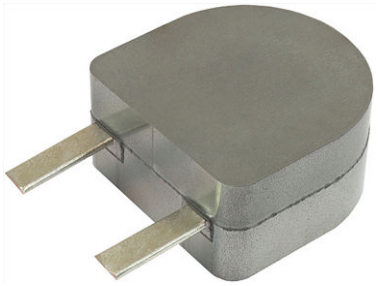
Automotive, High Current, Radial, Through-Hole Inductor, High Temperature (155 °C)



FEATURES

- High temperature rating, up to 155 °C
- 10 % inductance tolerance
- Magnetically shielded construction
- Flat surface for mounting heat sink or active cooling cold plate
- Handles high transient current spikes without saturation
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE GRADE

Pb-free

RoHS COMPLIANT

HALOGEN FREE

GREEN (5-2008)

LINKS TO ADDITIONAL RESOURCES

Product Page

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

PART NUMBER	L_0 INDUCTANCE ± 10 % 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)		SATURATION CURRENT DC TYP. (A)		SRF TYP. (MHz)
				40 °C RISE (1)	80 °C RISE (2)	20 % DROP (3)	30 % DROP (4)	
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

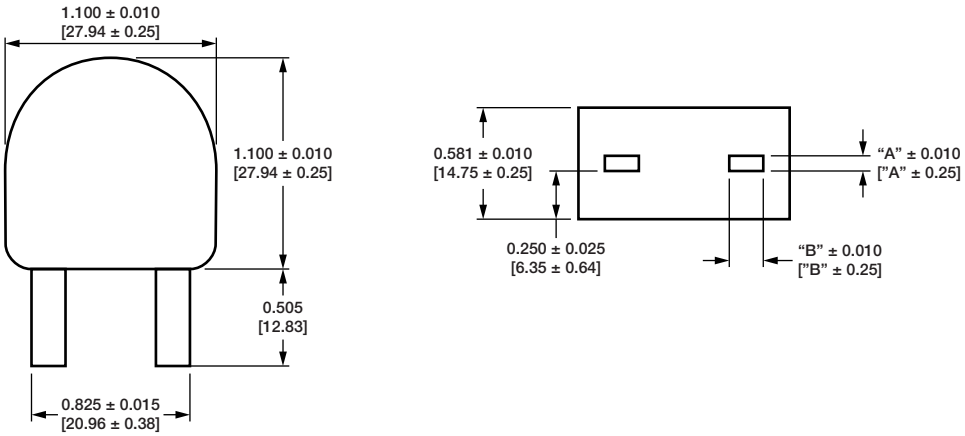
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provisions 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 °C
(2) DC current (A) that will cause an approximate ΔT of +80 °C
(3) DC current (A) that will cause L_0 to drop approximately 20 %
(4) DC current (A) that will cause L_0 to drop approximately 30 %

For technical questions, contact: magnetics@vishay.com

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DIMENSIONS in inches [millimeters]



LEAD DIMENSIONS ± 0.010 [± 0.25]

VALUE	A - HEIGHT	B - WIDTH
1.0	0.122 [3.10]	0.208 [5.28]
2.2	0.079 [2.01]	0.177 [4.50]
3.3	0.079 [2.01]	0.177 [4.50]
4.7	0.059 [1.50]	0.177 [4.50]
10	0.039 [0.99]	0.157 [3.99]

DESCRIPTION

IHXL1100OZ-3A	**1.0 µH**	**± 10 %**	**BULK / TRAY PACKAGING**	**e3**
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

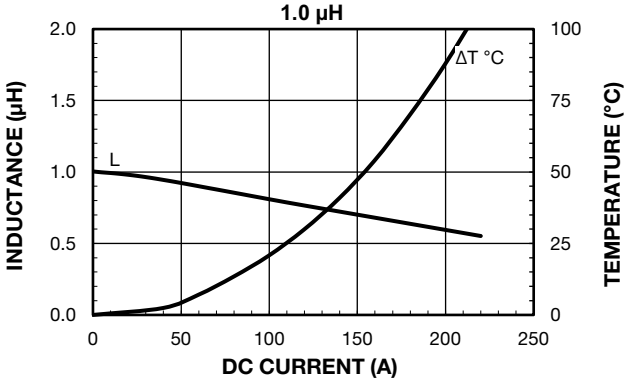
GLOBAL PART NUMBER

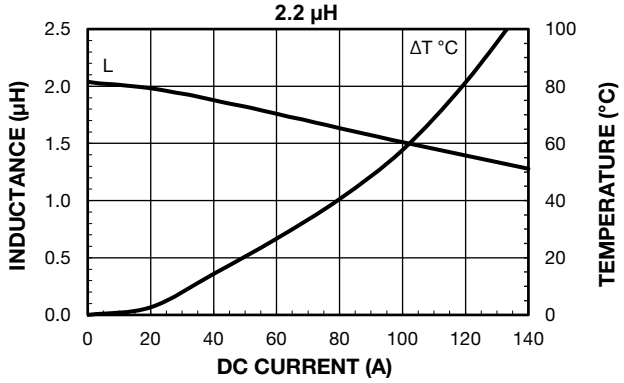
I H X L	1 1 0 0 O Z	E B	1 R 0	K	3 A
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE **1R0** = 1.0 µH	INDUCTANCE TOLERANCE **K** = ± 10 %	SERIES

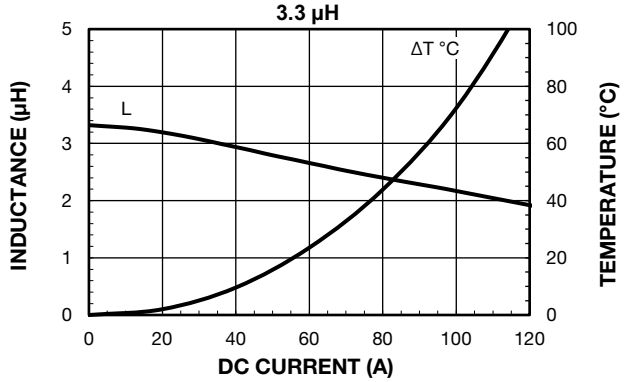
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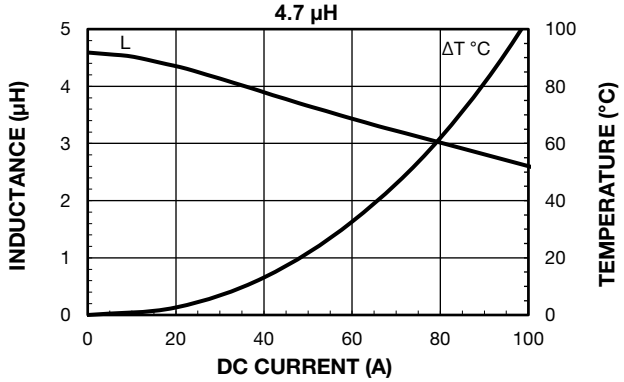
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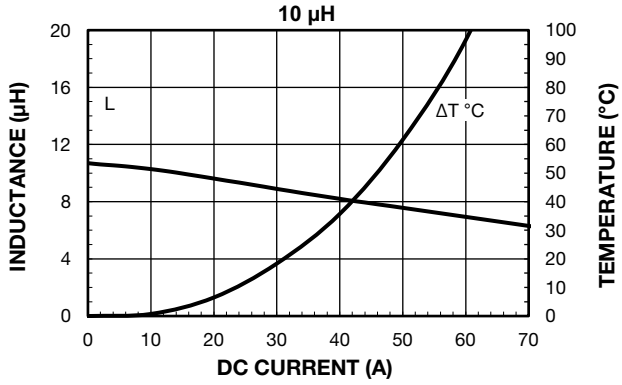
PERFORMANCE GRAPHS: INDUCTANCE VS. CURRENT







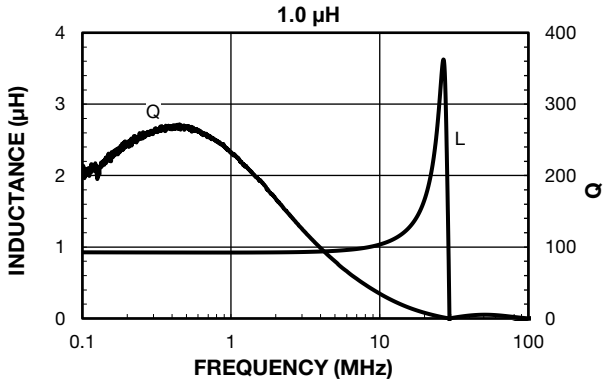


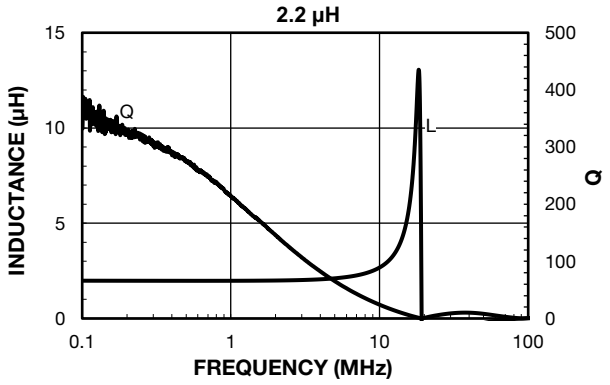


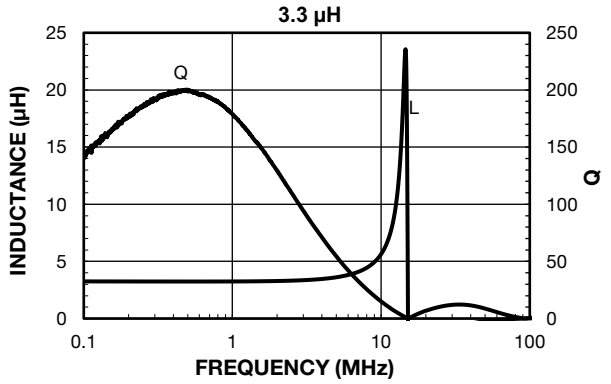
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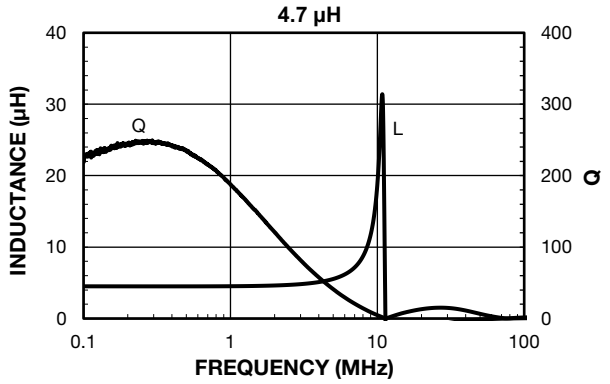
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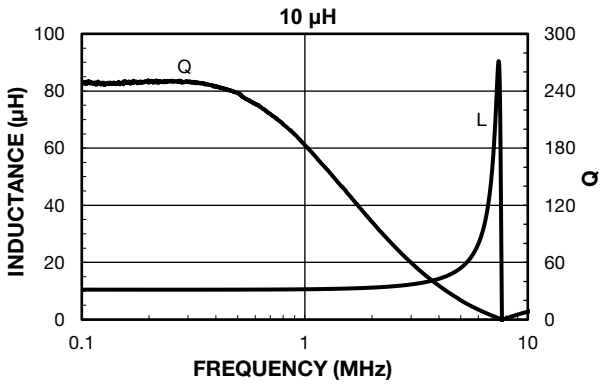
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY











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