



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



FEATURES

- High temperature, up to 155 °C
- 10.8 mm x 10.2 mm x 4.0 mm SMD package
- Magnetically shielded construction
- Metal alloy core
- Material categorization:
for definitions of compliance please see
www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



3D Models



Design Tools



Product Page

APPLICATIONS

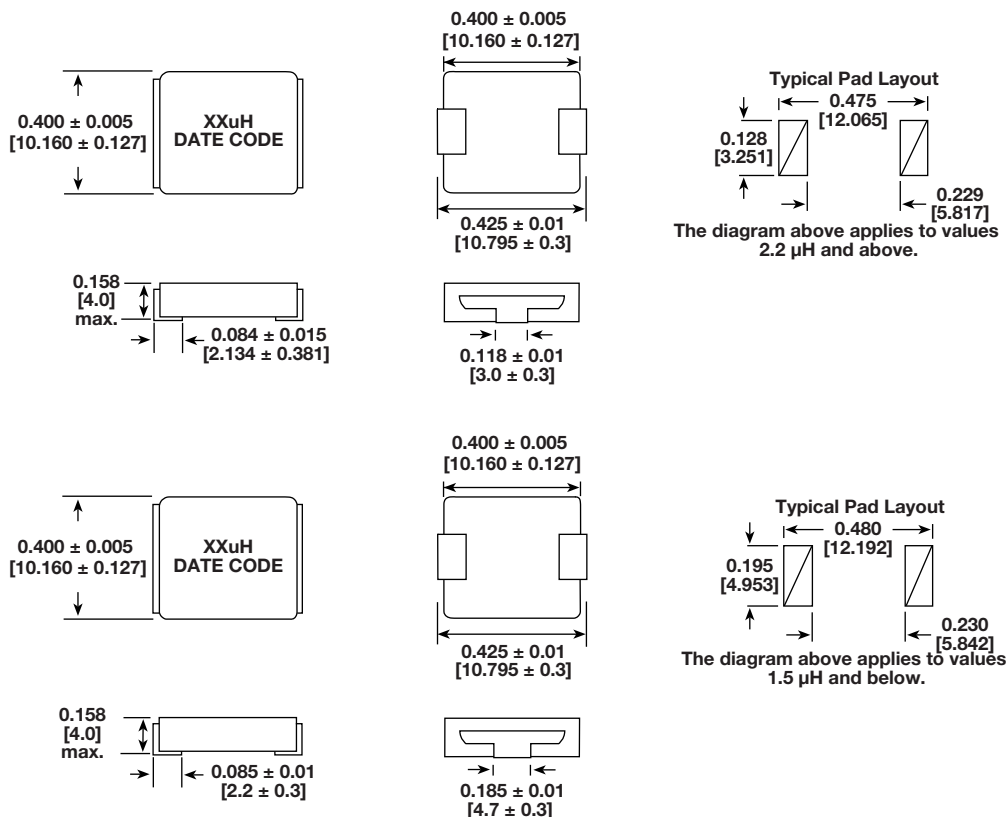
- DC/DC power supplies
- Smart grid and solar
- Telecommunications equipment
- Noise suppression and filtering

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	INDUCTANCE ± 20 % (μH) AT 0 A	DCR 25 °C (mΩ)		HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾		SRF TYP. (MHz)
		TYP.	MAX.		20 % DROP	30 % DROP	
IHLP4040DZE_R47M51	0.47	1.55	1.66	35.5	28.5	38.0	72.1
IHLP4040DZE_R68M51	0.68	2.17	2.32	35.0	24.0	32.0	42.5
IHLP4040DZE_1R0M51	1.0	2.87	3.07	23.5	24.0	32.0	37.2
IHLP4040DZE_1R5M51	1.5	4.20	4.50	22.0	17.9	24.2	32
IHLP4040DZE_2R2M51	2.2	8.15	8.76	15.0	12.0	16.2	30.1
IHLP4040DZE_3R3M51	3.3	11	11.81	11.0	12.0	16.2	25.5
IHLP4040DZE_4R7M51	4.7	14.3	15.32	9.8	9.2	12.4	20.1
IHLP4040DZE_5R6M51	5.6	16.5	17.60	9.3	9.0	12.2	16.3
IHLP4040DZE_6R8M51	6.8	20.9	22.36	8.0	9.0	12.2	16.3
IHLP4040DZE_100M51	10	30.9	33.06	6.5	8.5	11.5	11.5
IHLP4040DZE_150M51	15	47	50.29	5.1	7.7	10.4	10.4
IHLP4040DZE_220M51	22	70.5	75.44	4.1	6.4	8.6	8.3
IHLP4040DZE_330M51	33	110	117.7	3.7	4.2	5.7	5.79
IHLP4040DZE_470M51	47	167	178	3.1	4.1	5.5	5.22
IHLP4040DZE_680M51	68	240	252	2.4	3.5	4.7	4.02

Notes

- All test data is referenced to 25 °C ambient
 - Test condition: 100 kHz, 0.25 V
 - 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
 - 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 L₀ to drop approximately 20 % and 30 %

DIMENSIONS in inches [millimeters]

DESCRIPTION

IHLP-4040DZ-51	4.7 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	4	0	4	0	D	Z	E	K	4	R	7	M	5	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE		TOL.	SERIES		

PACKAGE CODE OPTIONS

ER = tape and reel packaging (500 piece reel)

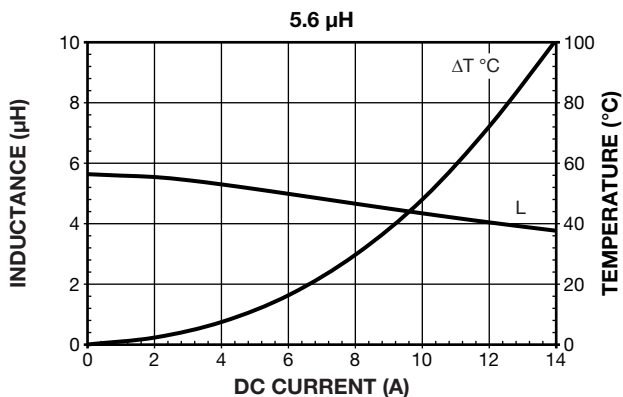
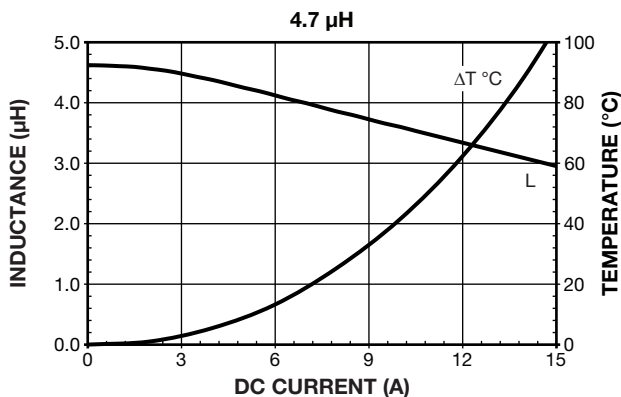
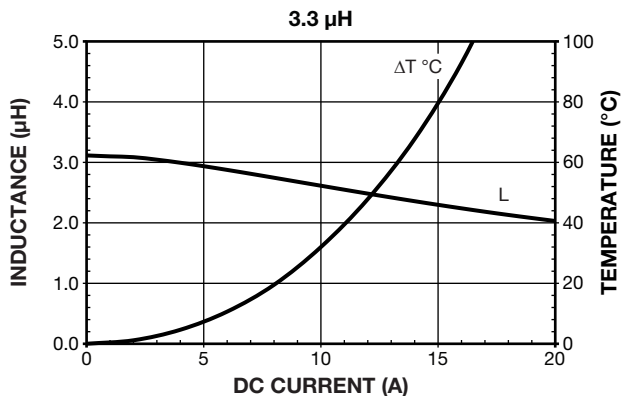
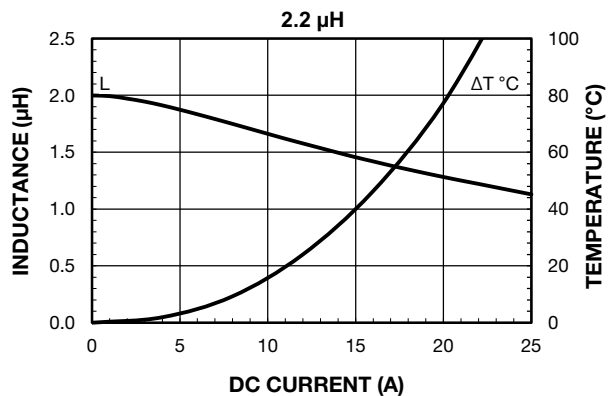
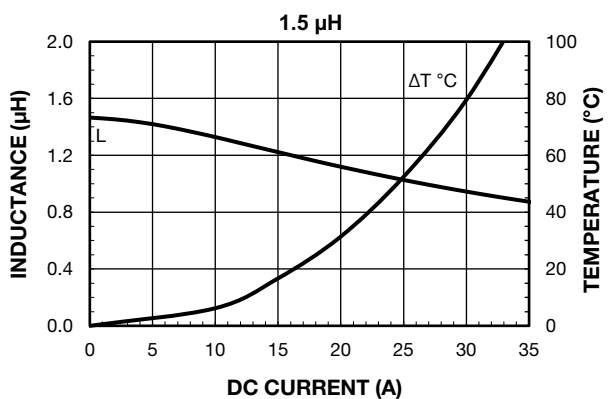
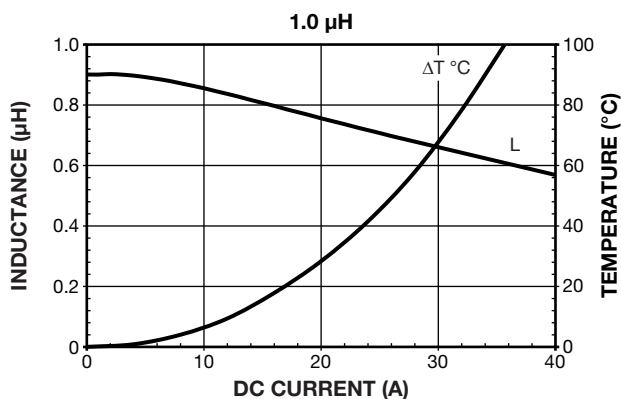
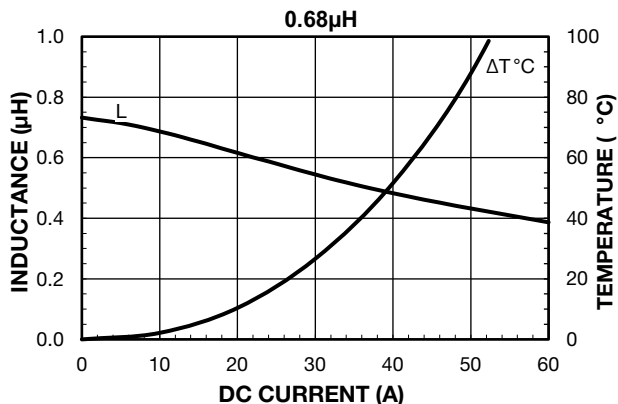
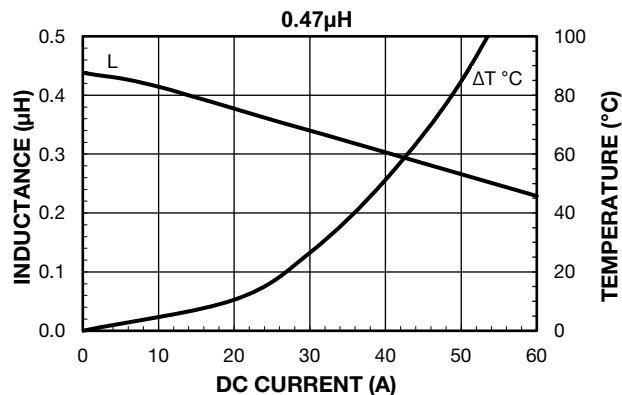
EK = tape and reel packaging (1000 piece reel)

Notes

- For additional packaging details see "[Packaging Methods](#)"
- 1000 piece reel for IHLP4040DZ models contains tape pitch change

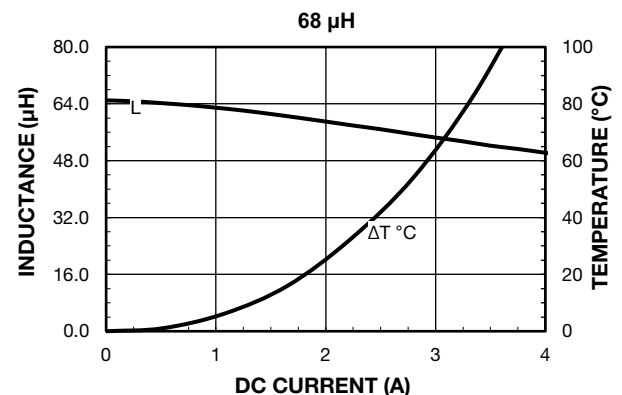
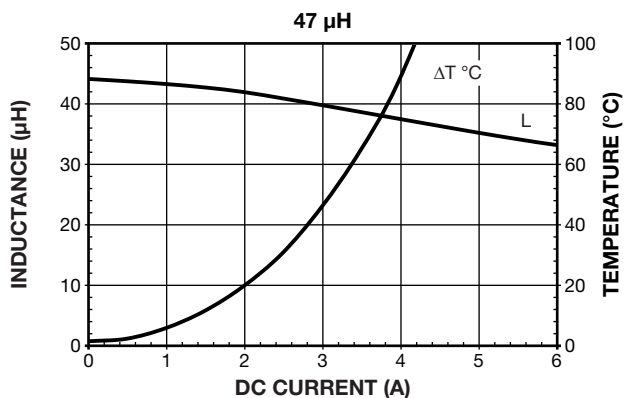
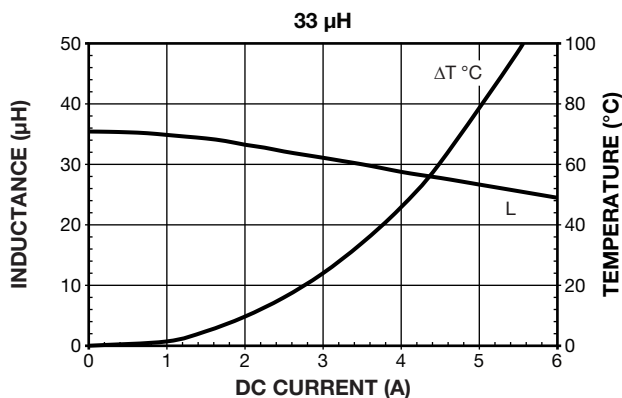
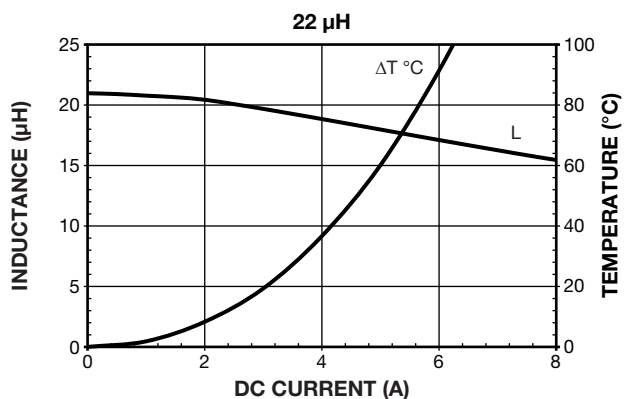
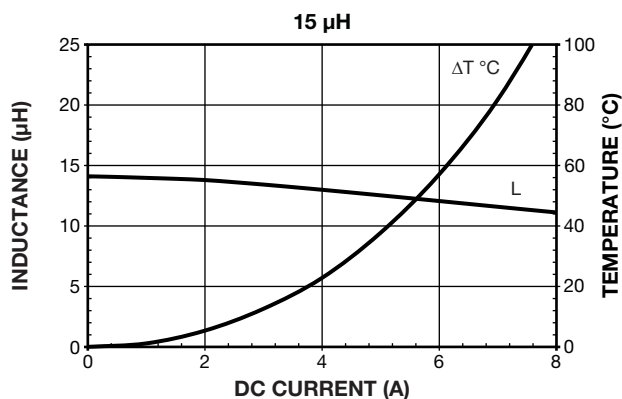
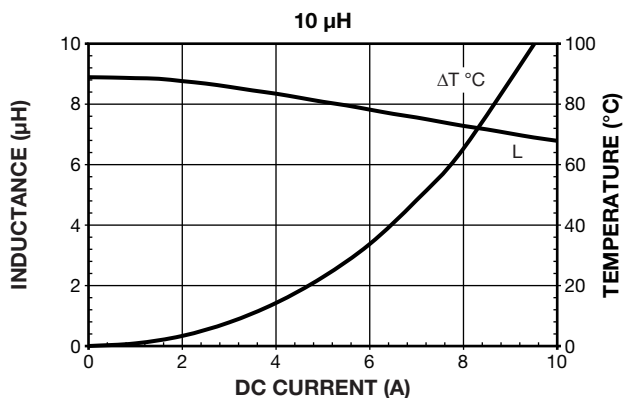
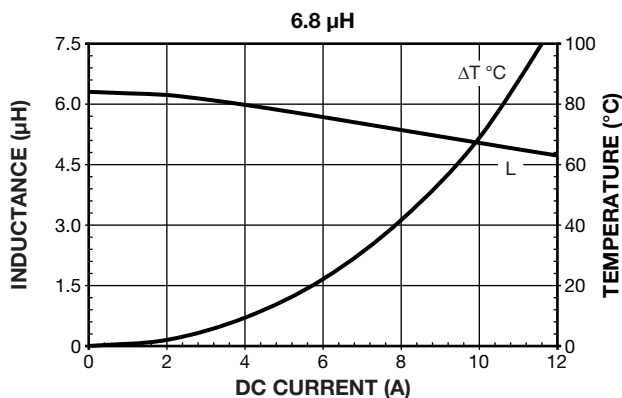


PERFORMANCE GRAPHS



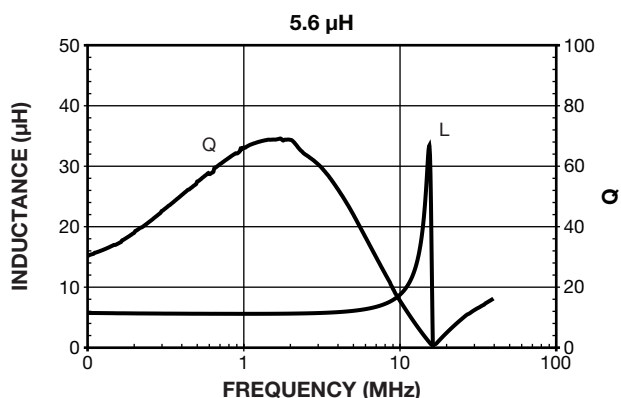
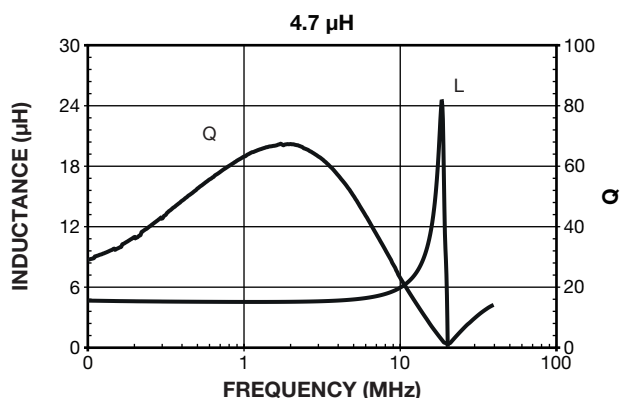
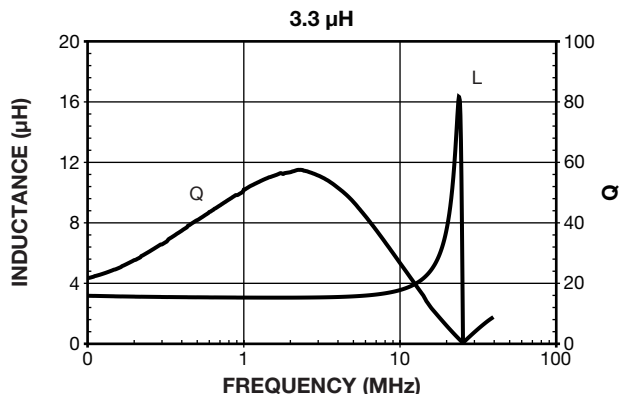
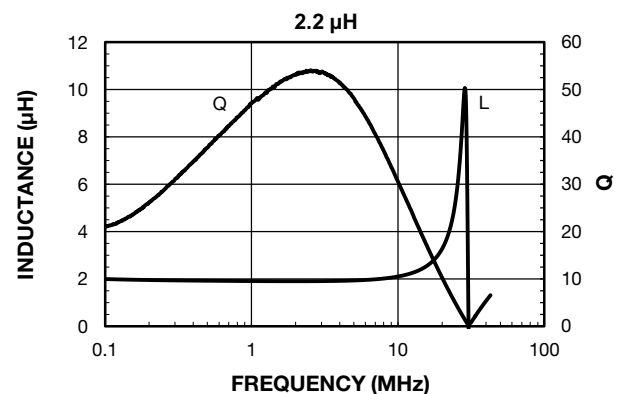
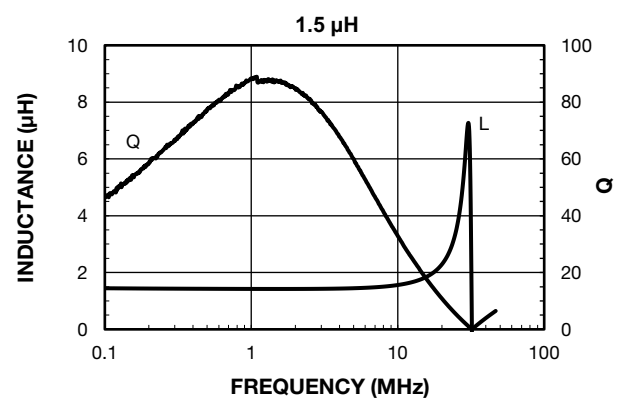
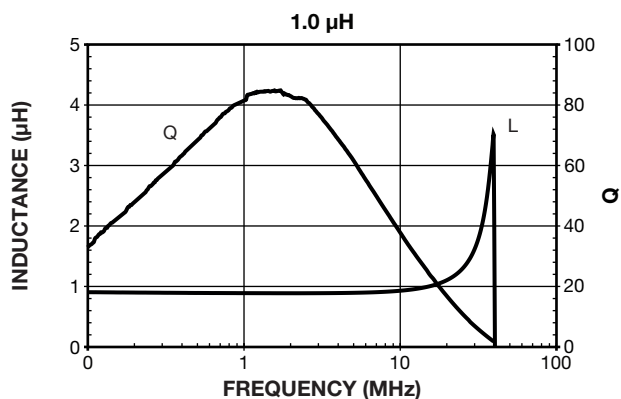
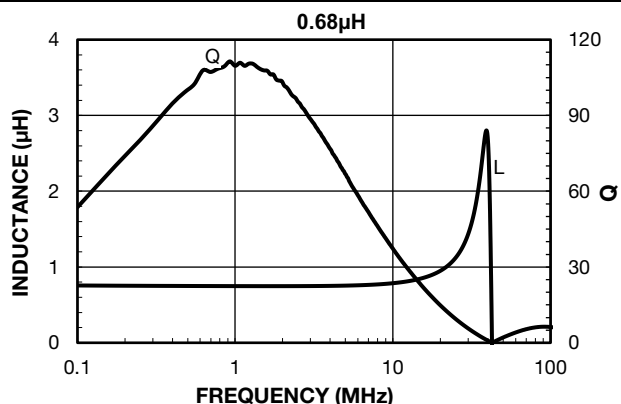
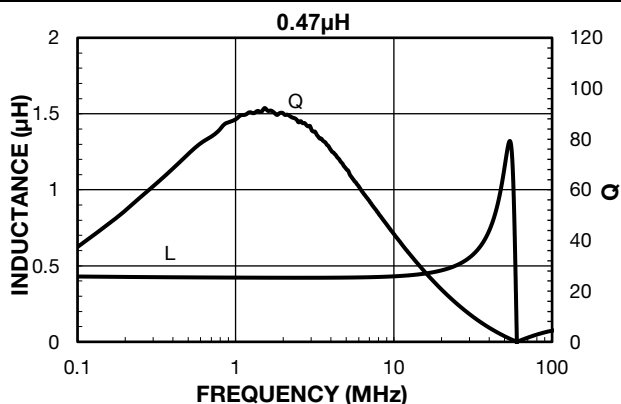


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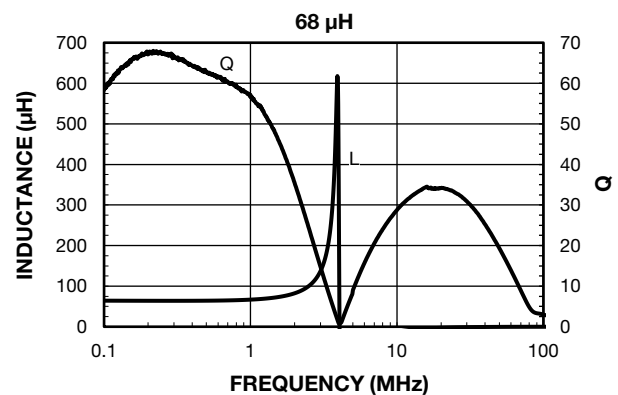
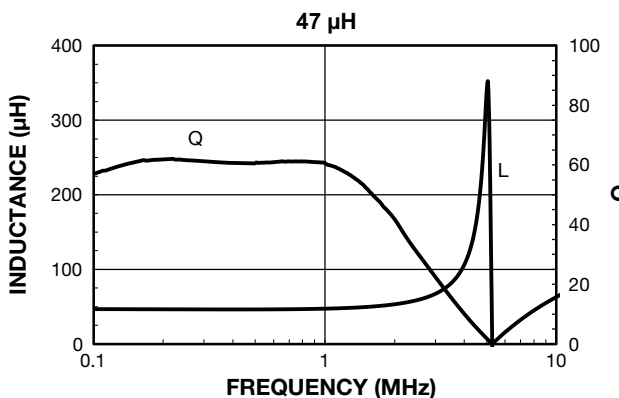
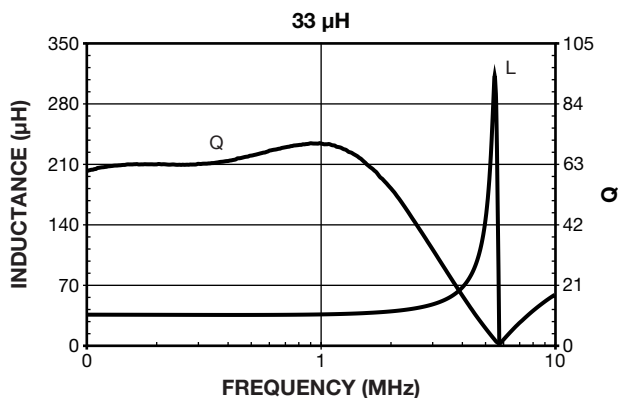
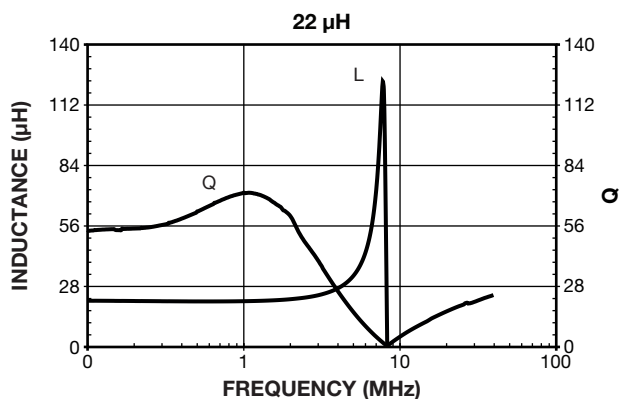
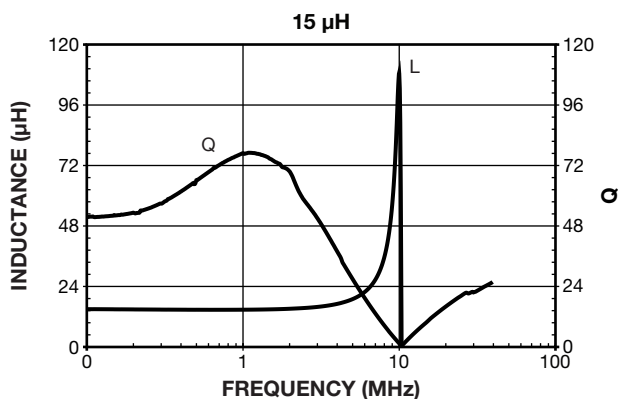
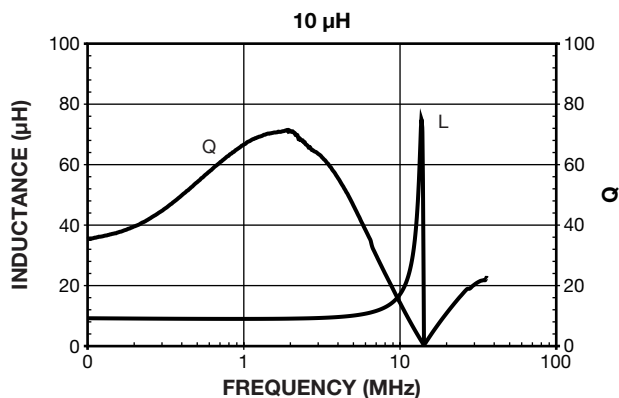
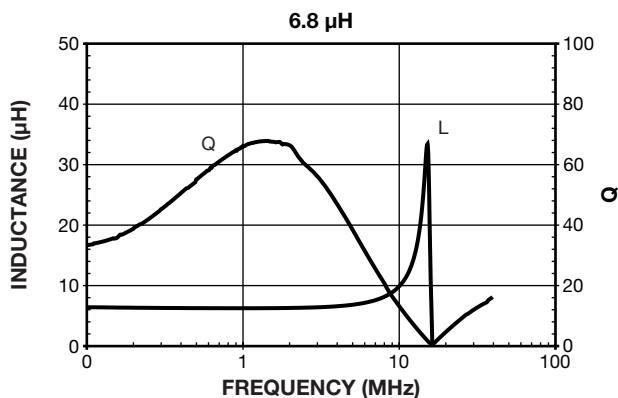


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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