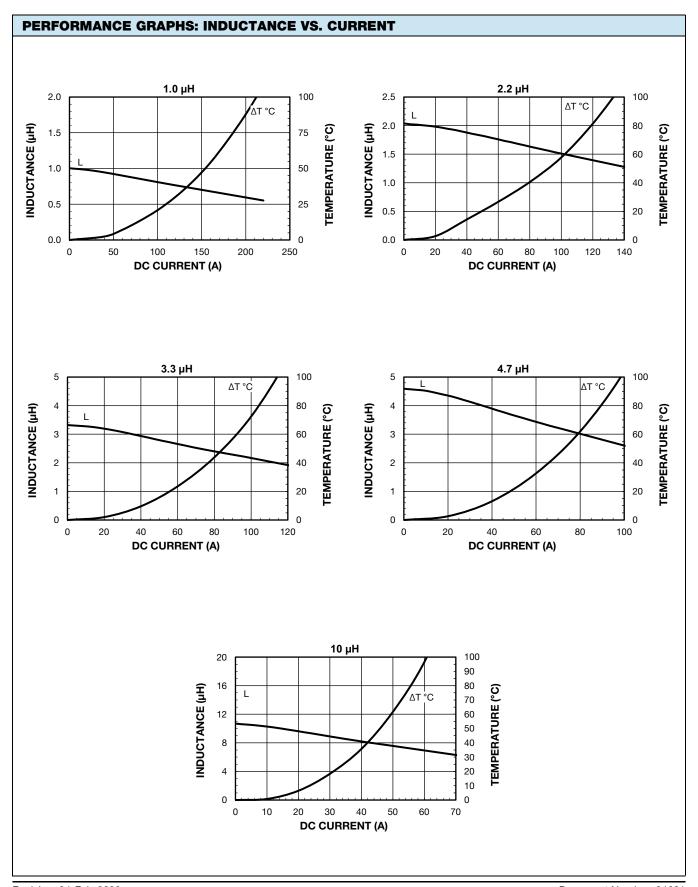
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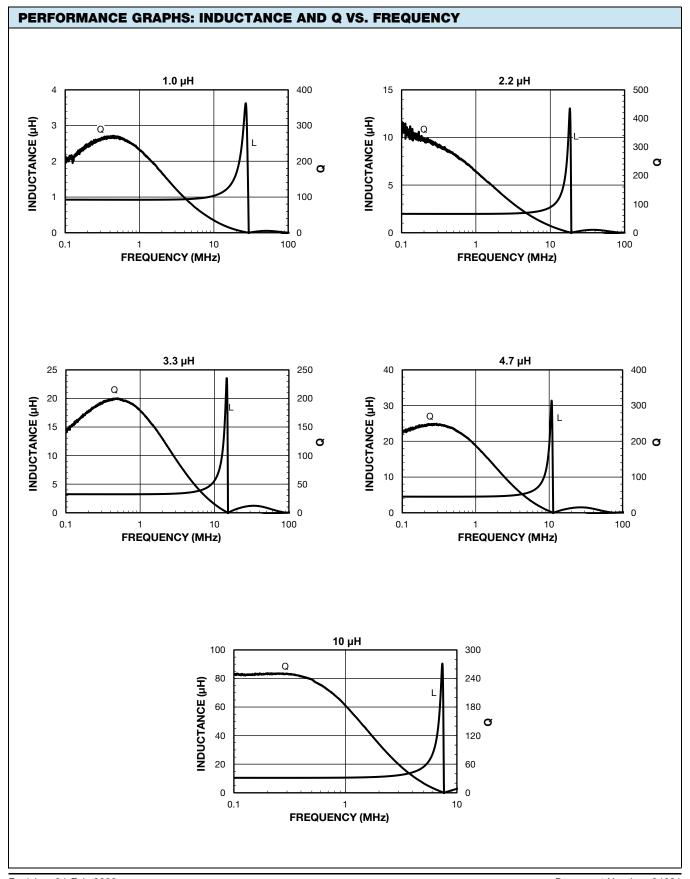
DESCRIPTION				
IHXL-1100OZ-3A	1.0 μΗ	± 10 %	BULK / TRAY PACKAGING	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER									
PRODUCT FAMILY	0 0 0 Z SIZE	E R 1	I R 0 INDUCTANCE VALUE	TOL.	3 A SERIES				











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