IHLP® Automotive Inductors, High Temperature (155 °C) Series



FEATURES

- 19.10 mm x 19.05 mm x 7.0 mm size
- High temperature up to 155 °C
- Magnetically shielded iron alloy construction
- 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 | 3D Models | Calculators

APPLICATIONS

- Engine and transmission control units
- DC/DC converters for infotainment, navigation systems, lighting
- Noise suppression and filtering
- LED drivers
- 5G telecommunications equipment

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 INDUCTANCE ± 20 % 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) (1)	SATURATION CURRENT DC TYP.		SRF TYP. (MHz)
					(A) (2)	(A) (3)	
IHLP7575GZERR56M5A	0.56	1.02	1.09	61	70	101	50.0
IHLP7575GZER1R0M5A	1.0	1.25	1.34	55	56	81	31.5
IHLP7575GZER1R5M5A	1.5	1.51	1.62	48	44	63	23.0
IHLP7575GZER3R3M5A	3.3	3.12	3.34	36	28	41	12.3
IHLP7575GZER8R2M5A	8.2	7.23	7.74	20.7	23.1	33	8.7
IHLP7575GZER100M5A	10	9.31	9.96	18.7	21.6	31.1	8.4
IHLP7575GZER330M5A	33	25.2	27.0	10.2	9.9	14.3	4.4

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

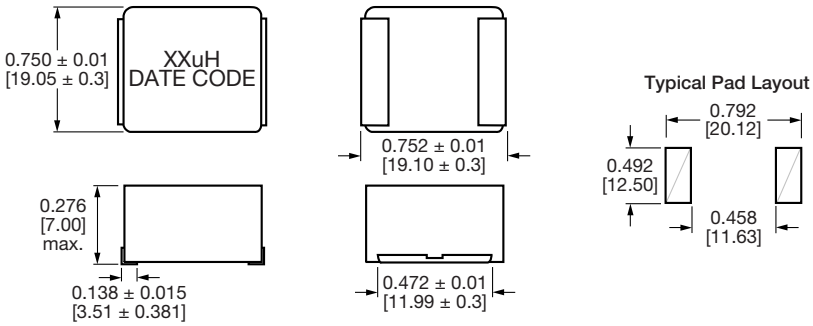
(2) DC current (A) that will cause L_0 to drop approximately 20 %

(3) 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]



DESCRIPTION

IHLP-7575GZ-5A	1.0 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

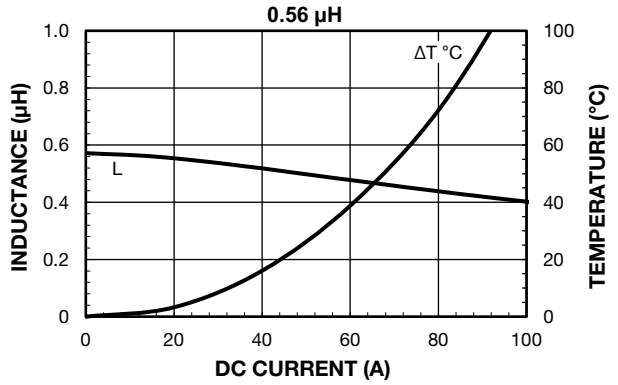
GLOBAL PART NUMBER

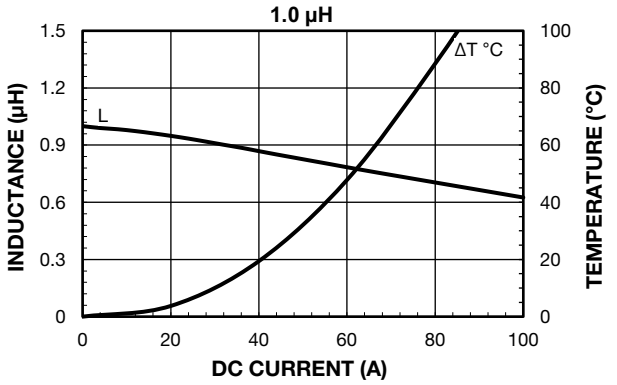
I H L P	7 5 7 5 G Z	E R	1 R 0	M	5 A
PRODUCT FAMILY	SIZE	PACKAGE CODE **ER** = tape and reel	INDUCTANCE VALUE **1R0** = 1.0 µH	INDUCTANCE TOLERANCE **M** = ± 20 % **N** = ± 30 %	SERIES

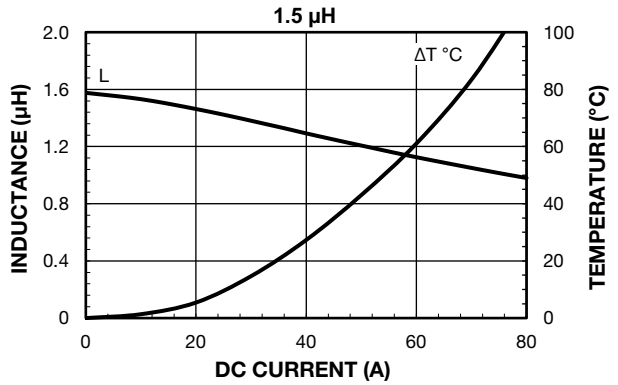
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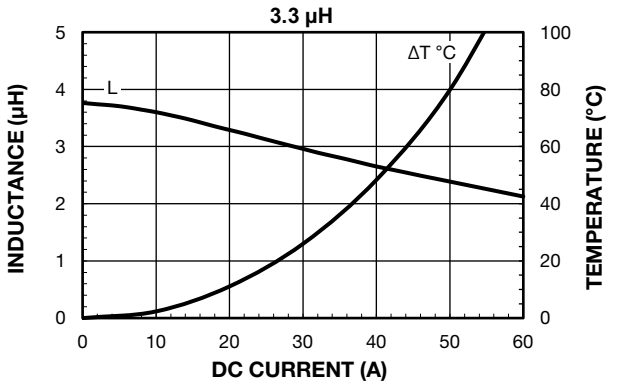
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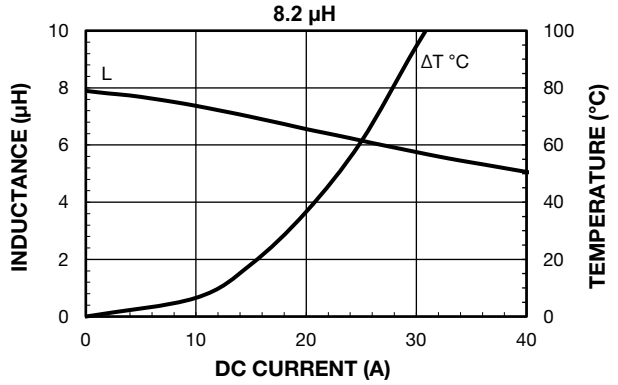
PERFORMANCE GRAPHS

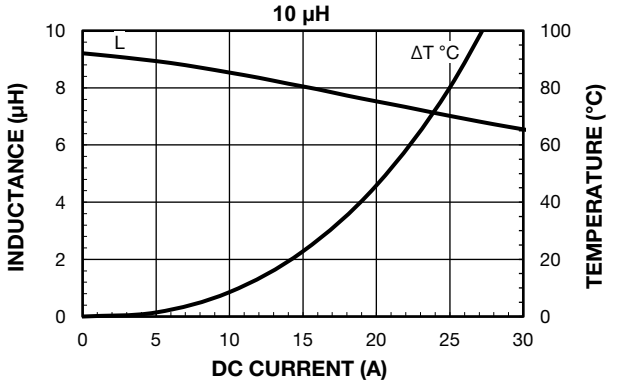


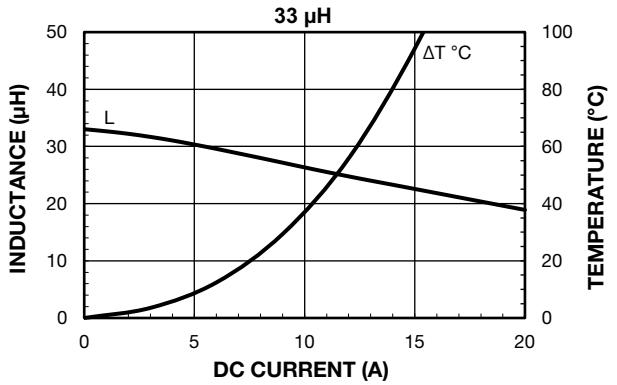






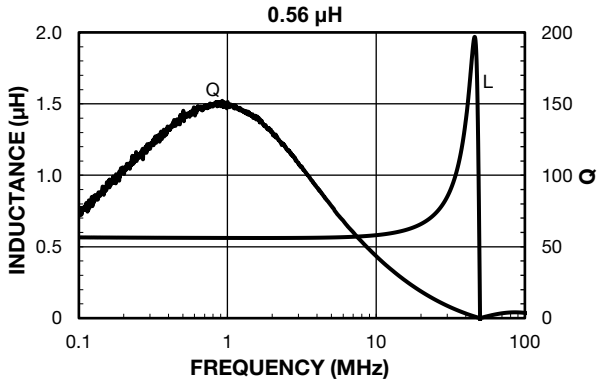


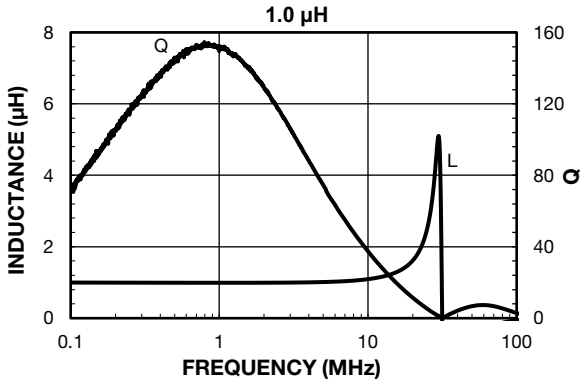


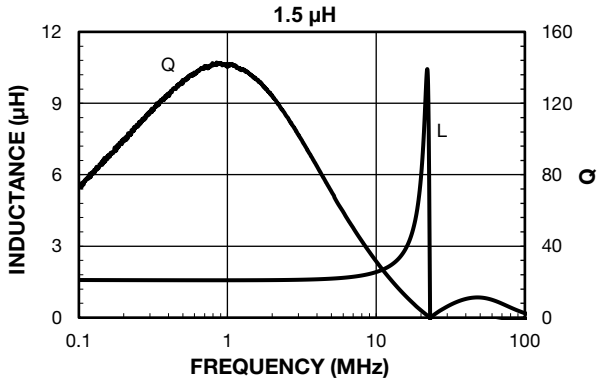


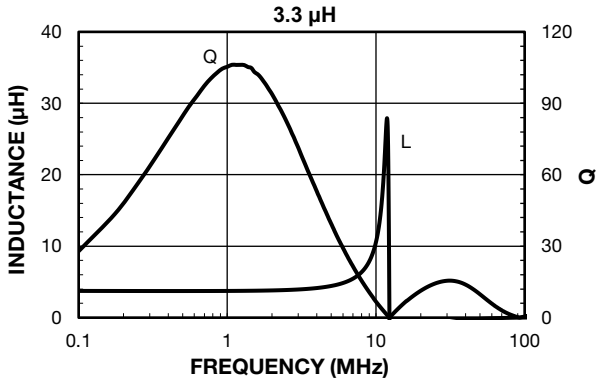
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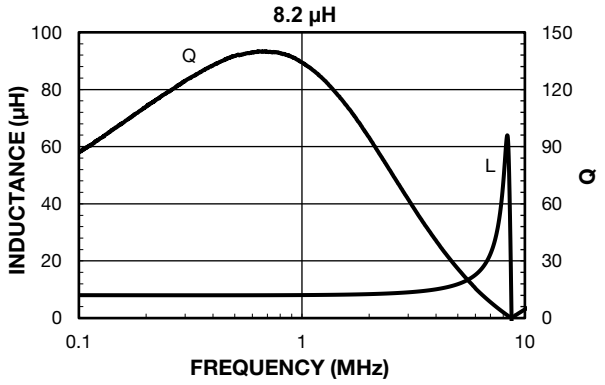
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY

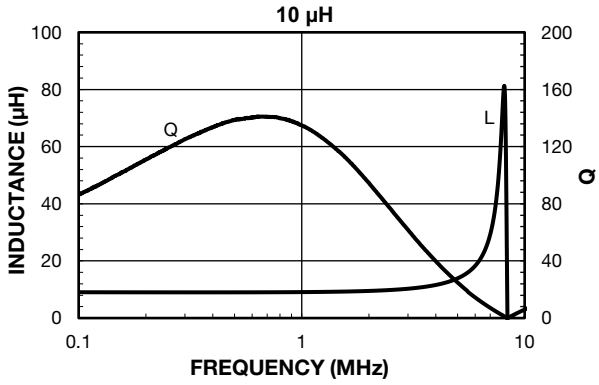


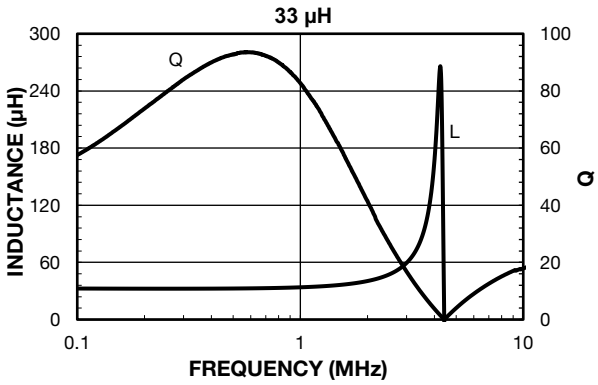












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