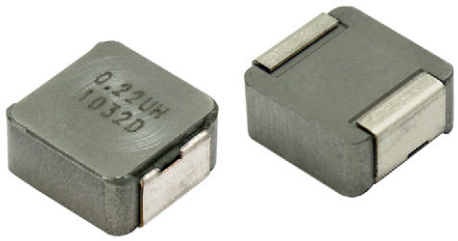
IHLP® Commercial Inductors, High Temperature (155 °C) Series



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

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

LINKS TO ADDITIONAL RESOURCES

3D Models
Design Tools

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

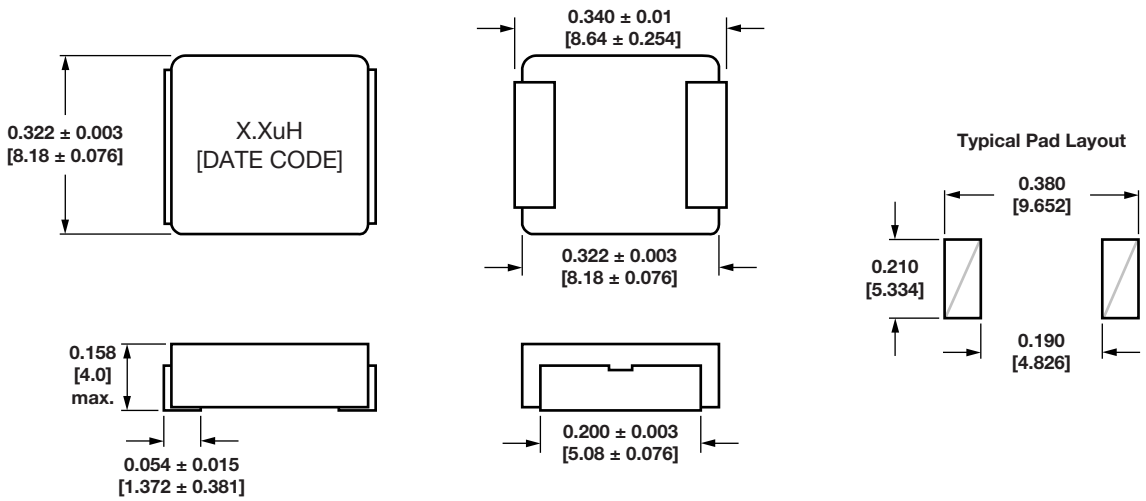
PART NUMBER	L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) [1]	SATURATION CURRENT DC TYP. (A)		SRF TYP. (MHz)
					20 % DROP [2]	30 % DROP [3]	
IHLP3232DZE_R22M51	0.22	1.68	1.86	36	32	44	117
IHLP3232DZE_R47M51	0.47	2.38	2.55	27	19	24	77
IHLP3232DZE_R68M51	0.68	3.3	3.53	21.5	12	17	51
IHLP3232DZE_R82M51	0.82	3.7	4	20	15	22	49
IHLP3232DZE_1R0M51	1.0	4.58	4.9	19	15	22	45
IHLP3232DZE_1R5M51	1.5	6.78	7.25	15.5	14	20	35
IHLP3232DZE_2R2M51	2.2	11.7	12.5	11.5	14	20	32
IHLP3232DZE_3R3M51	3.3	15.4	16.48	10.6	11.8	16	23
IHLP3232DZE_4R7M51	4.7	26.6	28.46	7.2	9.1	12	18
IHLP3232DZE_5R6M51	5.6	29.6	31.67	6.9	9	12	18
IHLP3232DZE_6R8M51	6.8	33.5	35.9	6.8	6.3	9.2	15.3
IHLP3232DZE_100M51	10	50	53.5	5.1	5.2	7	13
IHLP3232DZE_150M51	15	62	66.34	4.8	3.6	4.5	10
IHLP3232DZE_220M51	22	103	110.21	3.7	3.8	5	9
IHLP3232DZE_330M51	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 %

DIMENSIONS in inches [millimeters]



DESCRIPTION

IHLP3232DZ-51	10 µH	± 20 %	EK	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 K	1 0 0	M	5 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EK = tape and reel	**100** = 10 µH	**M** = ± 20 %	

PACKAGE CODE OPTIONS

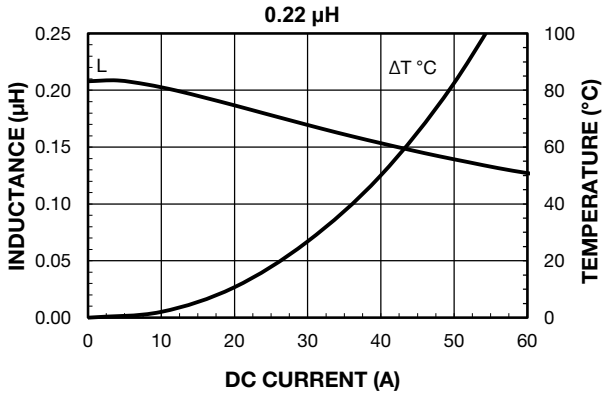
EK = tape and reel packaging (1250 pcs on 13-inch reel)

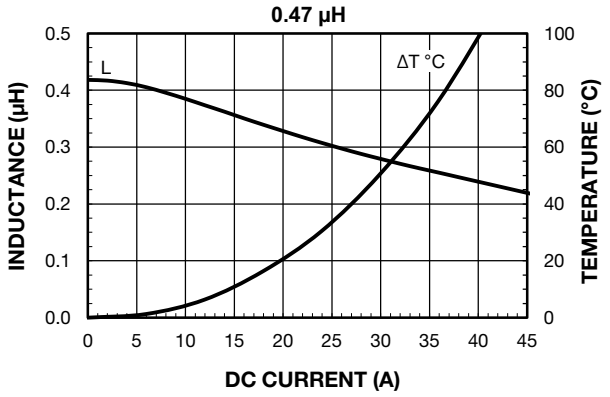
ER = tape and reel packaging (500 pcs on 13-inch reel)

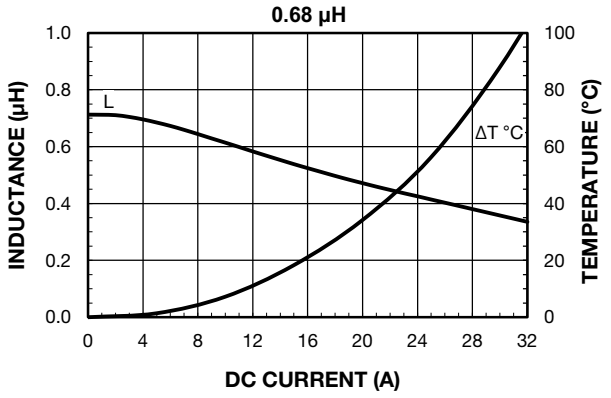
Note

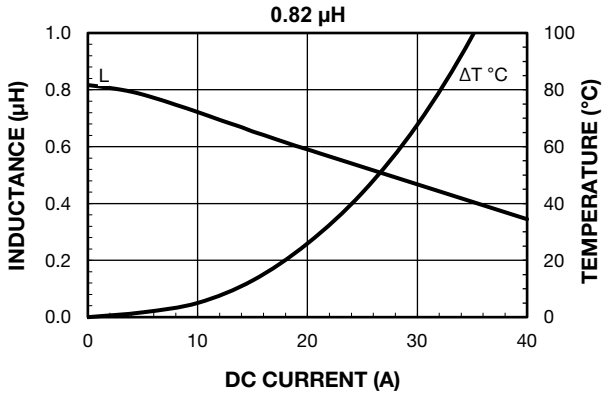
- For additional packaging details see "Packaging Methods"

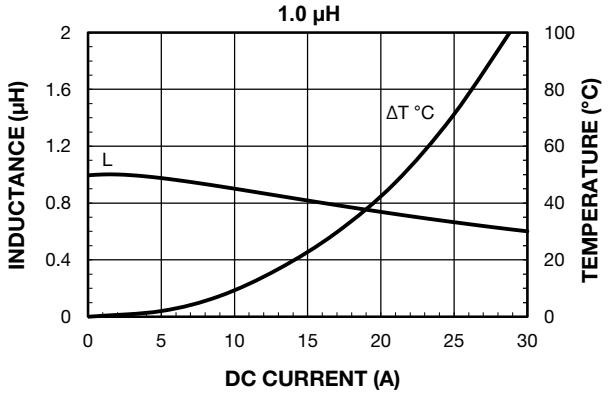
PERFORMANCE GRAPHS

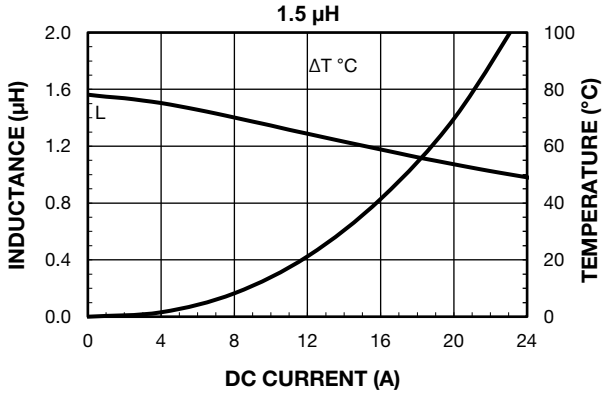


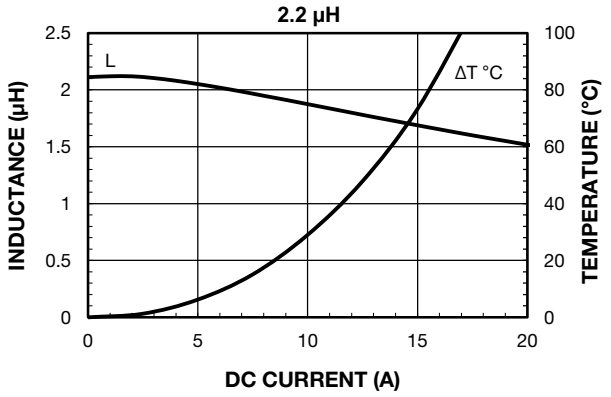


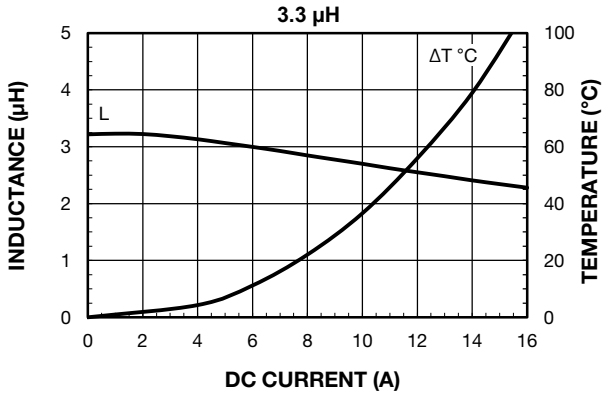












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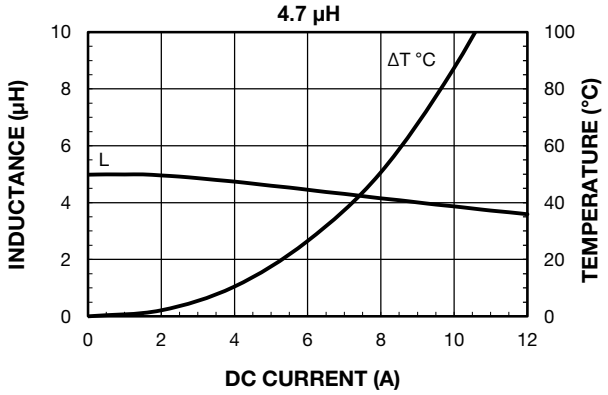
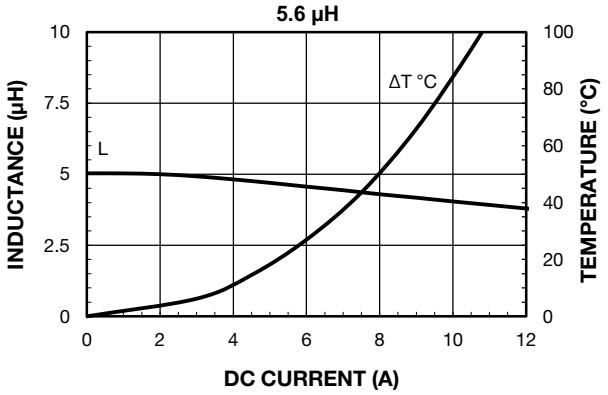
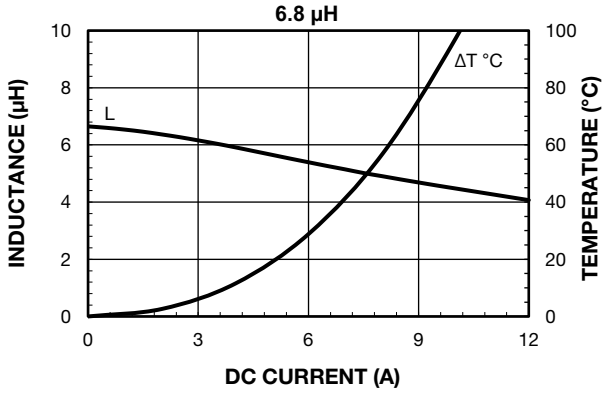
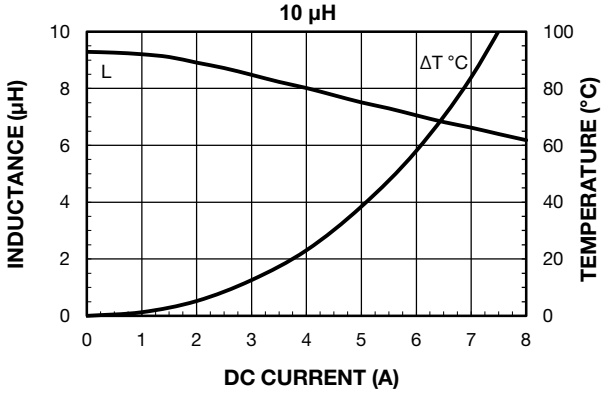
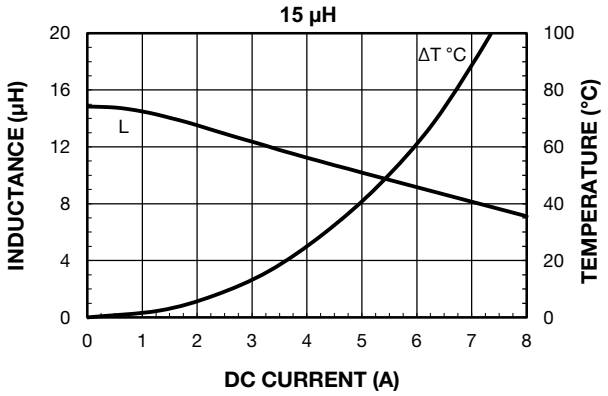
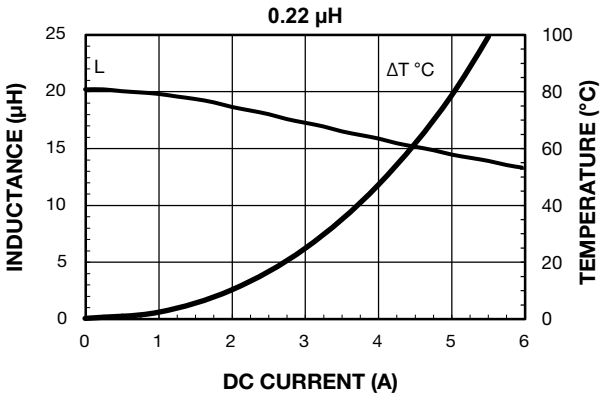


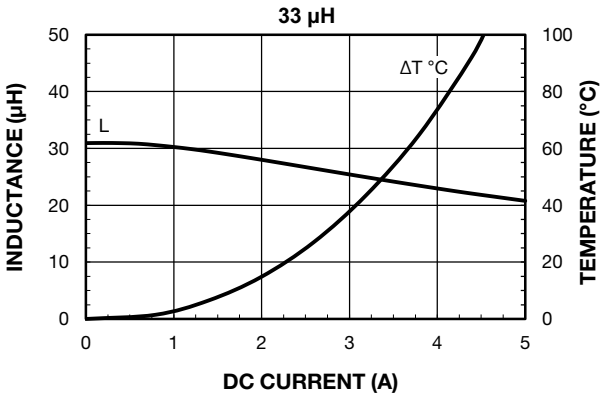


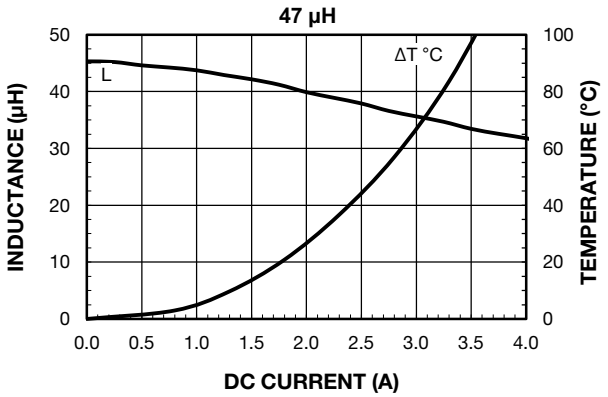




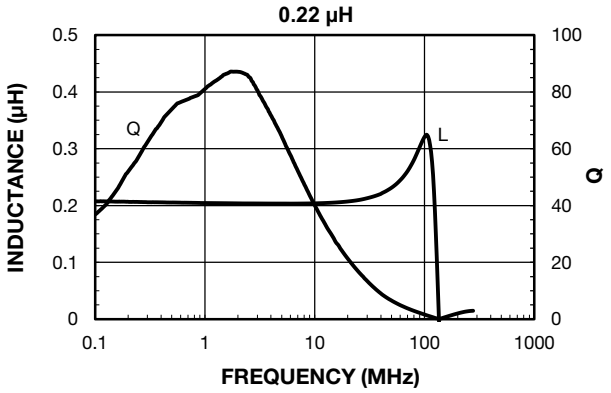


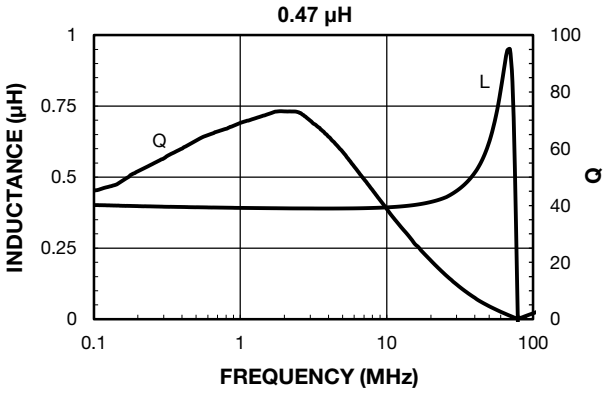


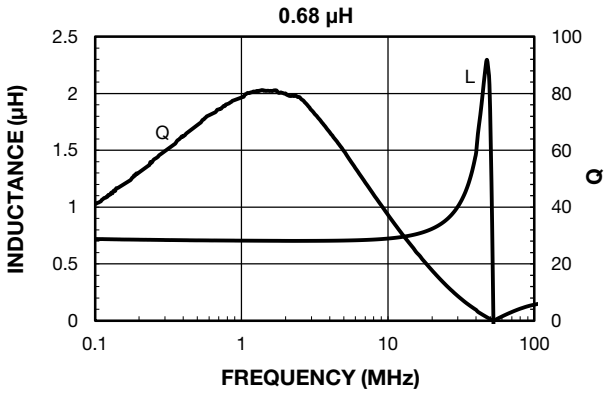


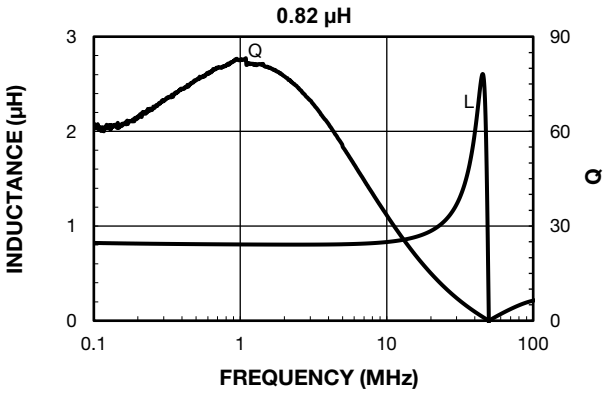


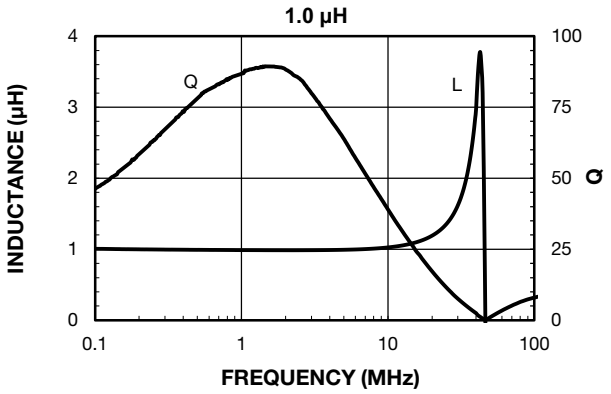
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY

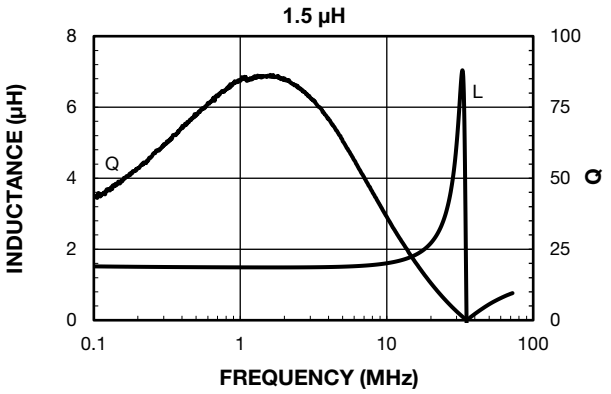


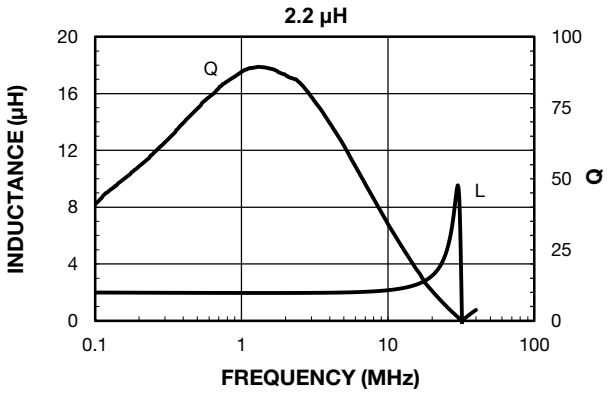


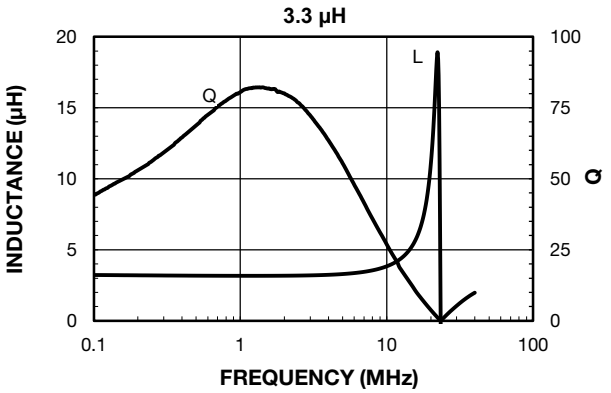




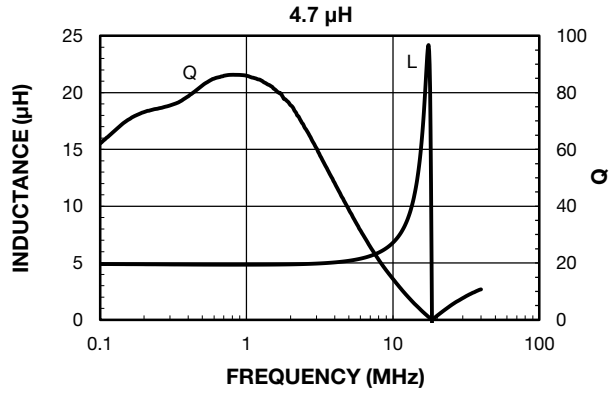


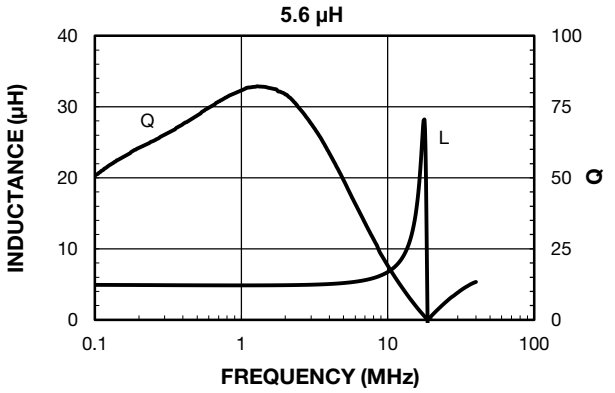


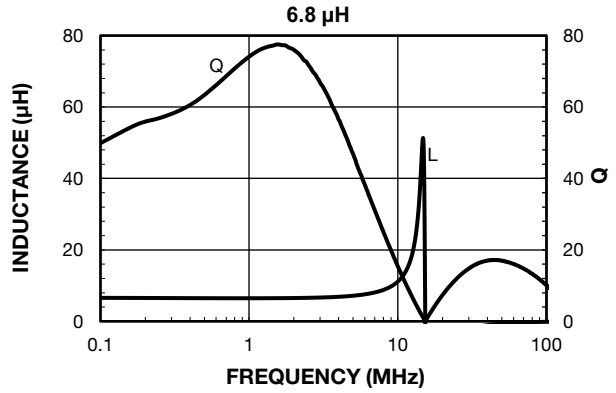


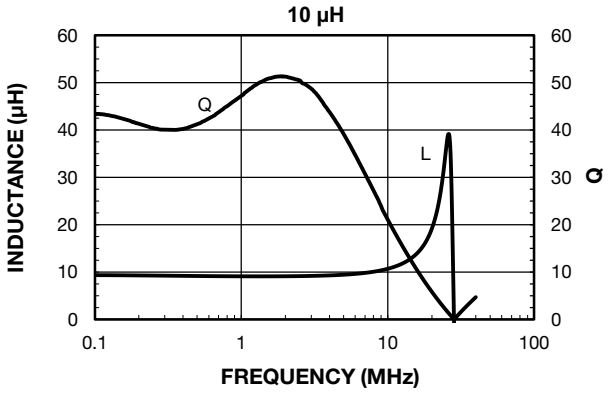


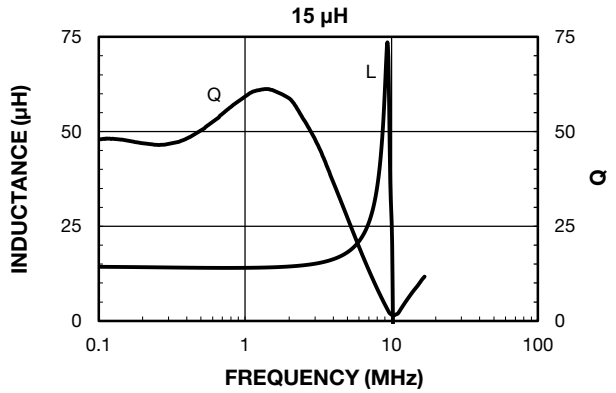
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY

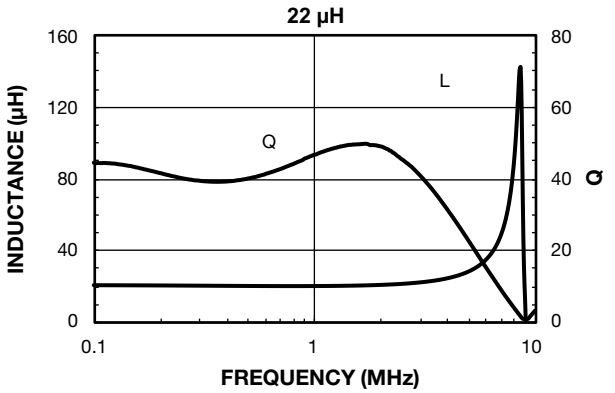


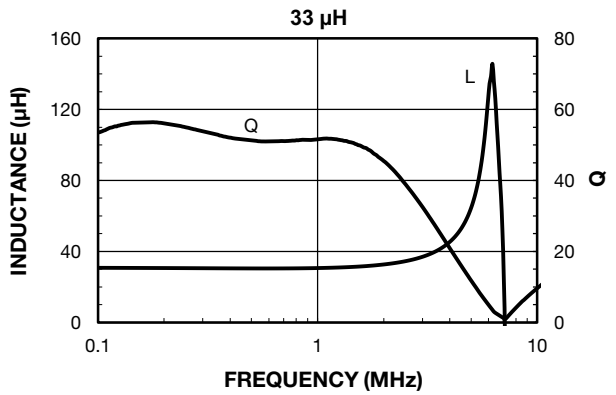


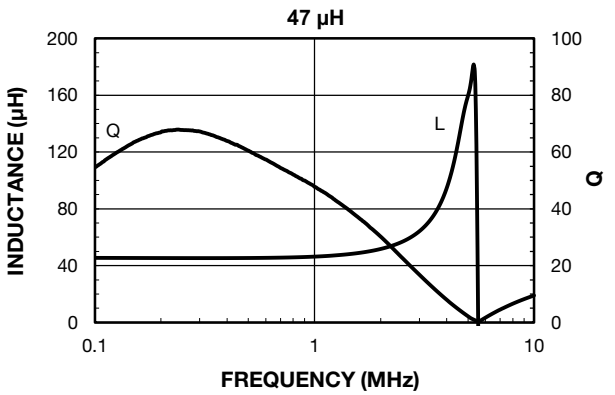












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