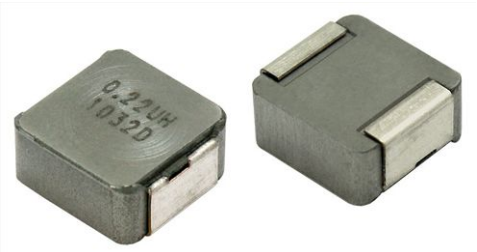
IHLP® Commercial Inductors, High Temperature (155 °C) Series



DESIGN SUPPORT TOOLS AVAILABLE

3D Models Design Tools

FEATURES

- Magnetically shielded construction
- Operating temperature up to 155 °C
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- IHLP design; PATENT(S): www.vishay.com/patents
- 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)	
IHLP3232DZERR22M51	0.22	1.68	1.86	36	32	44	117
IHLP3232DZERR47M51	0.47	2.38	2.55	27	19	24	77
IHLP3232DZERR68M51	0.68	3.3	3.53	21.5	12	17	51
IHLP3232DZERR82M51	0.82	3.7	4	20	15	22	49
IHLP3232DZER1R0M51	1.0	4.58	4.9	19	15	22	45
IHLP3232DZER1R5M51	1.5	6.78	7.25	15.5	14	20	35
IHLP3232DZER2R2M51	2.2	11.7	12.5	11.5	14	20	32
IHLP3232DZER3R3M51	3.3	15.4	16.48	10.6	11.8	16	23
IHLP3232DZER4R7M51	4.7	26.6	28.46	7.2	9.1	12	18
IHLP3232DZER5R6M51	5.6	29.6	31.67	6.9	9	12	18
IHLP3232DZER6R8M51	6.8	33.5	35.9	6.8	6.3	9.2	15.3
IHLP3232DZER100M51	10	50	53.5	5.1	5.2	7	13
IHLP3232DZER150M51	15	62	66.34	4.8	3.6	4.5	10
IHLP3232DZER220M51	22	103	110.21	3.7	3.8	5	9
IHLP3232DZER330M51	33	149	159.43	3.1	3.2	4.2	6.1

Notes

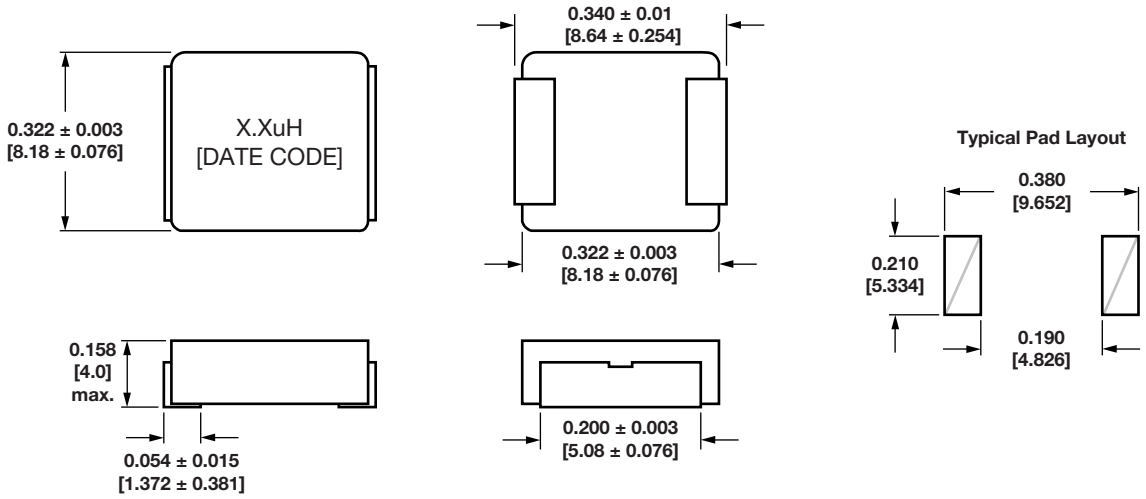
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions 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.

For technical questions, contact: magnetics@vishay.com

DIMENSIONS in inches [millimeters]



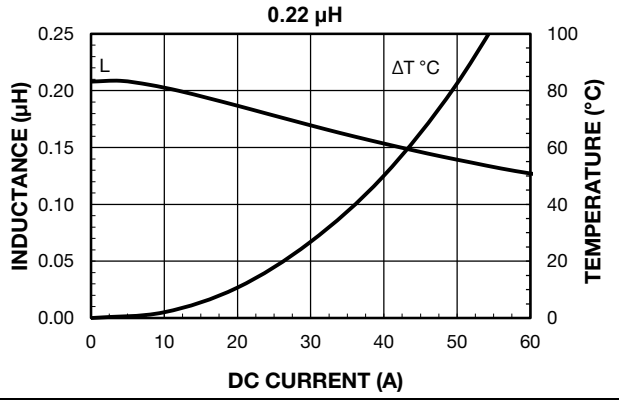
DESCRIPTION

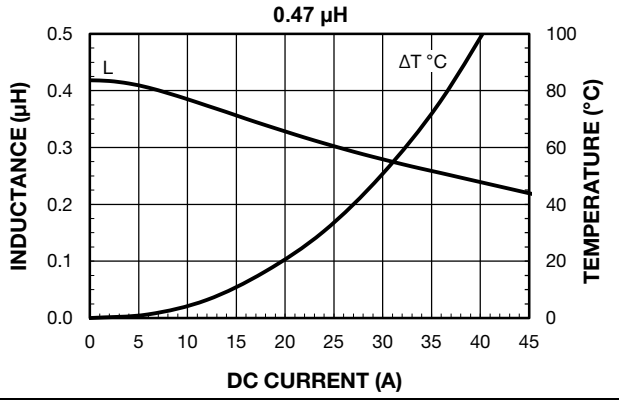
IHLP-3232DZ-51	10 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	H	L	P	3	2	3	2	D	Z	E	R	1	0	0	M	5	1
MODEL				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

PERFORMANCE GRAPHS





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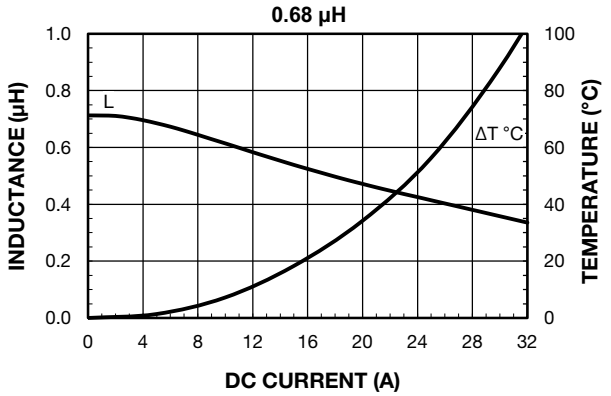

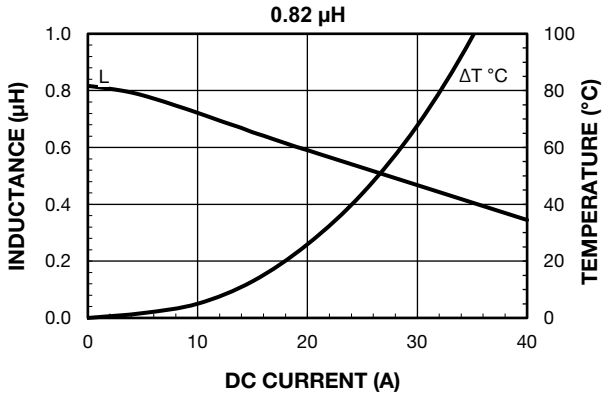

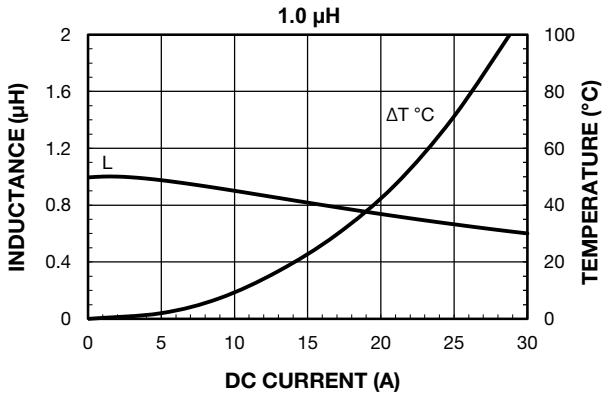

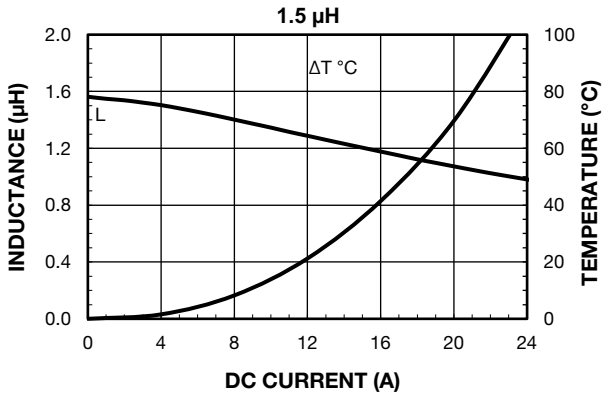

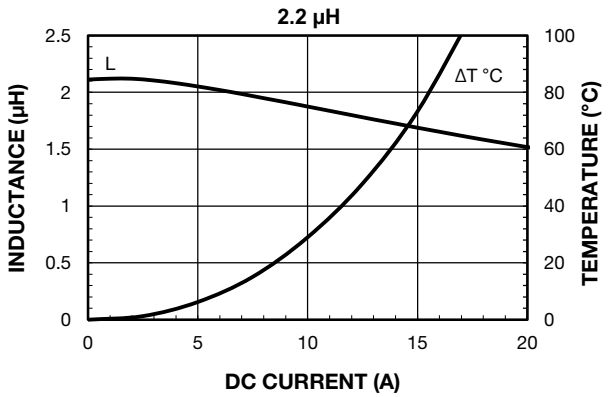

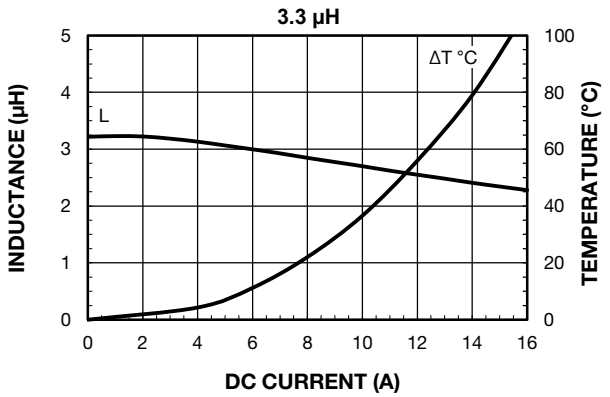

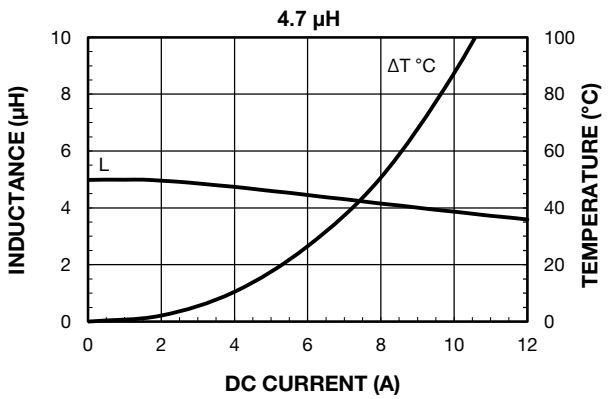

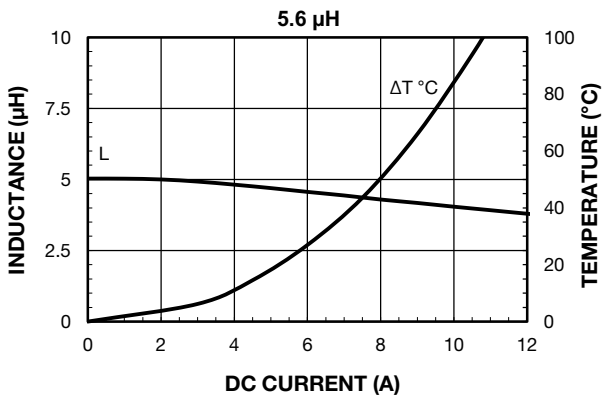

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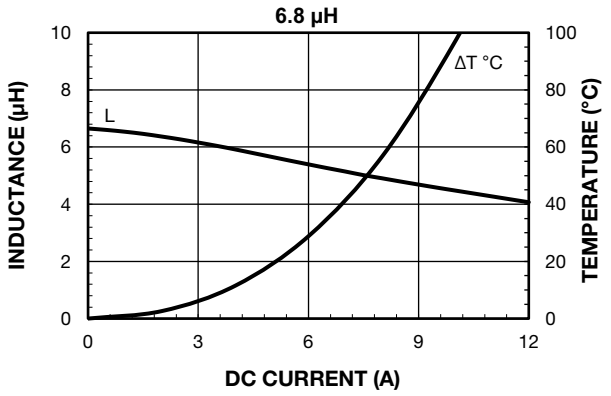
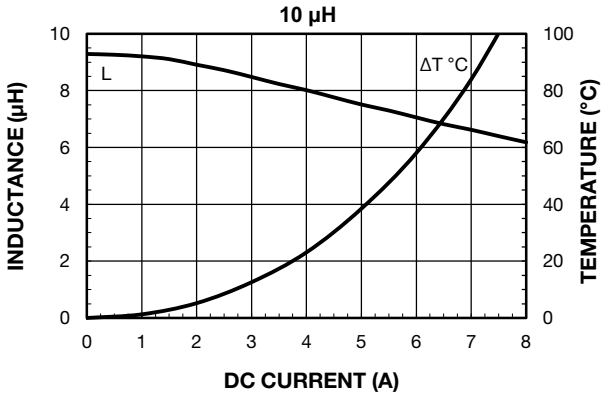
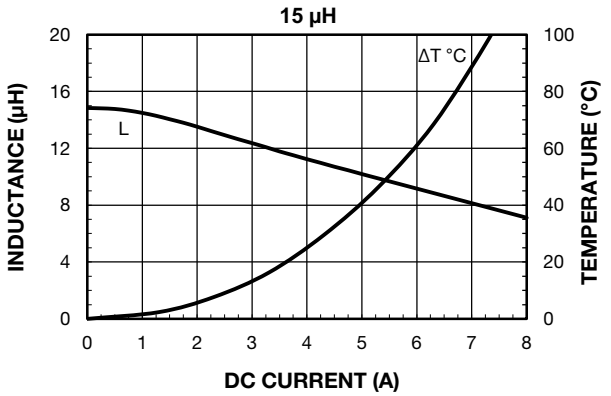
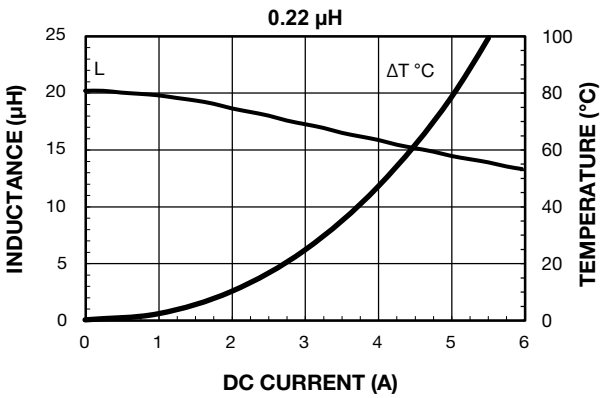
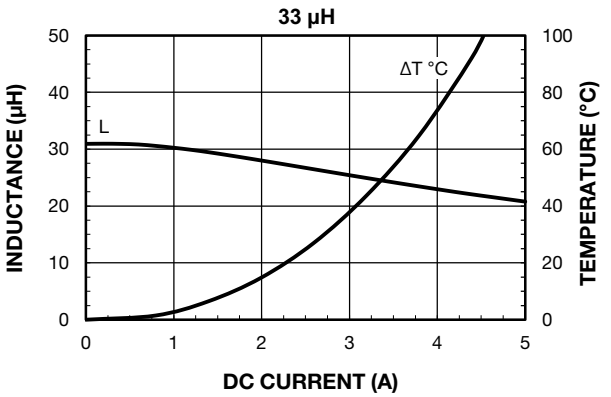
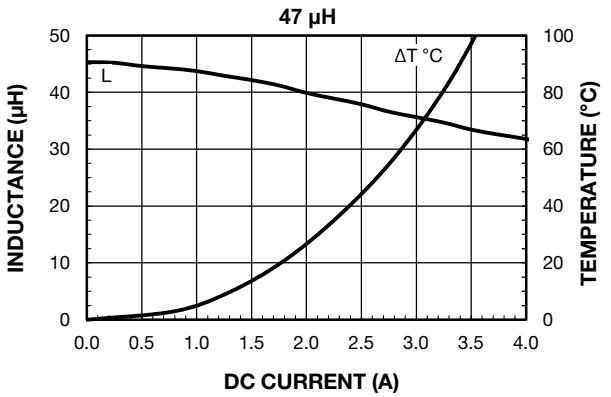




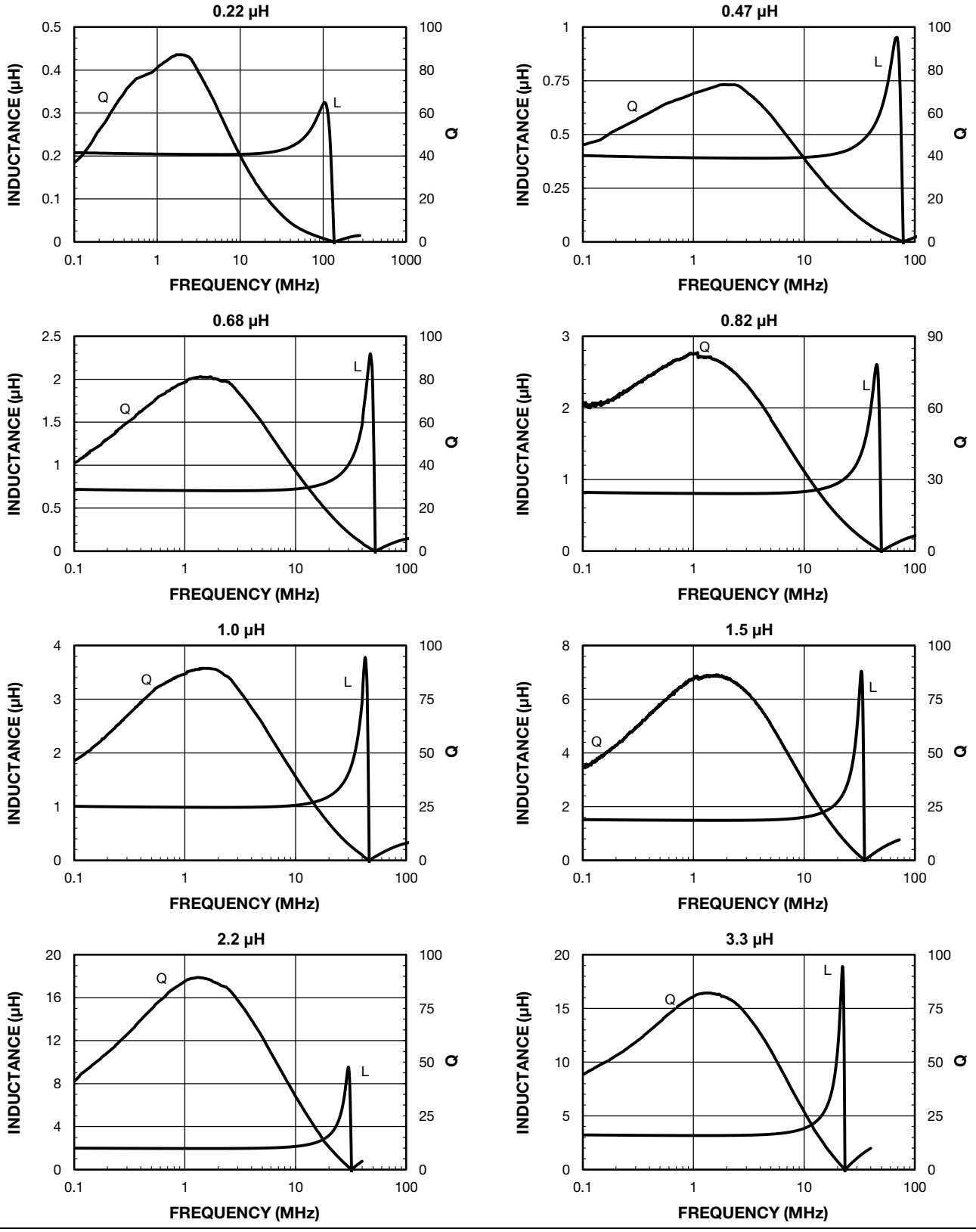








PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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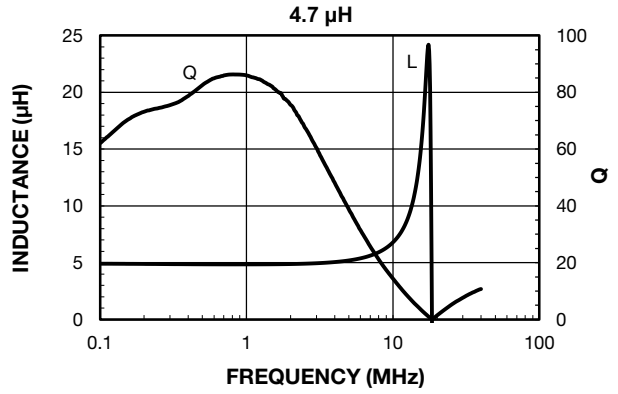

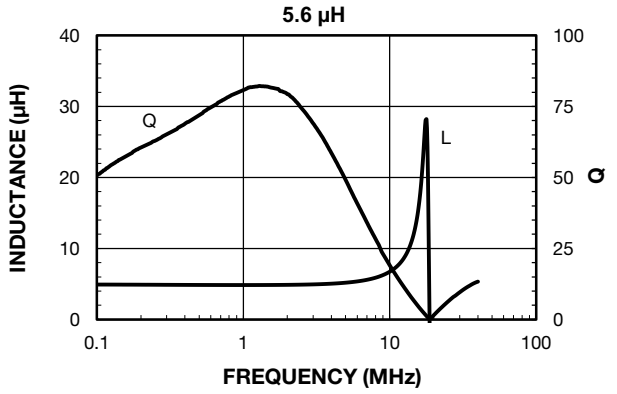

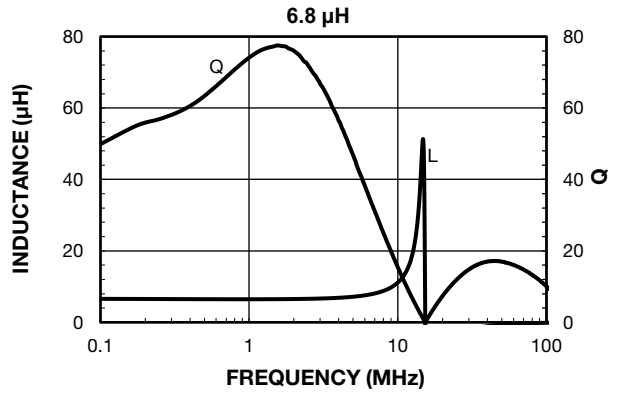

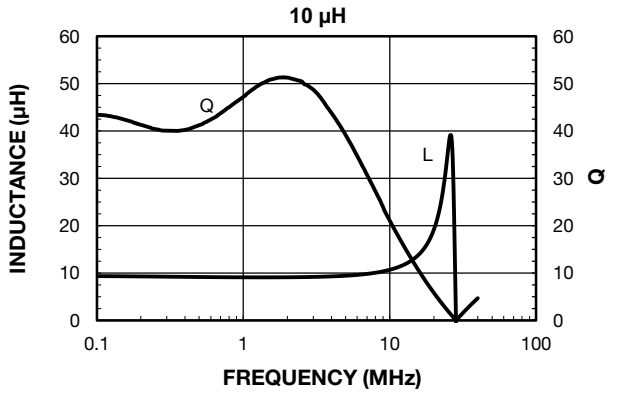

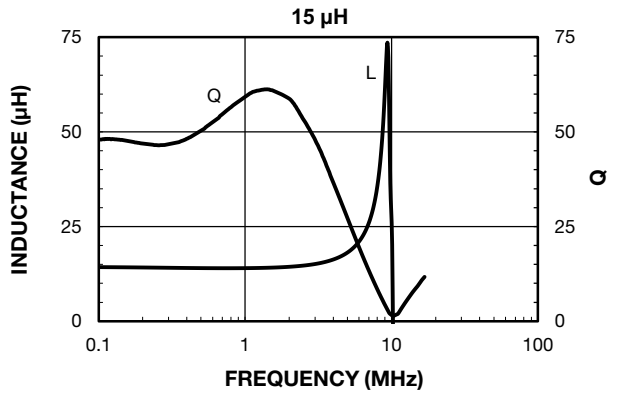

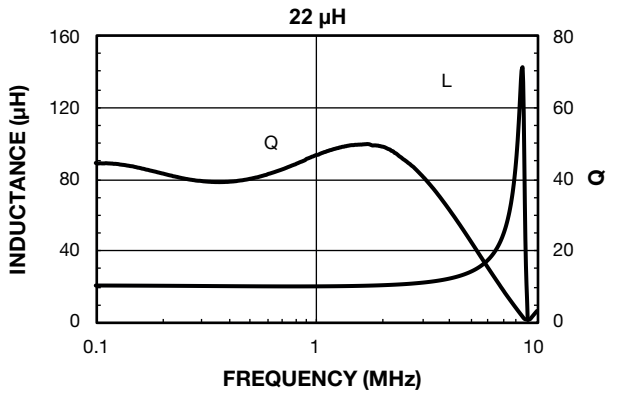

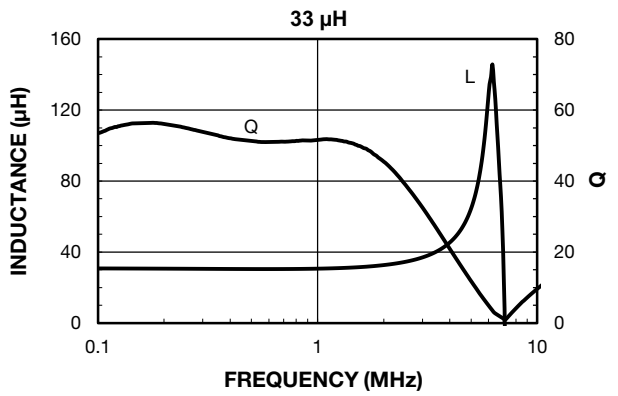

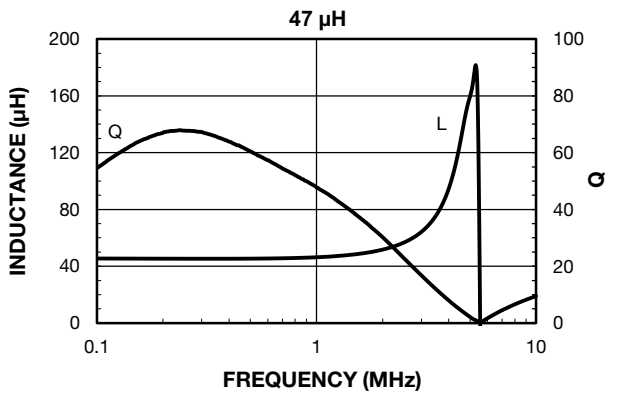

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