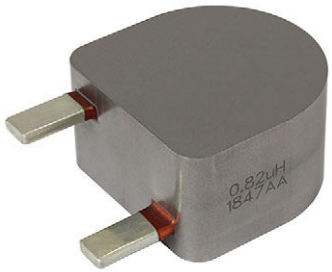
High Current Through-Hole Inductor, High Temperature



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

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

APPLICATIONS

- Industrial high current filters
- Switching regulators
- In-line noise filters
- Differential mode choke
- Boost power factor correction choke
- Solar power / wind power applications

STANDARD ELECTRICAL SPECIFICATIONS

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)
0.68	0.12	0.13	154	235	301	420
0.82	0.17	0.18	132	196	235	332
1.5	0.25	0.26	120	178	138	193
2.2	0.32	0.34	115	168	104	150
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 °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 L_0 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

For technical questions, contact: magnetics@vishay.com
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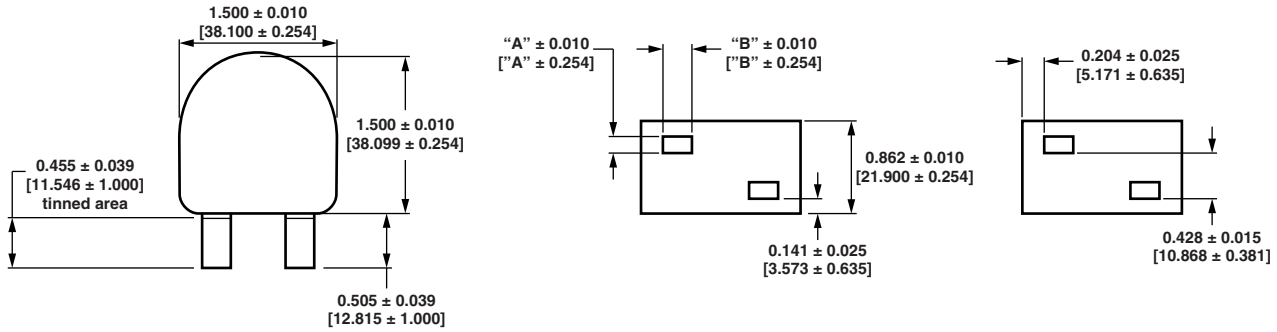
DIMENSIONS in inches [millimeters]



LEAD DIMENSIONS ± 0.010 [± 0.25]

VALUE	A - HEIGHT	B - WIDTH
0.68	0.162 [4.11]	0.298 [7.34]
0.82	0.102 [2.59]	0.253 [6.43]
1.5	0.102 [2.59]	0.253 [6.43]
2.2	0.102 [2.59]	0.253 [6.43]
3.3	0.102 [2.59]	0.253 [6.43]

DESCRIPTION

IHXL-1500VZ-51	2.2 µH	± 20 %	EB	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	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

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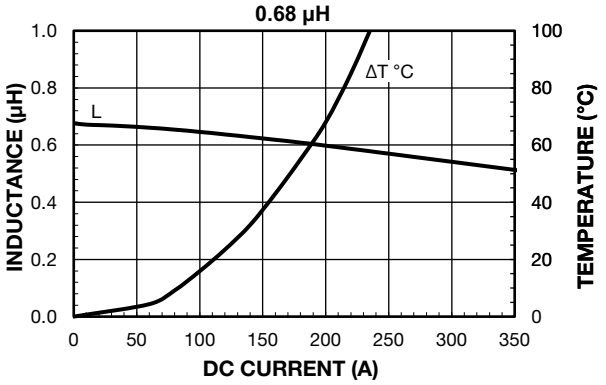
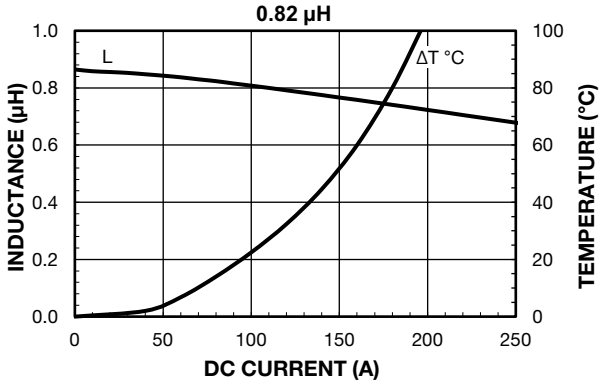
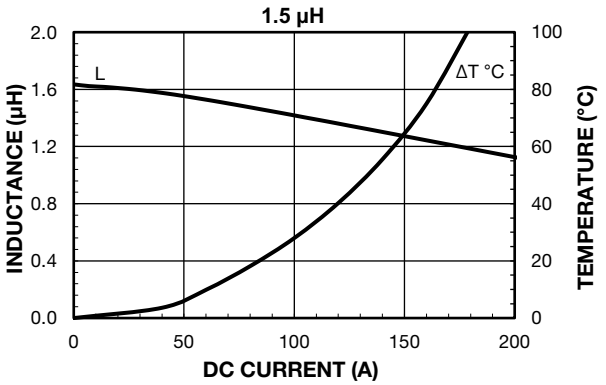
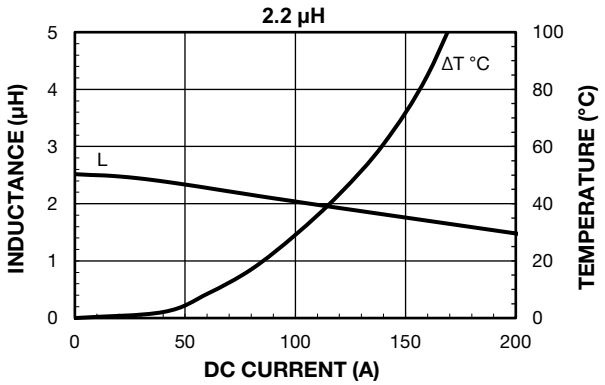
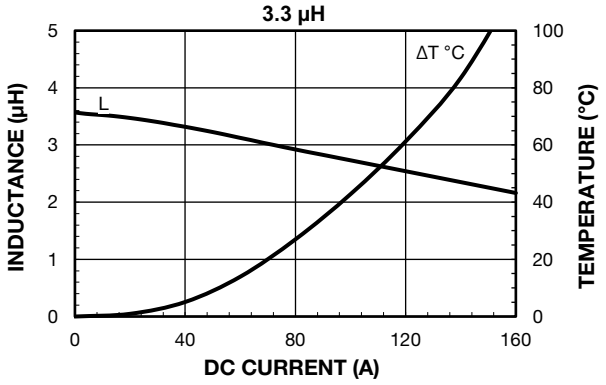
PERFORMANCE GRAPHS











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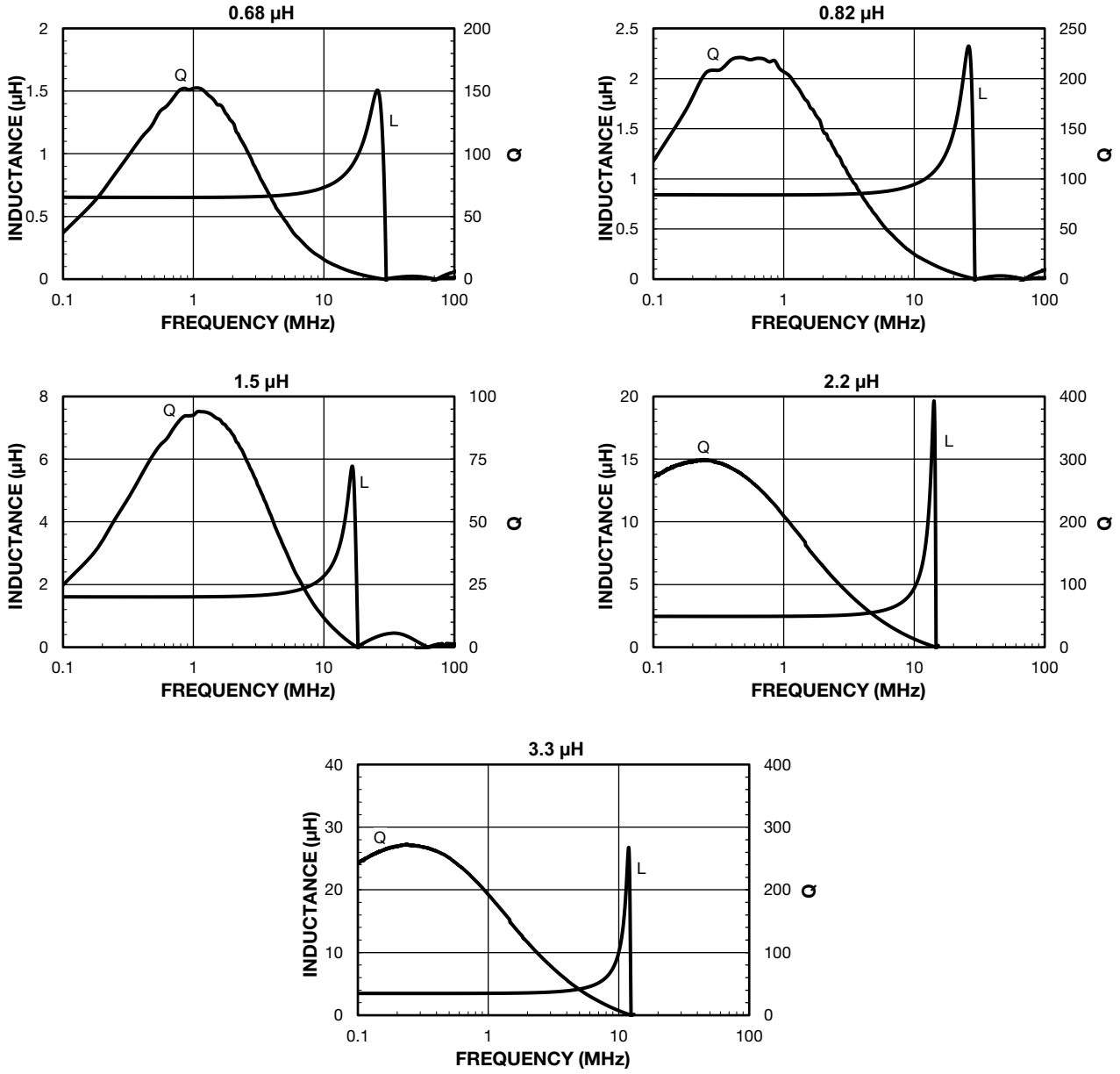
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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