



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

RoHS
COMPLIANTHALOGEN
FREEGREEN
(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

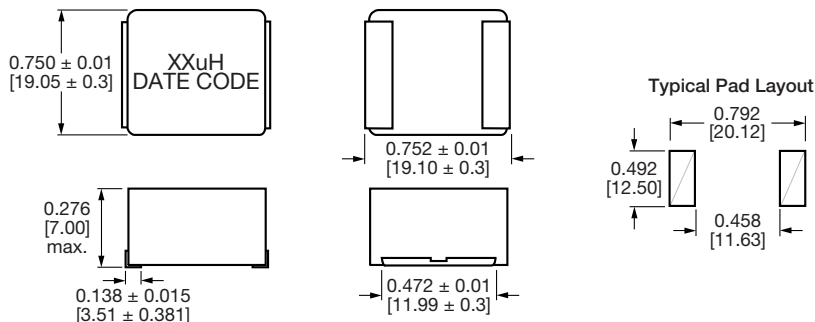
PART NUMBER	L ₀ INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP.		SRF TYP. (MHz)
					(A) ⁽²⁾	(A) ⁽³⁾	
IHLP7575GZERR56M5A	0.56	1.02	1.09	61	70	101	50.0
IHLP7575GZER1R0M5A	1.0	1.25	1.34	55	56	81	31.5
IHLP7575GZER1R5M5A	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 L₀ to drop approximately 20 %
 (3) DC current (A) that will cause L₀ to drop approximately 30 %



DIMENSIONS in inches [millimeters]



DESCRIPTION

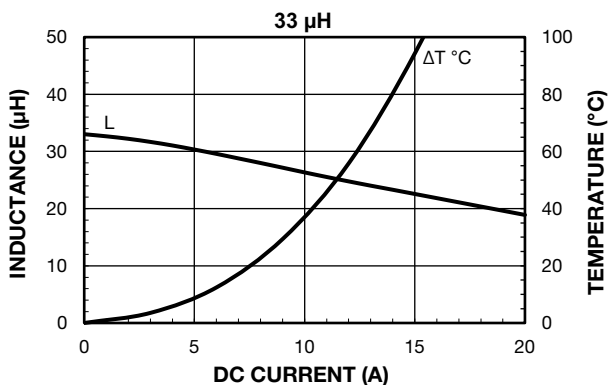
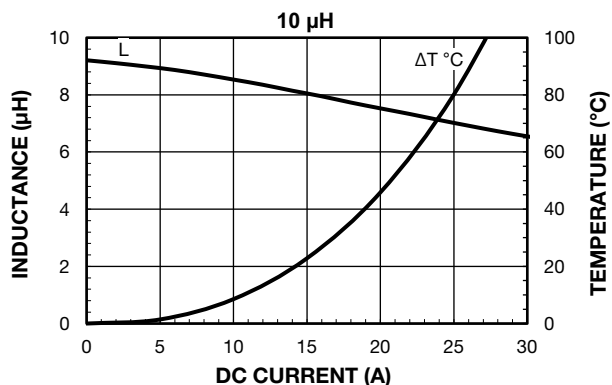
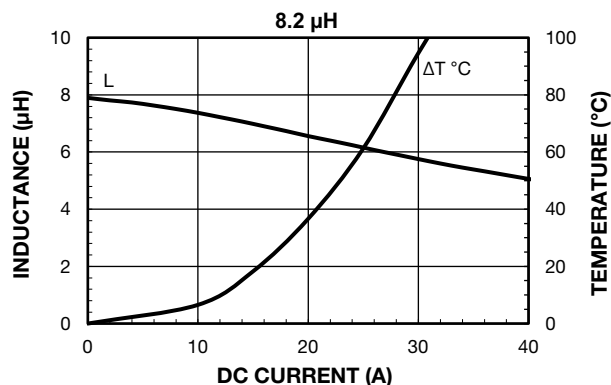
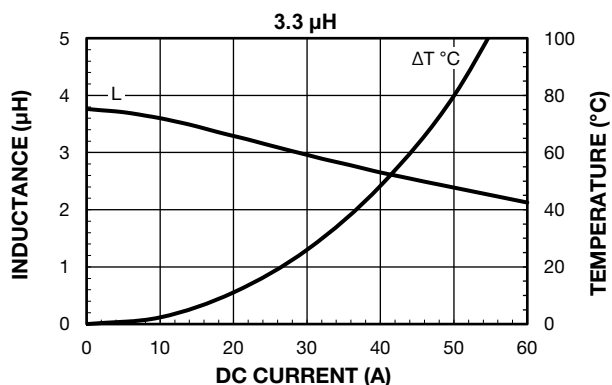
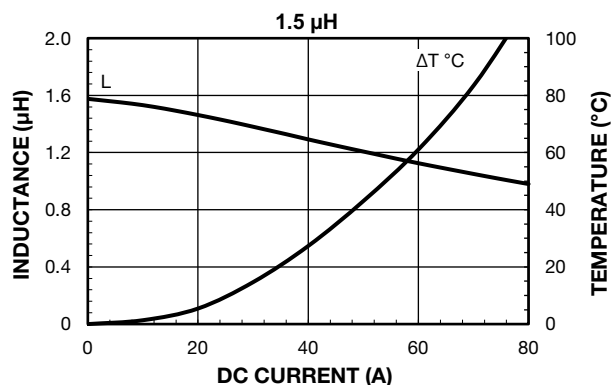
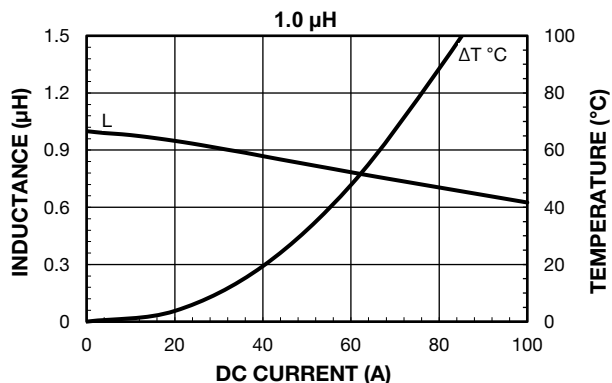
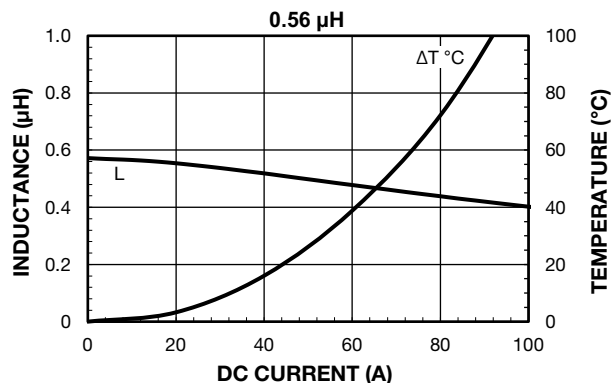
IHLP-7575GZ-5A	1.0 μH	$\pm 20\%$	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

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	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		ER = tape and reel	1R0 = 1.0 μ H	M = $\pm 20\%$ N = $\pm 30\%$	

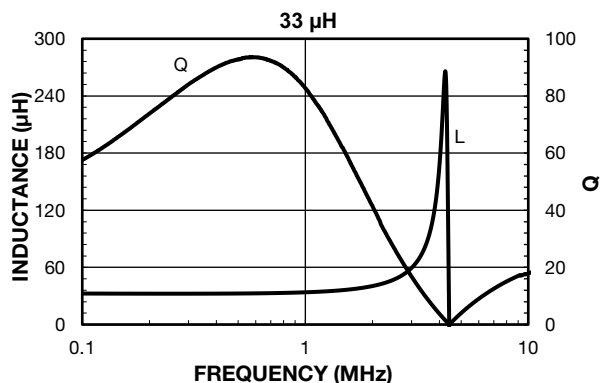
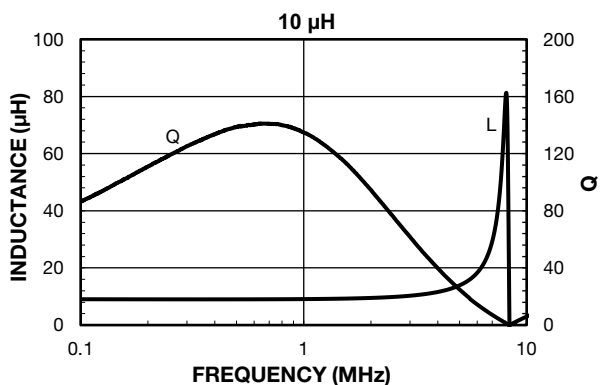
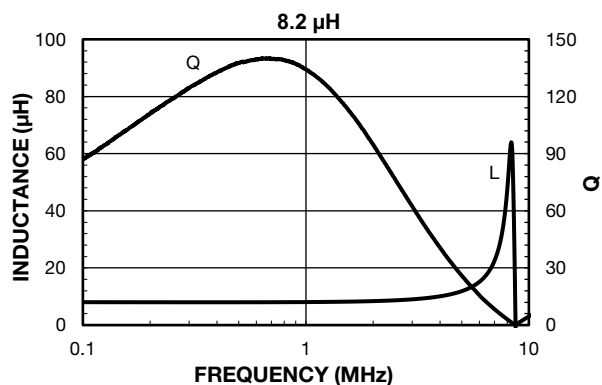
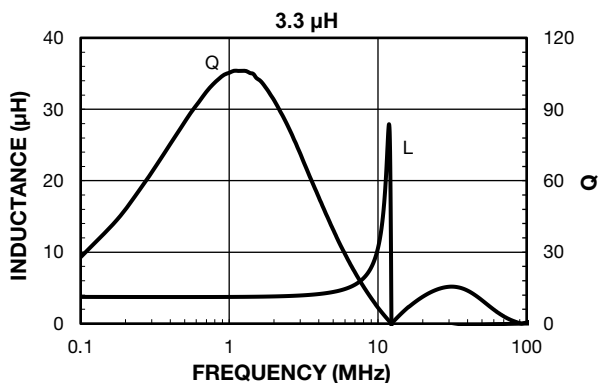
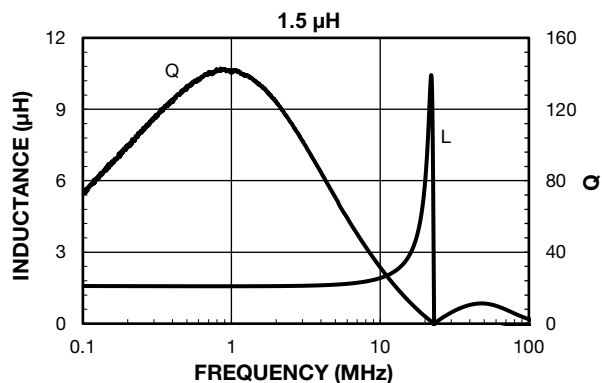
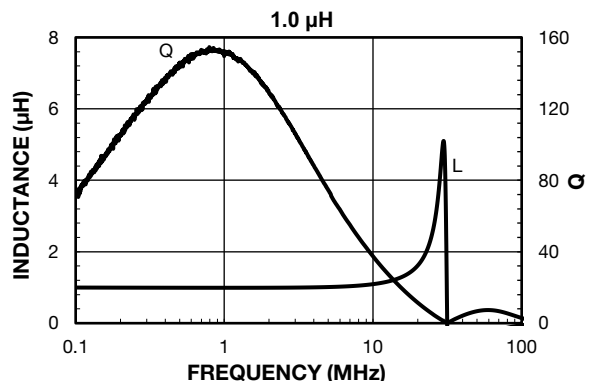
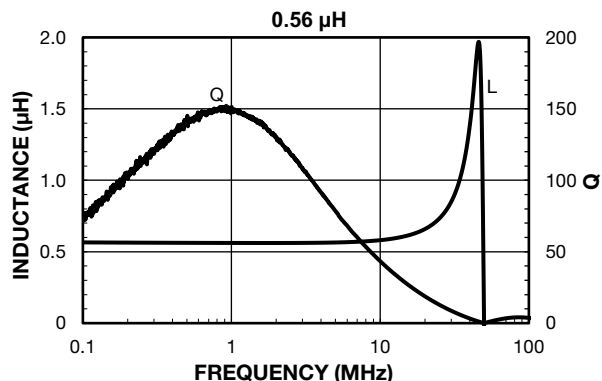


PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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