



**THE DATASHEET OF
IHLP4040DZER150M51**





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
- IHLP design; PATENT(S): www.vishay.com/patents
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



APPLICATIONS

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

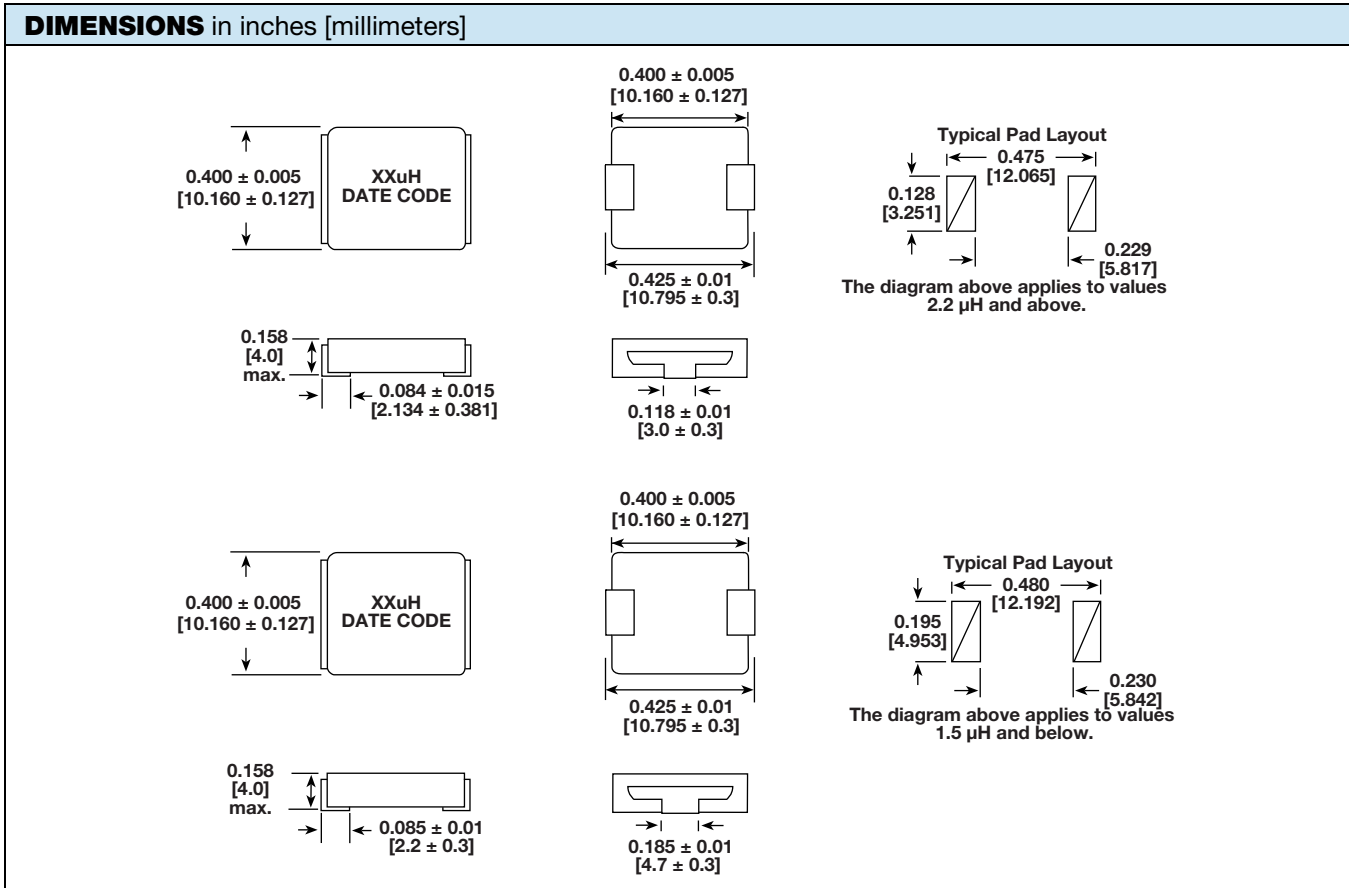
STANDARD ELECTRICAL SPECIFICATIONS							
PART NUMBER	INDUCTANCE ± 20 % (µH) AT 0 A	DCR 25 °C (mΩ)		HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾		SRF TYP. (MHz)
		TYP.	MAX.		20 % DROP	30 % DROP	
IHLP4040DZERR47M51	0.47	1.55	1.66	35.5	28.5	38.0	72.1
IHLP4040DZERR68M51	0.68	2.17	2.32	35.0	24.0	32.0	42.5
IHLP4040DZER1R0M51	1.0	2.87	3.07	23.5	24.0	32.0	37.2
IHLP4040DZER1R5M51	1.5	4.20	4.50	22.0	17.9	24.2	32
IHLP4040DZER2R2M51	2.2	8.15	8.76	15.0	12.0	16.2	30.1
IHLP4040DZER3R3M51	3.3	11	11.81	11.0	12.0	16.2	25.5
IHLP4040DZER4R7M51	4.7	14.3	15.32	9.8	9.2	12.4	20.1
IHLP4040DZER5R6M51	5.6	16.5	17.60	9.3	9.0	12.2	16.3
IHLP4040DZER6R8M51	6.8	20.9	22.36	8.0	9.0	12.2	16.3
IHLP4040DZER100M51	10	30.9	33.06	6.5	8.5	11.5	11.5
IHLP4040DZER150M51	15	47	50.29	5.1	7.7	10.4	10.4
IHLP4040DZER220M51	22	70.5	75.44	4.1	6.4	8.6	8.3
IHLP4040DZER330M51	33	110	117.7	3.7	4.2	5.7	5.79
IHLP4040DZER470M51	47	167	178	3.1	4.1	5.5	5.22
IHLP4040DZER680M51	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 %

PATENT(S): www.vishay.com/patents

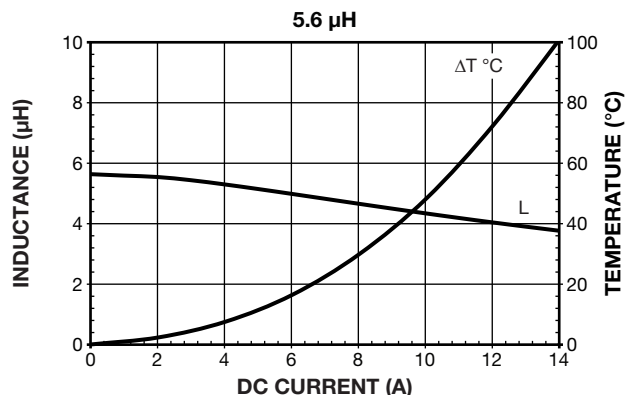
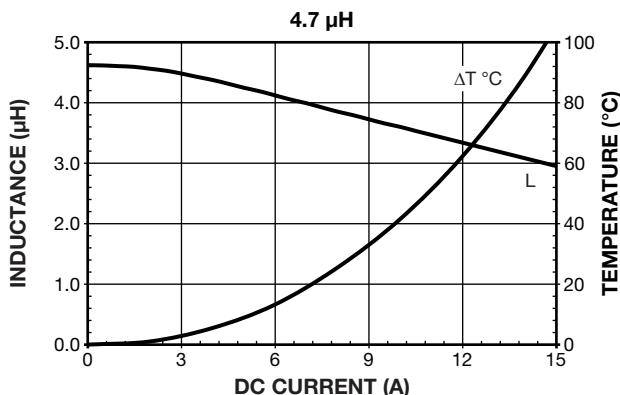
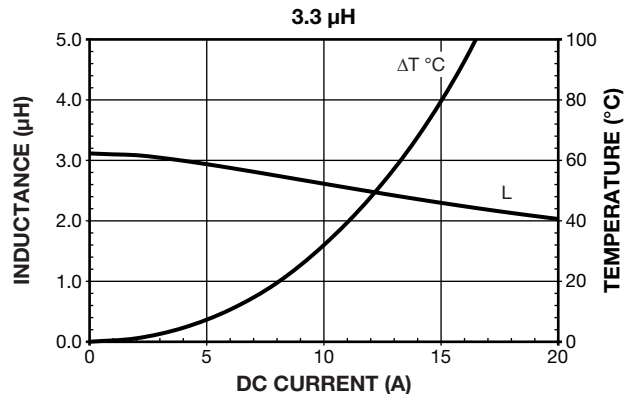
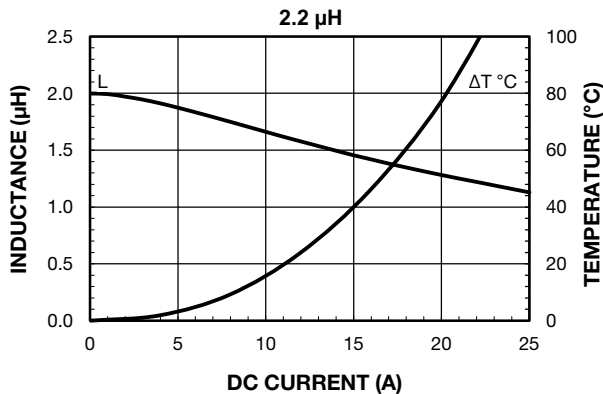
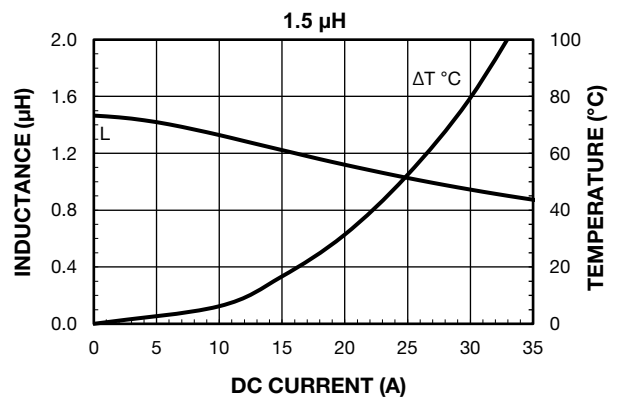
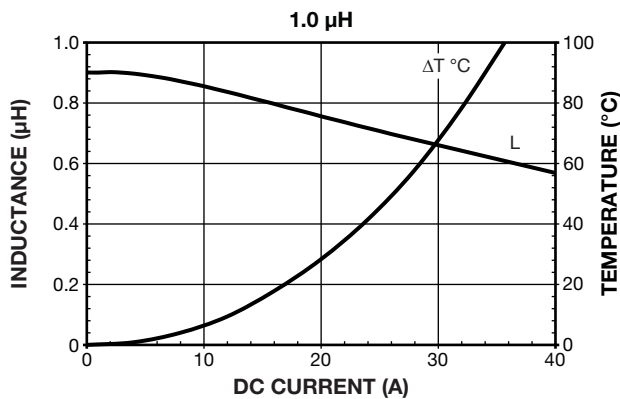
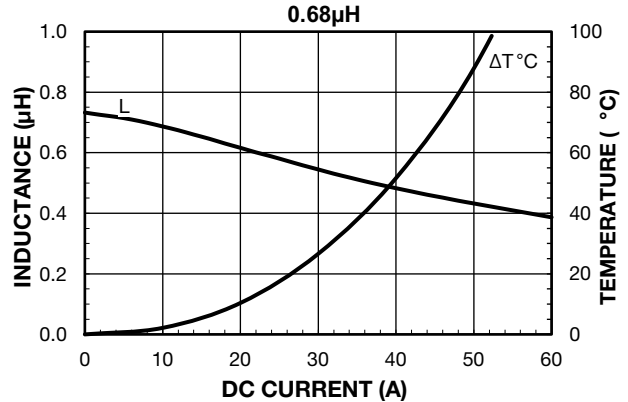
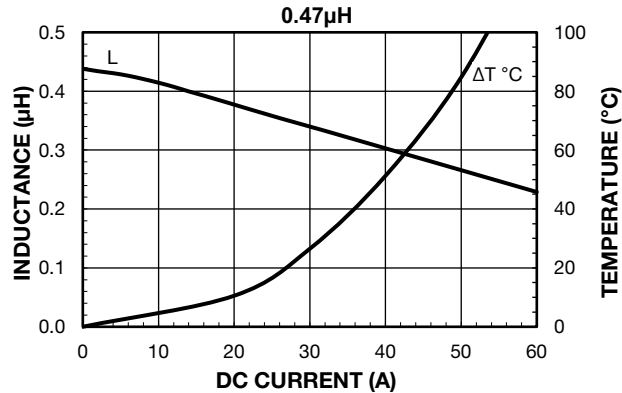
This Vishay product is protected by one or more United States and international patents.



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	R	4	R	7	M	5	1
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES			

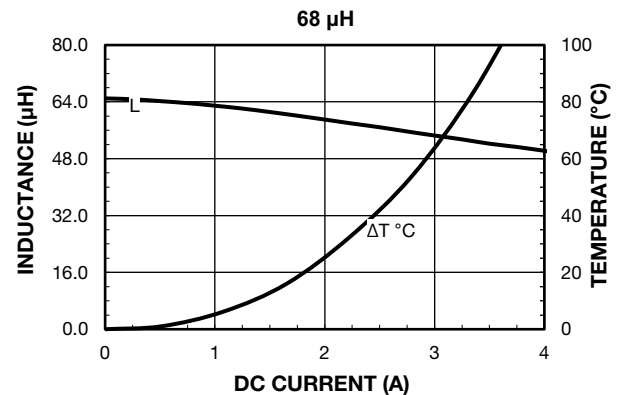
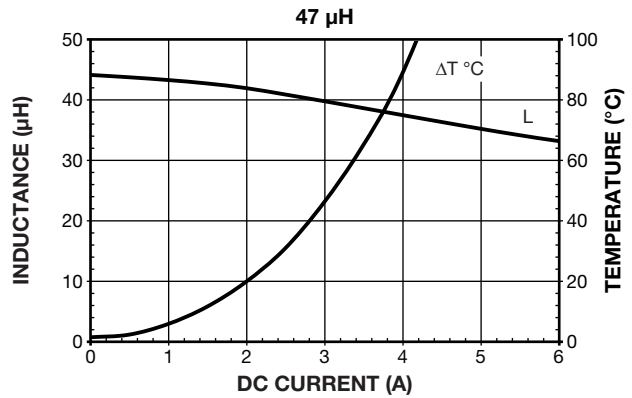
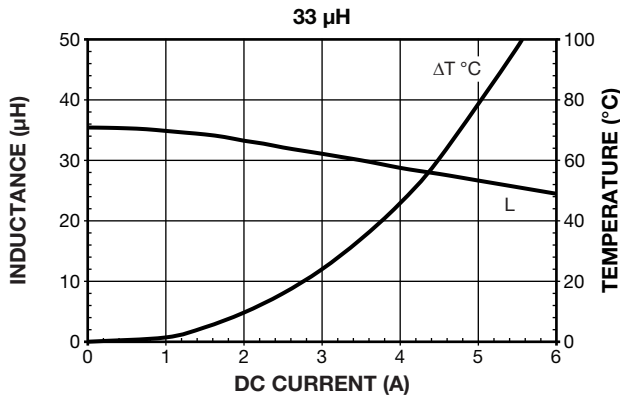
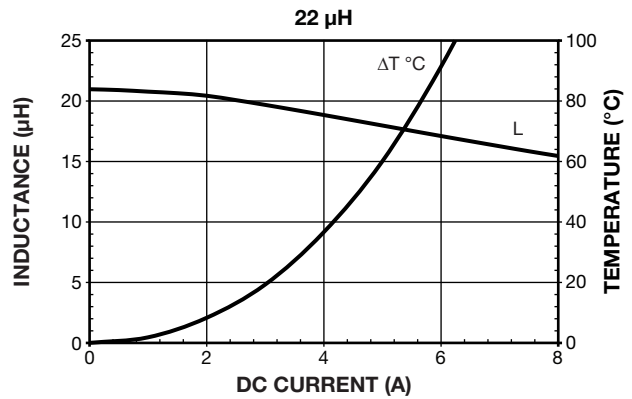
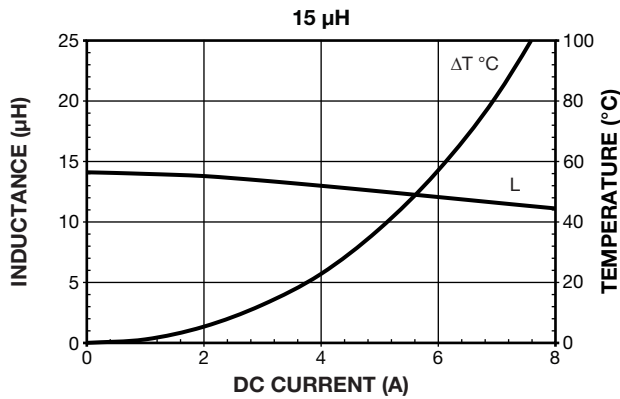
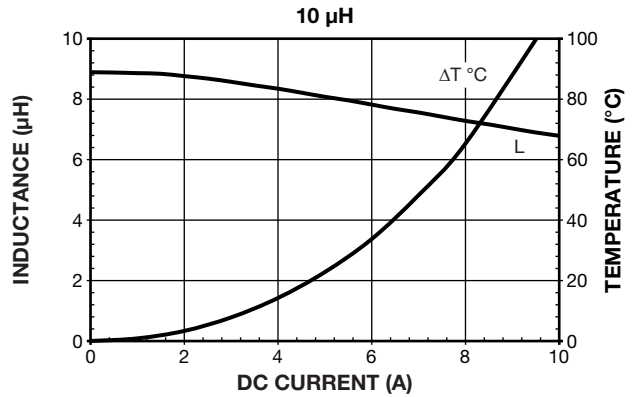
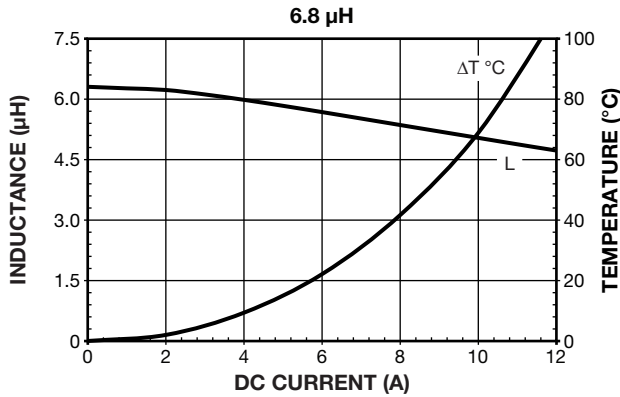


PERFORMANCE GRAPHS

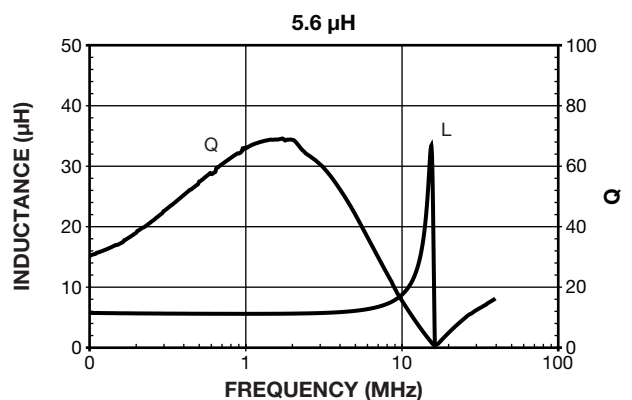
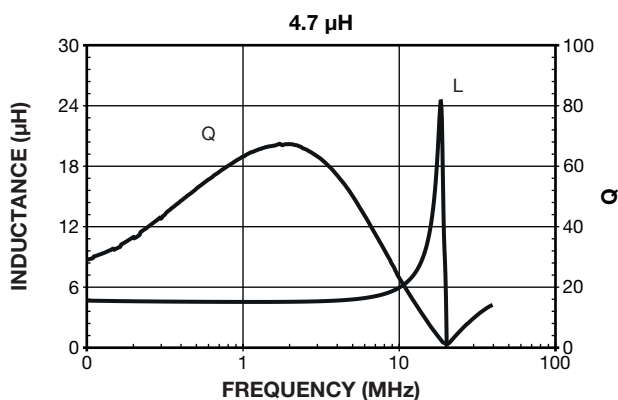
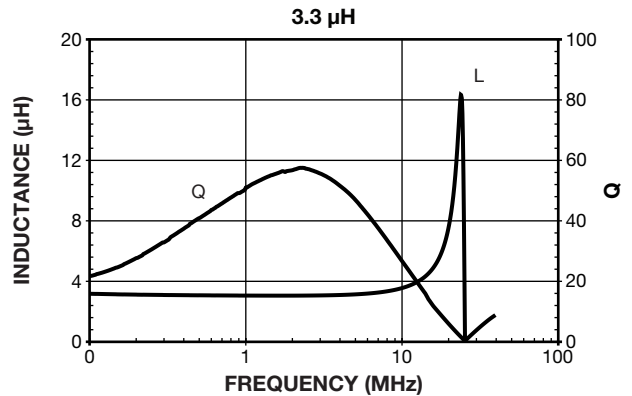
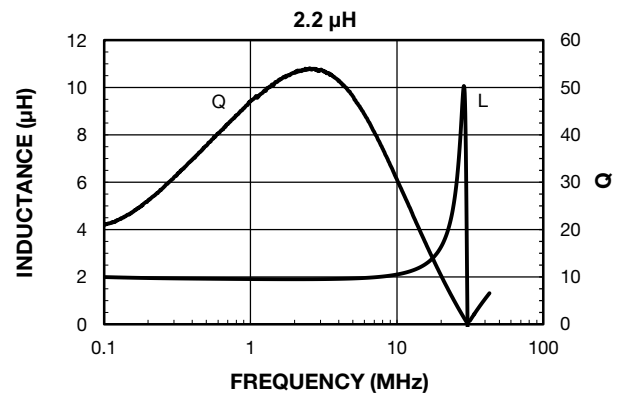
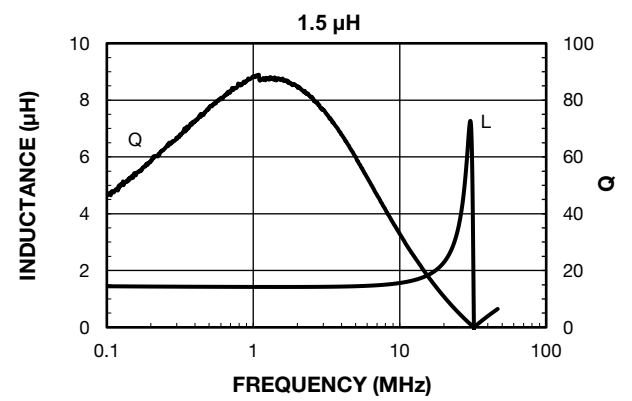
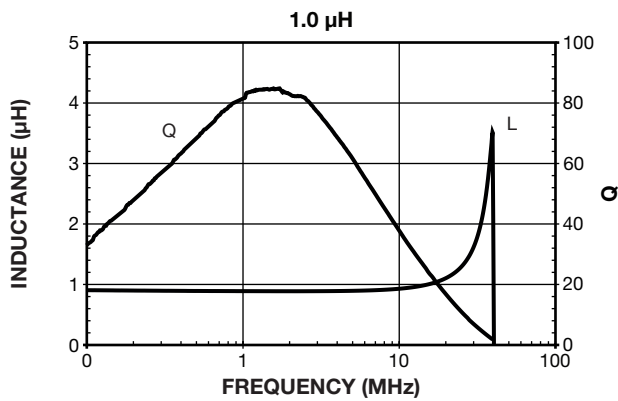
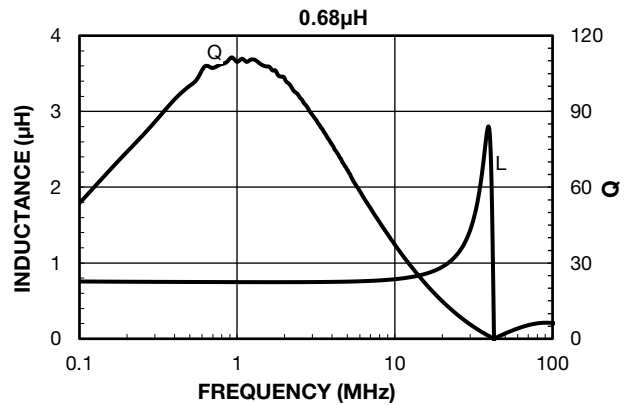
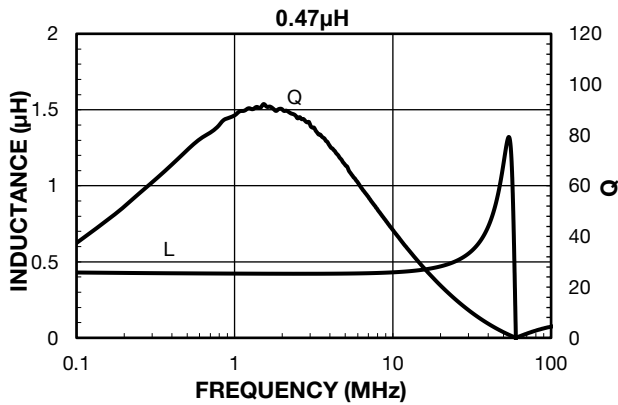




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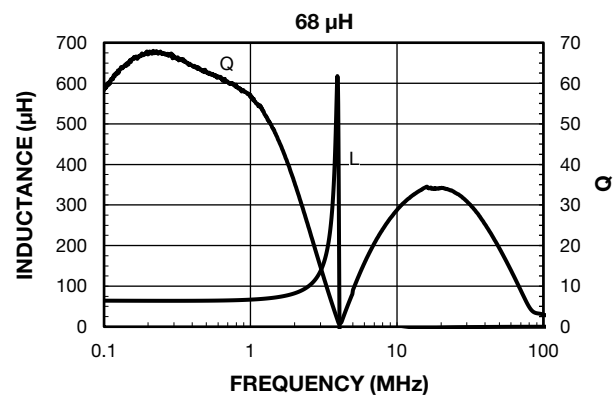
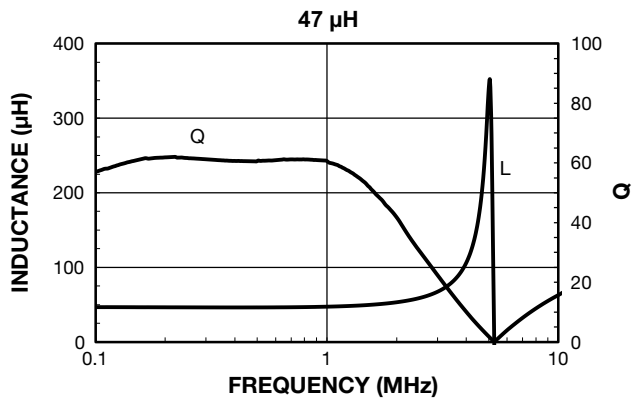
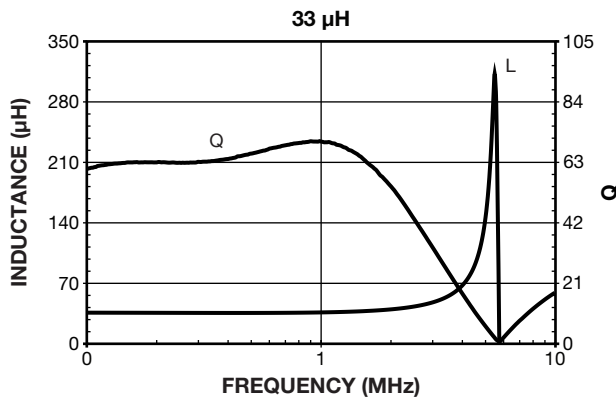
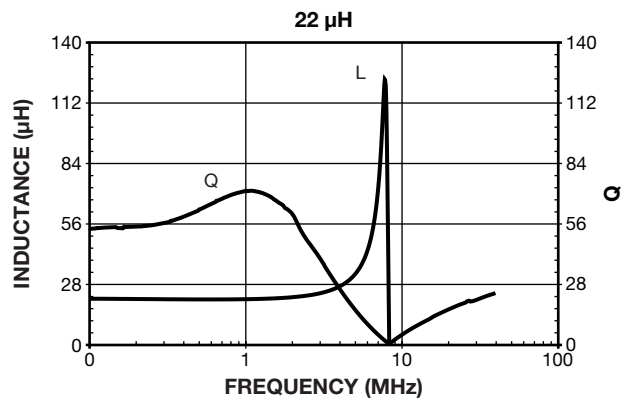
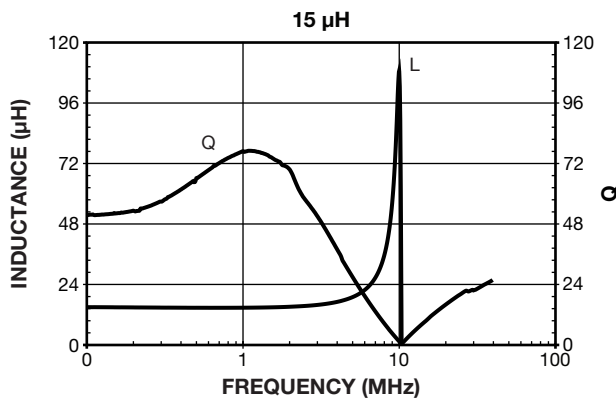
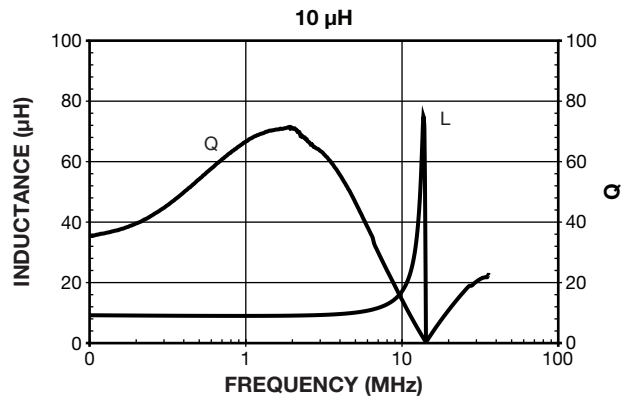
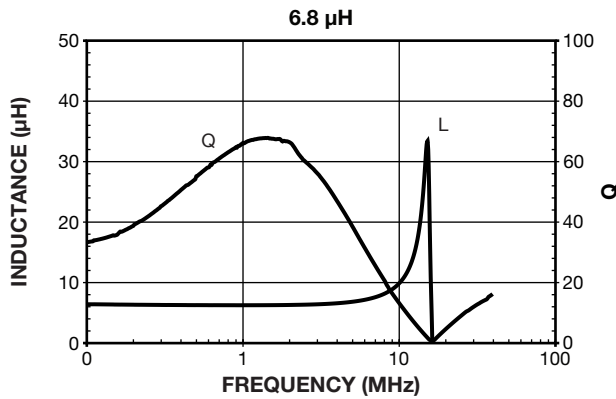


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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