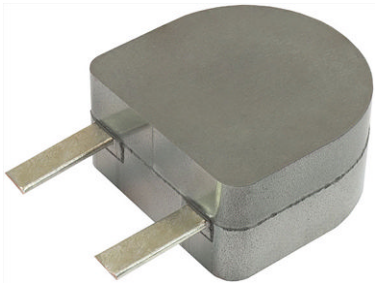
Commercial, High Current, Radial, Through-Hole Inductor, High Temperature (155 °C)



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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE
GREEN (5-2008)

APPLICATIONS

- 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

LINKS TO ADDITIONAL RESOURCES

Product Page

STANDARD ELECTRICAL SPECIFICATIONS

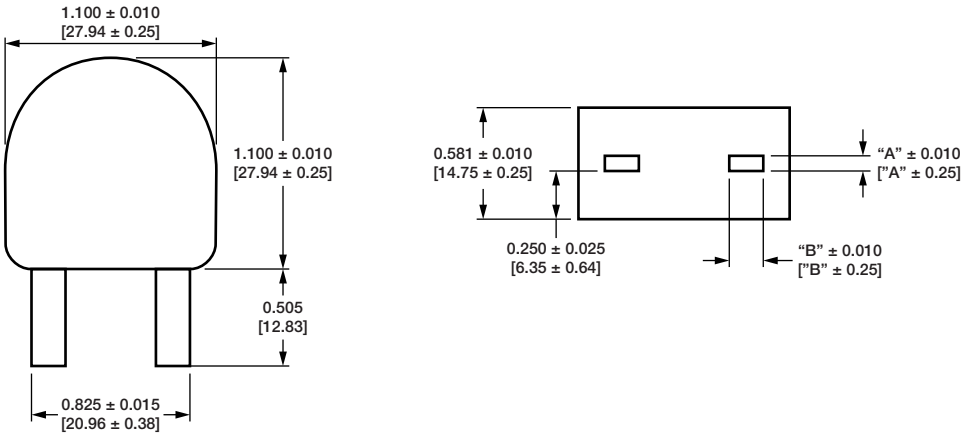
PART NUMBER	L_0 INDUCTANCE ± 10 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A)		SATURATION CURRENT DC TYP. (A)		SRF TYP. (MHz)
				40 °C RISE (1)	80 °C RISE (2)	20 % DROP (3)	30 % DROP (4)	
IHXL1100OZEB1R0K31	1.0	0.28	0.31	138	191	102	149	29
IHXL1100OZEB2R2K31	2.2	0.47	0.52	79	118	80	114	19
IHXL1100OZEB3R3K31	3.3	0.70	0.77	76	103	60	86	15
IHXL1100OZEB4R7K31	4.7	0.92	1.01	65	88	49	70	11
IHXL1100OZEB100K31	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 %

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]

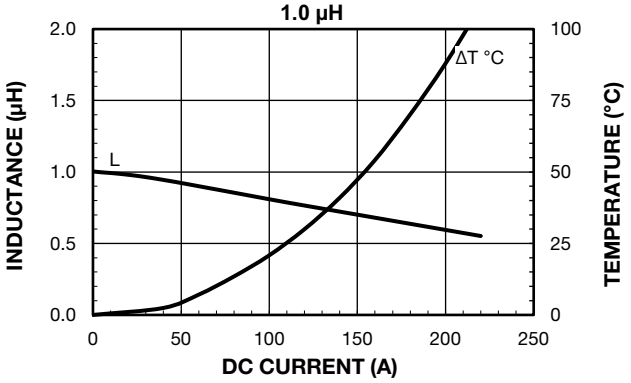
DESCRIPTION

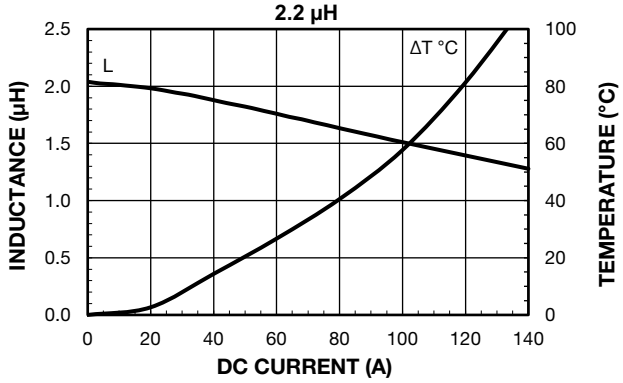
IHXL1100OZ-31	**1.0 µH**	**± 10 %**	**BULK / TRAY PACKAGING**	**e3**
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

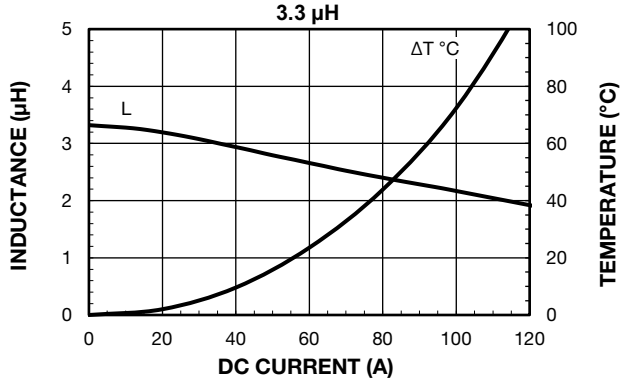
GLOBAL PART NUMBER

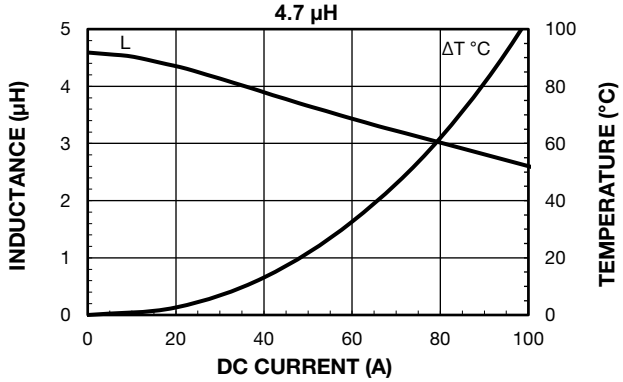
I H X L	1 1 0 0 O Z	E B	1 R 0	K	3 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE **1R0** = 1.0 µH	INDUCTANCE TOLERANCE **K** = ± 10 %	SERIES

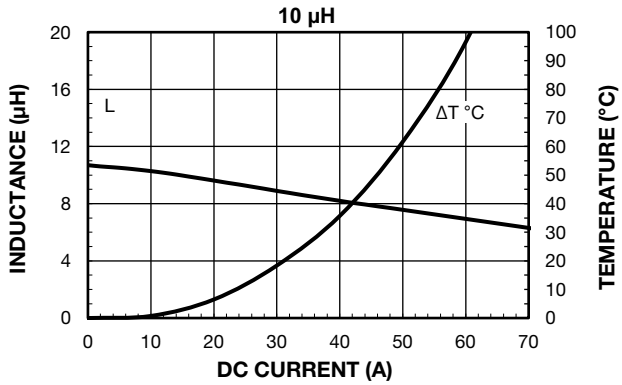
PERFORMANCE GRAPHS: INDUCTANCE VS. CURRENT



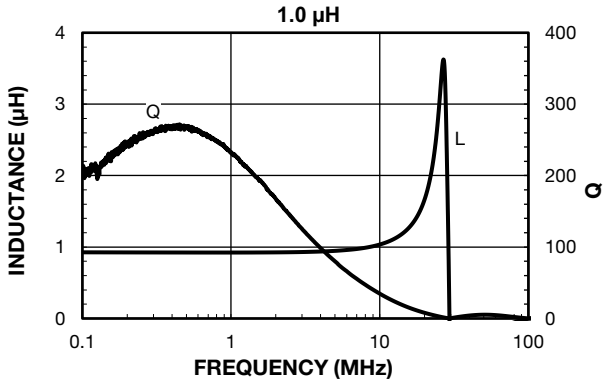


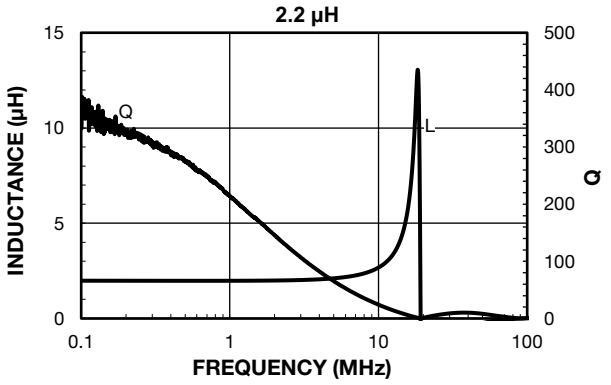


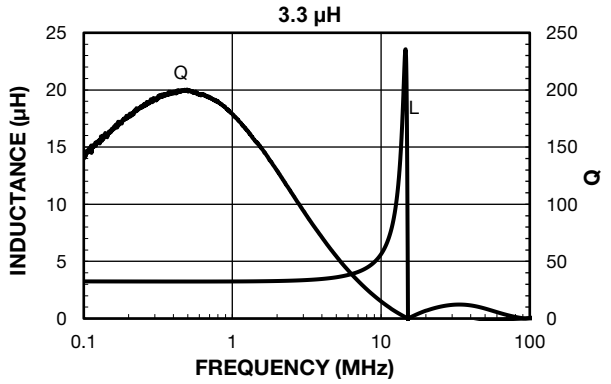


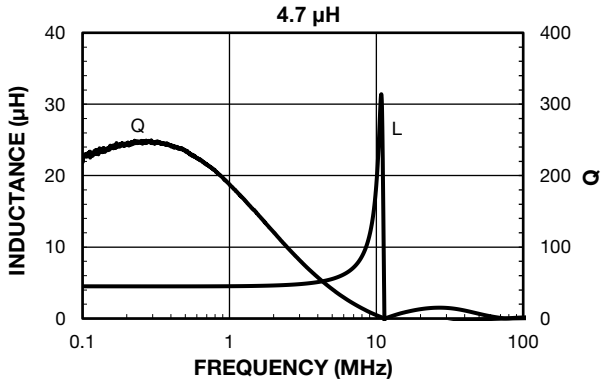


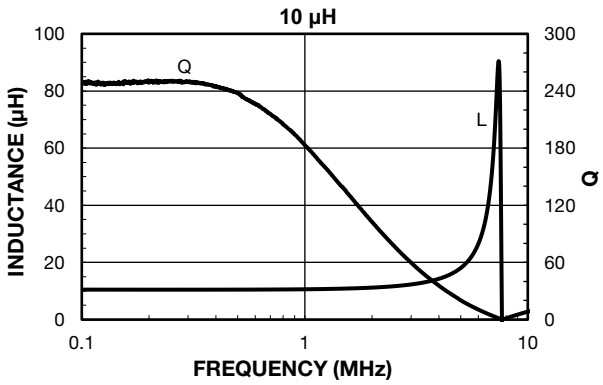
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY











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