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

LINKS TO ADDITIONAL RESOURCES

3D Models Design Tools

FEATURES

- High temperature, up to 155 °C
- Magnetically shielded construction
- Excellent DC/DC energy storage up to 2 MHz
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- IHLP design; PATENT(S): www.vishay.com/patents
- Packaging information: SMD packaging
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

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

APPLICATIONS

- PDA / notebook / desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

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. (A)		SRF TYP. (MHz)
					20 % DROP [2]	30 % DROP [3]	
IHLP6767GZERR47M51	0.47	0.89	0.95	65	76	110	52.3
IHLP6767GZER1R0M51	1	1.36	1.46	53	42	60	35.5
IHLP6767GZER1R5M51	1.5	1.72	1.85	40.5	40	55	24
IHLP6767GZER2R2M51	2.2	2.25	2.41	38.5	38	41	19.8
IHLP6767GZER3R3M51	3.3	3.06	3.27	32.2	32	40	16.5
IHLP6767GZER4R7M51	4.7	4.89	5.23	24	26	35	14
IHLP6767GZER5R6M51	5.6	5.86	6.30	23	23	33	11.5
IHLP6767GZER6R8M51	6.8	7.5	8.06	21	22	32	10.4
IHLP6767GZER8R2M51	8.2	8.6	9.23	17.5	14.5	19	9.4
IHLP6767GZER100M51	10	10.2	10.91	16	13	18.5	7.7
IHLP6767GZER150M51	15	15.85	16.96	12.5	13	16	8.55
IHLP6767GZER220M51	22	21.28	22.27	11.7	11	15	5.97
IHLP6767GZER330M51	33	36.2	38.9	8.8	9.4	13.7	4.43
IHLP6767GZER470M51	47	52.7	56.4	7.25	7	10.1	3.72

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, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- Rated operating voltage (across inductor) = 75 V

(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 %

PATENT(S): www.vishay.com/patents
This Vishay product is protected by one or more United States and international patents.

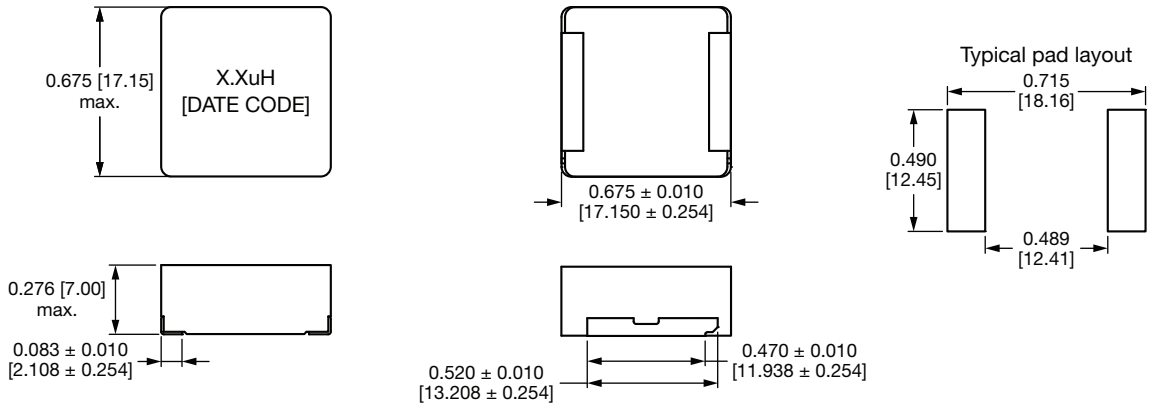
DESCRIPTION

IHLP-6767GZ-51	2.2 µH	± 20 %	TAPE AND REEL	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

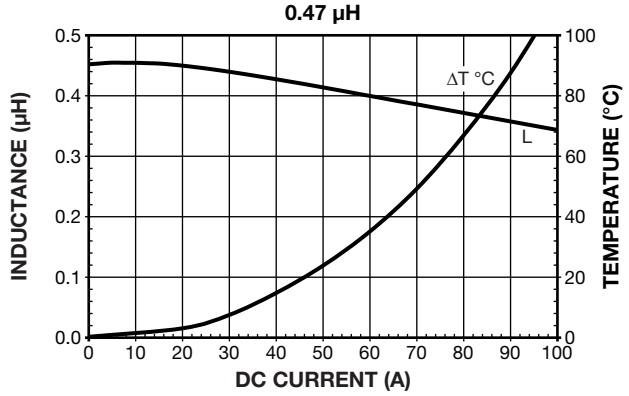
I	H	L	P	6	7	6	7	G	Z	E	R	2	R	2	M	5	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

DIMENSIONS in inches [millimeters]

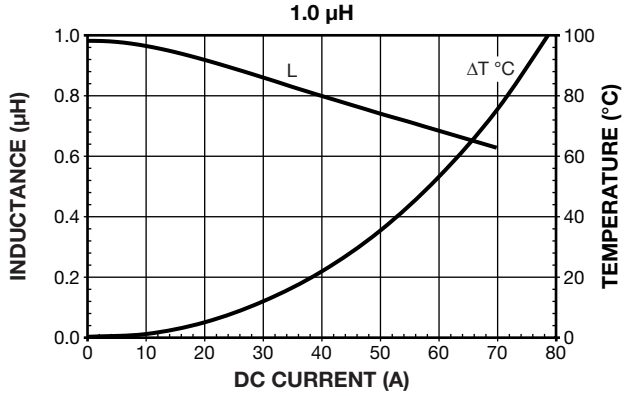


PERFORMANCE GRAPHS

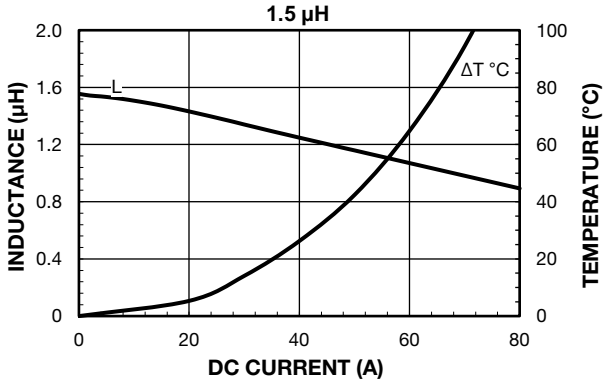
0.47 µH



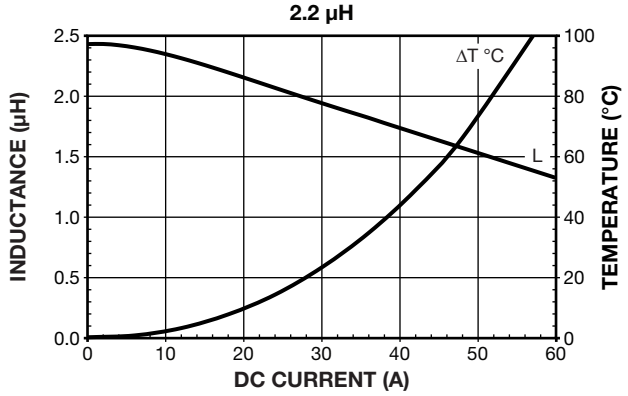
1.0 µH



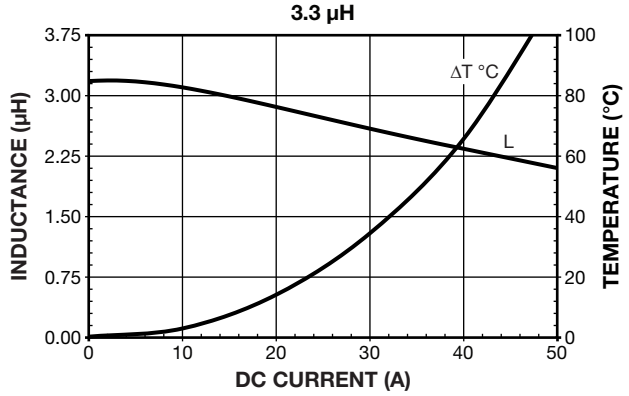
1.5 µH



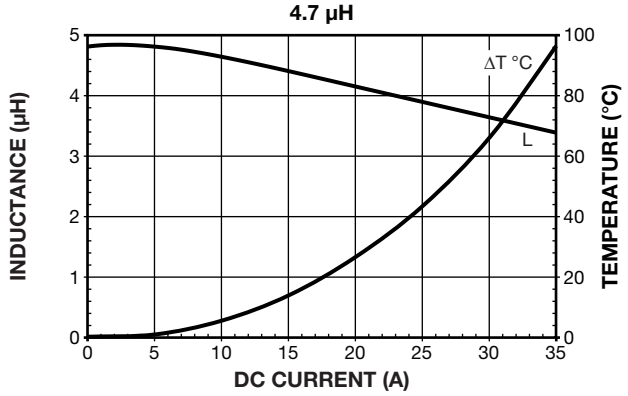
2.2 µH



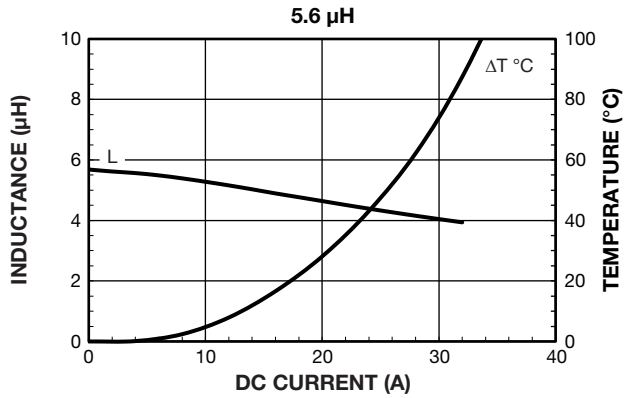
3.3 µH



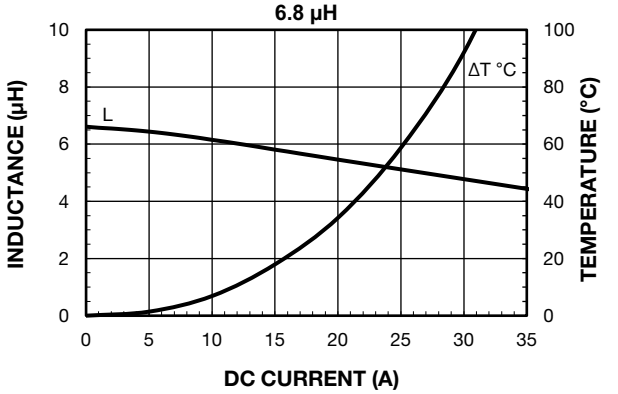
4.7 µH



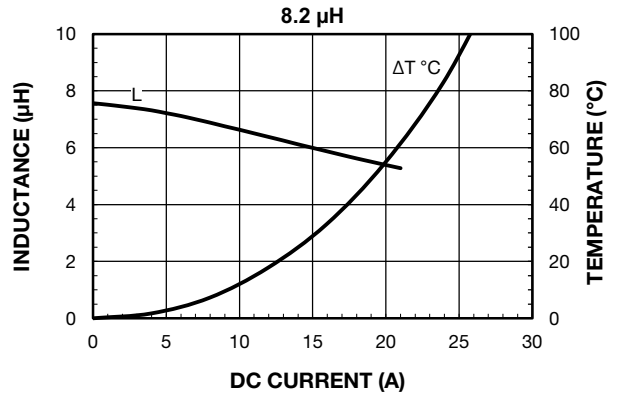
5.6 µH

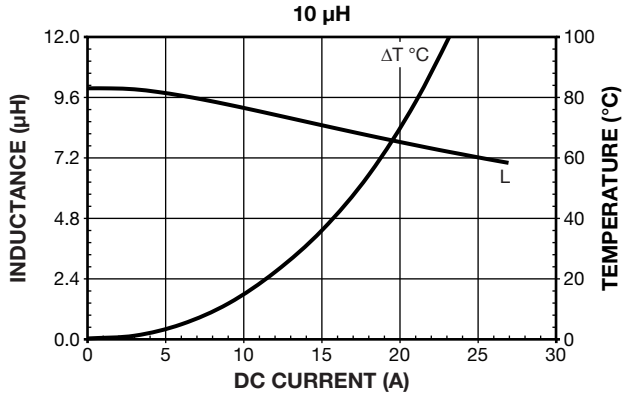


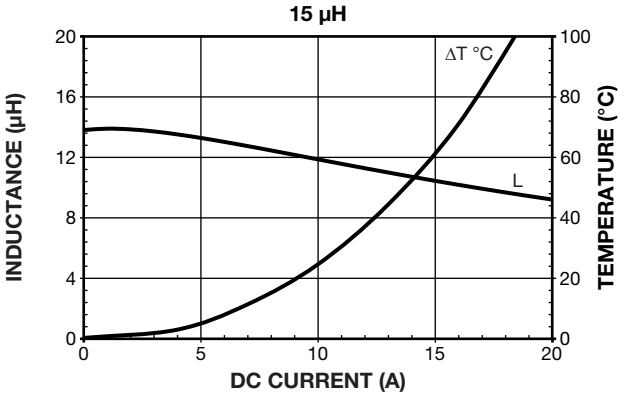
6.8 µH

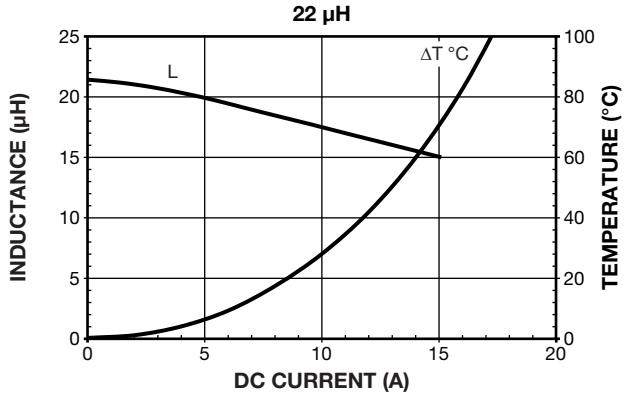


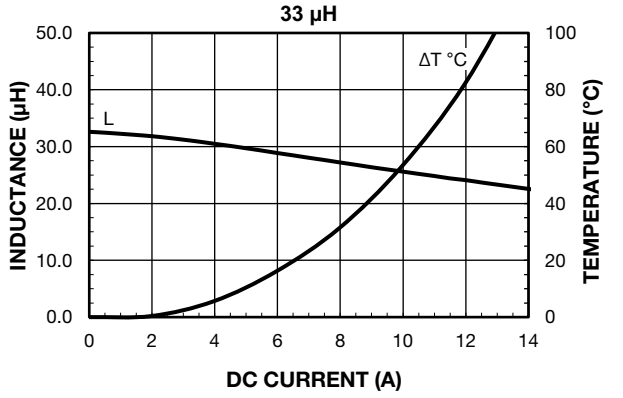
PERFORMANCE GRAPHS

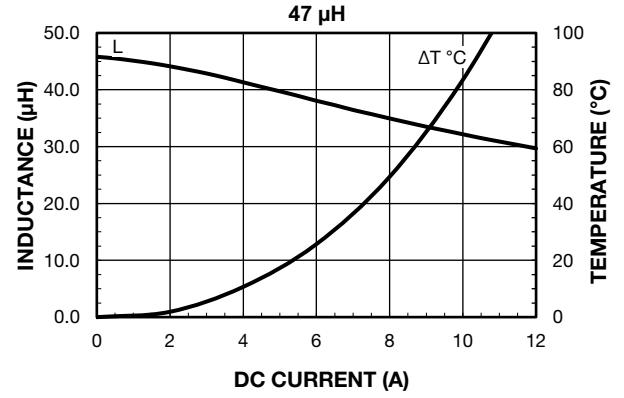






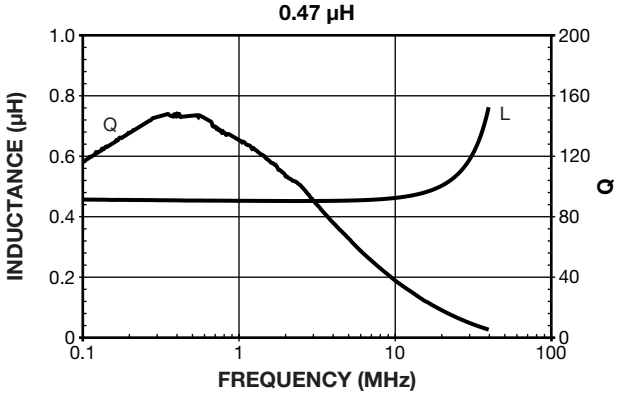




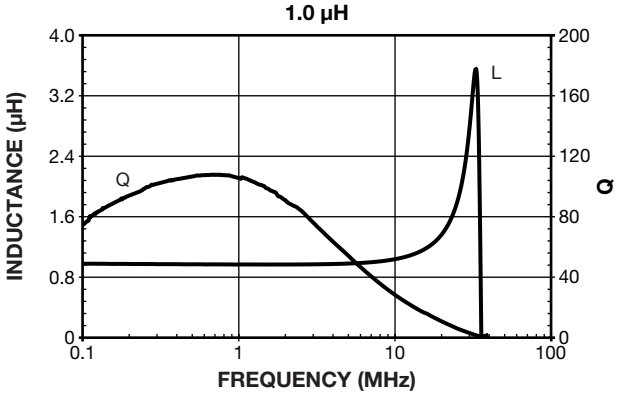


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY

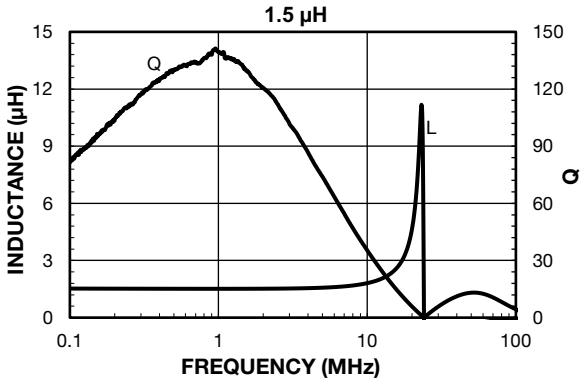
0.47 µH



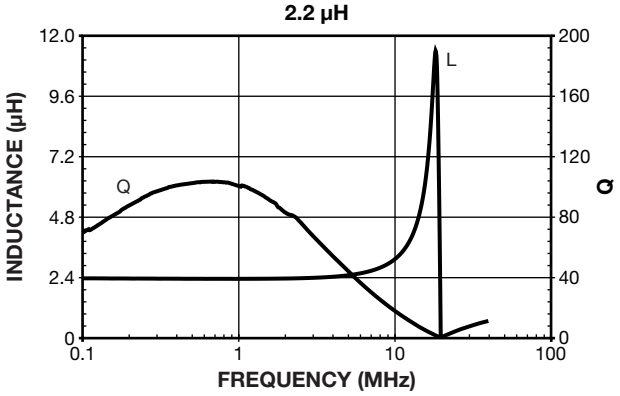
1.0 µH



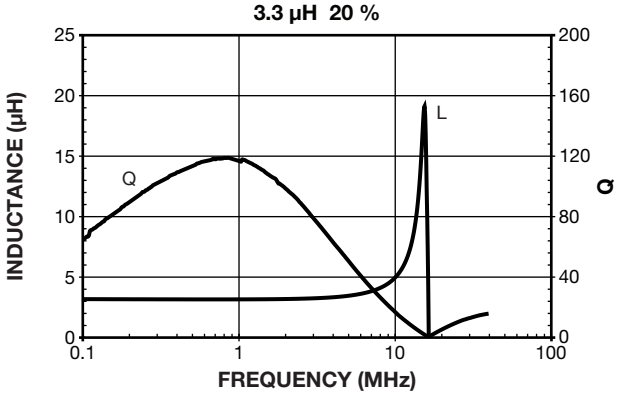
1.5 µH



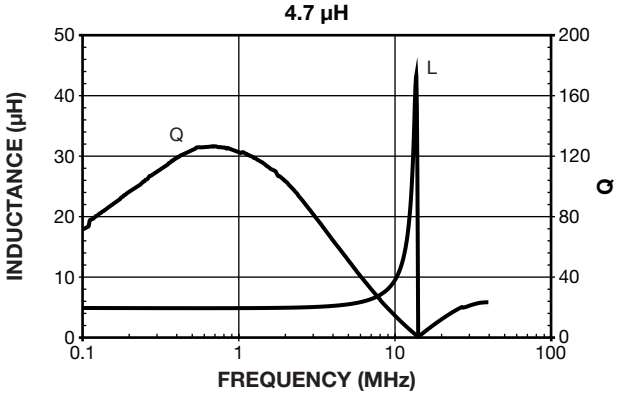
2.2 µH



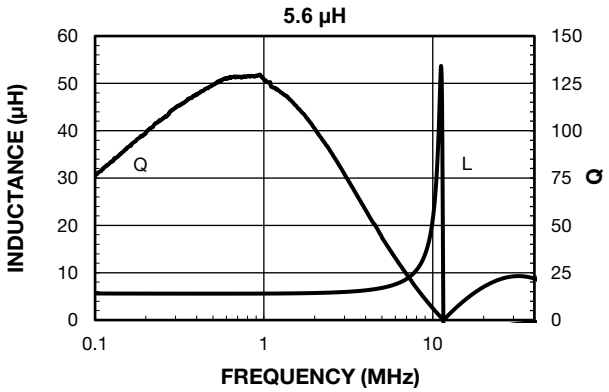
3.3 µH 20 %



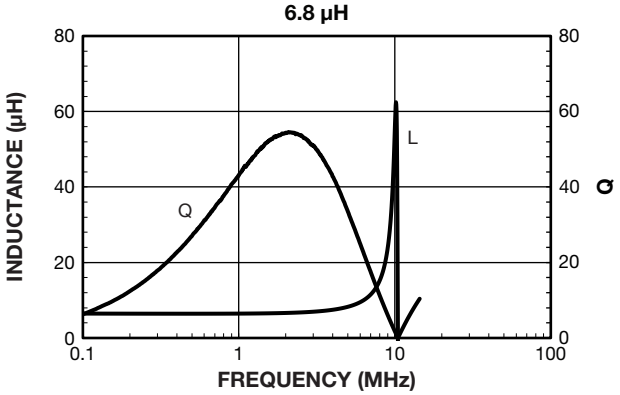
4.7 µH



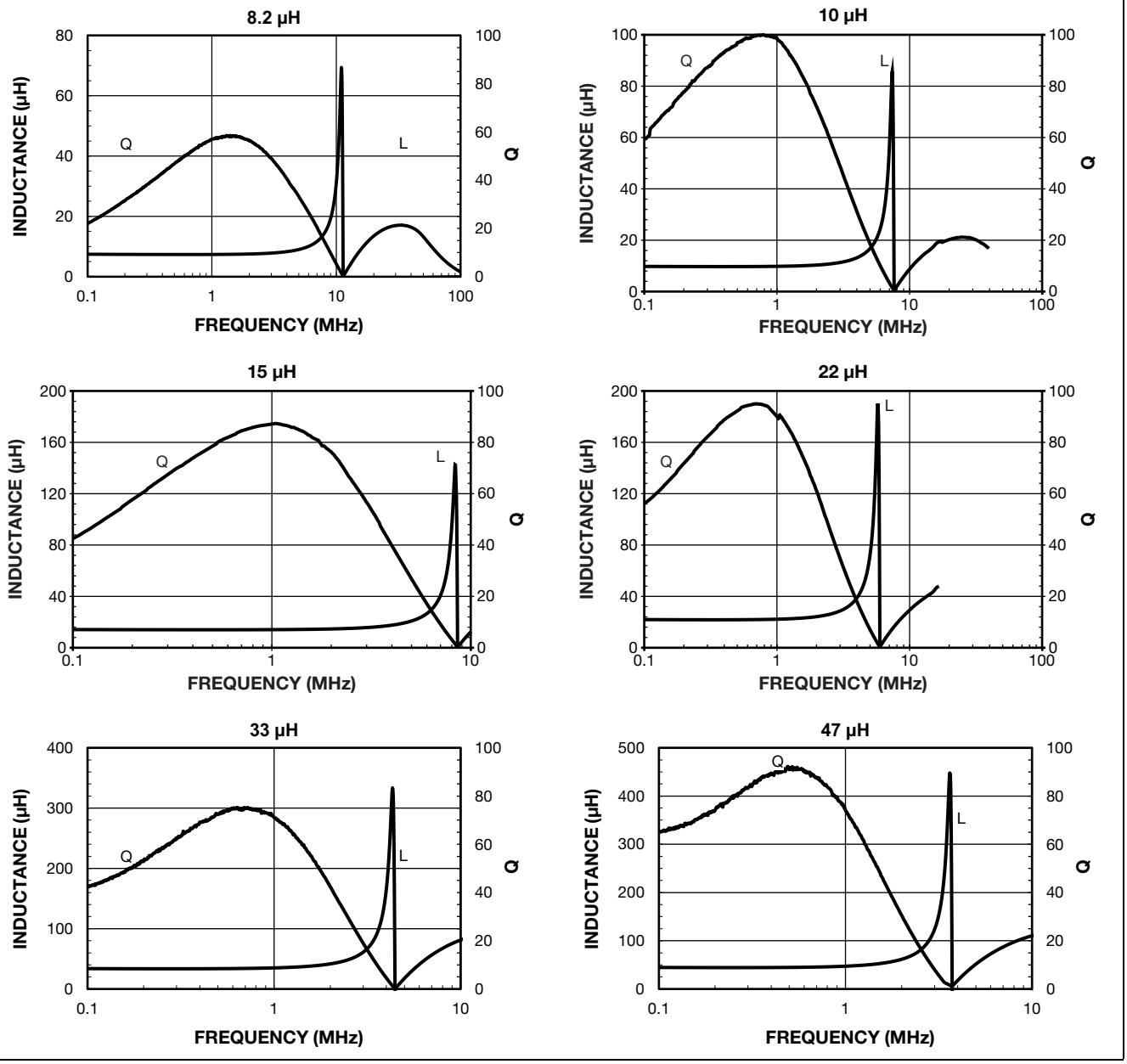
5.6 µH



6.8 µH



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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