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

LINKS TO ADDITIONAL RESOURCES

3D Models | Design Tools | Product Page

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

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

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

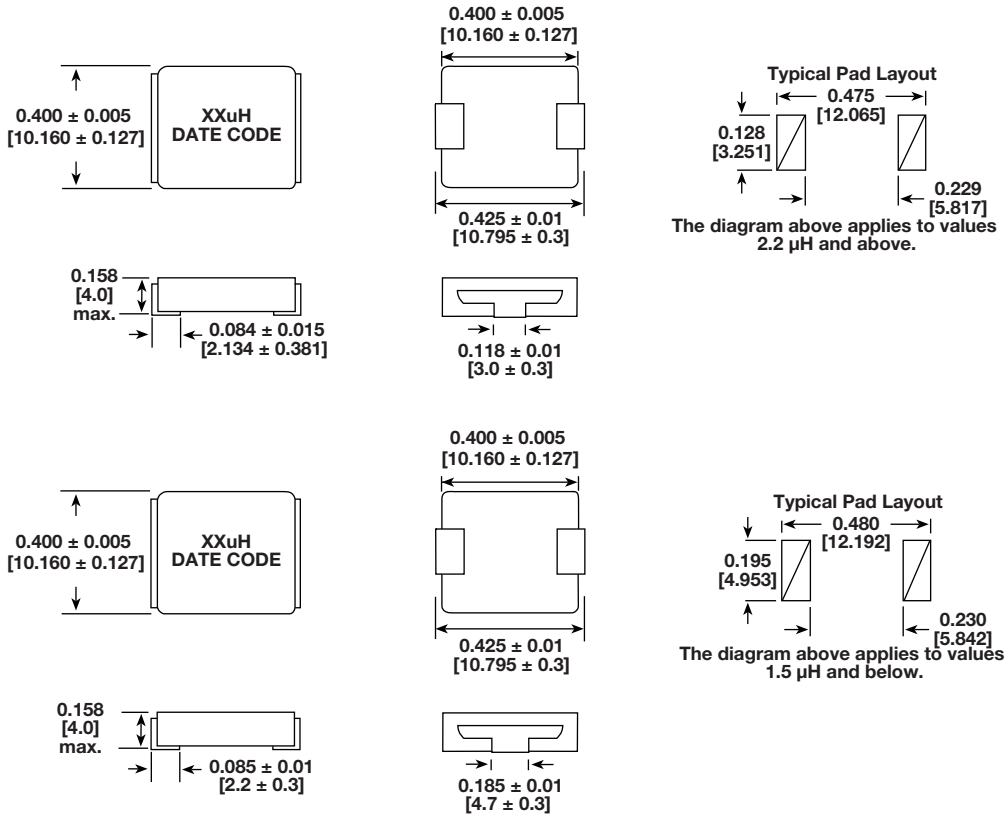
(1) DC current (A) that will cause an approximate ΔT of 40 °C

(2) DC current (A) that will cause L_0 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.

DIMENSIONS in inches [millimeters]



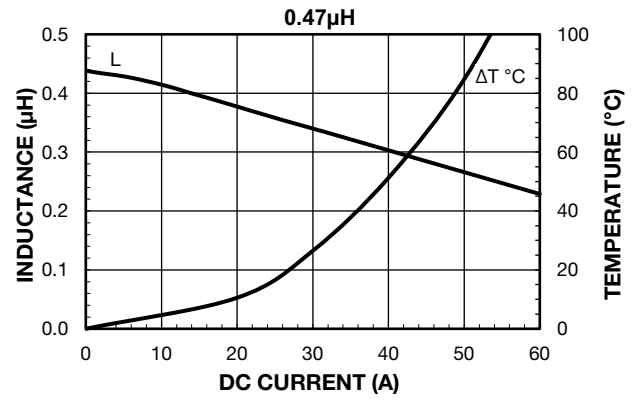
DESCRIPTION

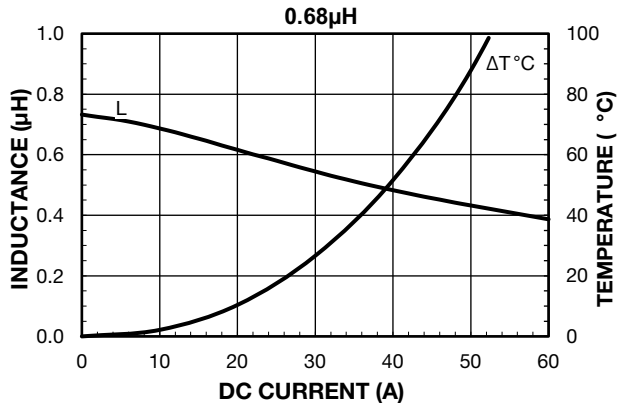
IHLP-4040DZ-51	4.7 µH	± 20 %	TAPE AND REEL	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

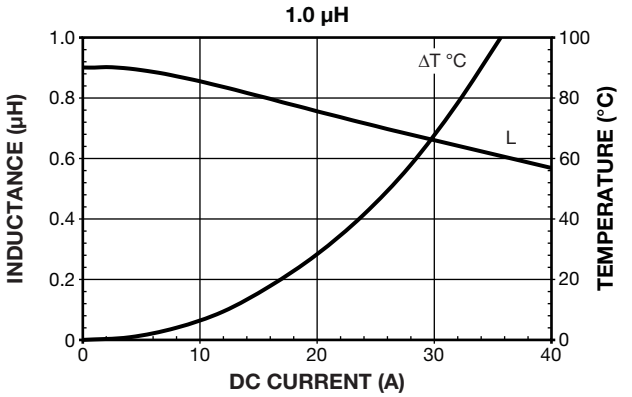
GLOBAL PART NUMBER

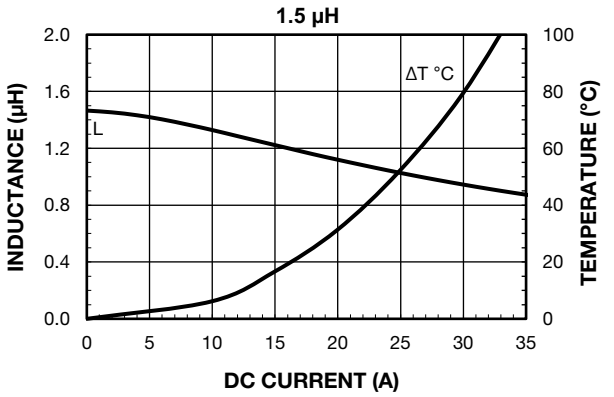
I	H	L	P	4	0	4	0	D	Z	E	R	4	R	7	M	5	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

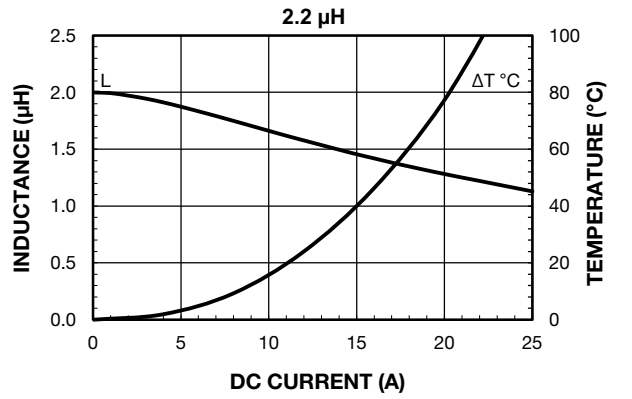
PERFORMANCE GRAPHS

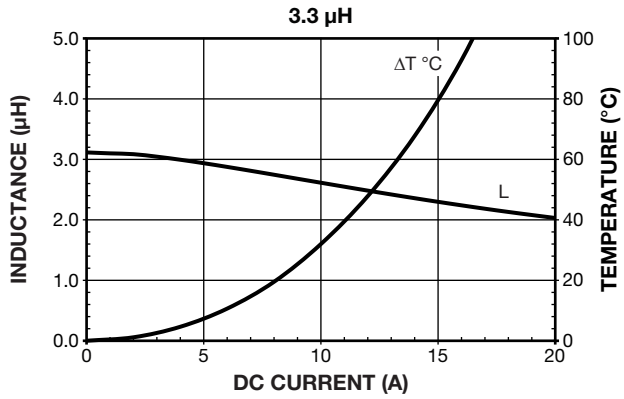


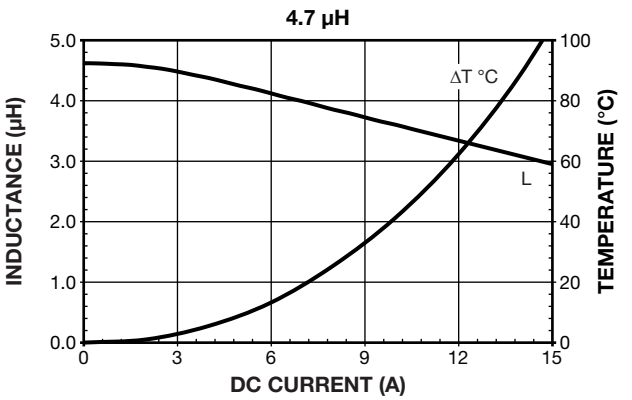


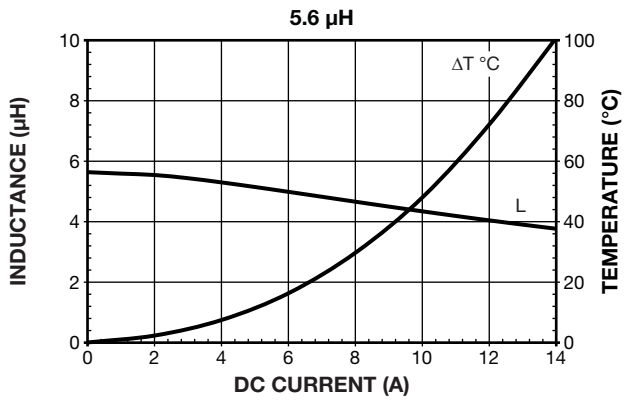






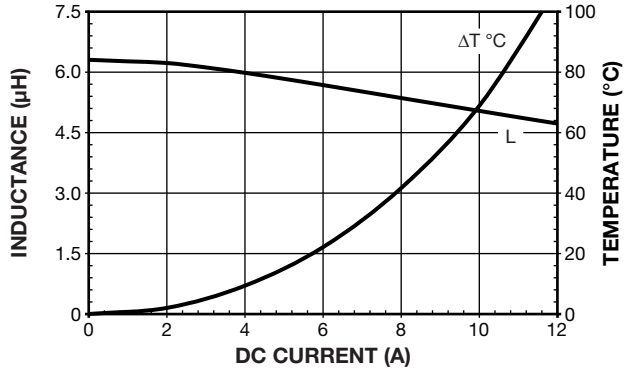




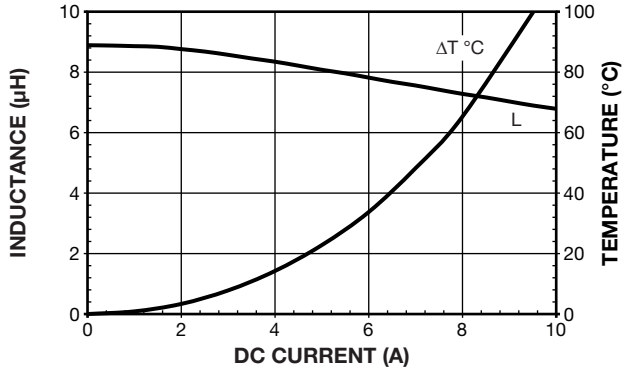


PERFORMANCE GRAPHS

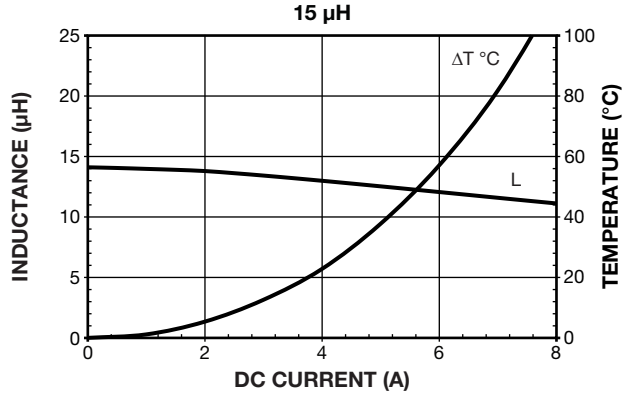
6.8 µH



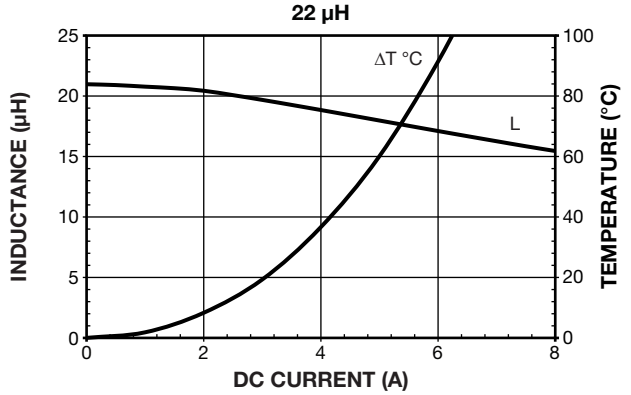
10 µH



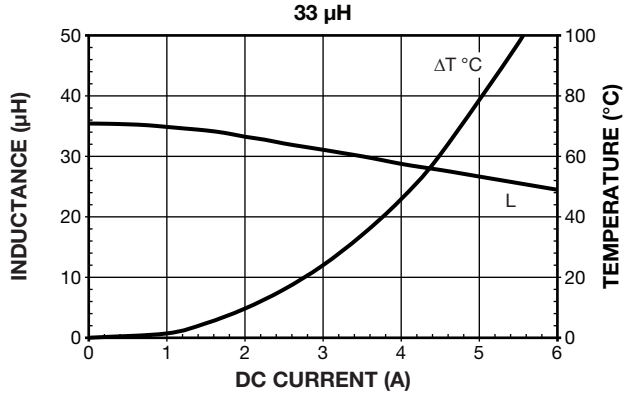
15 µH



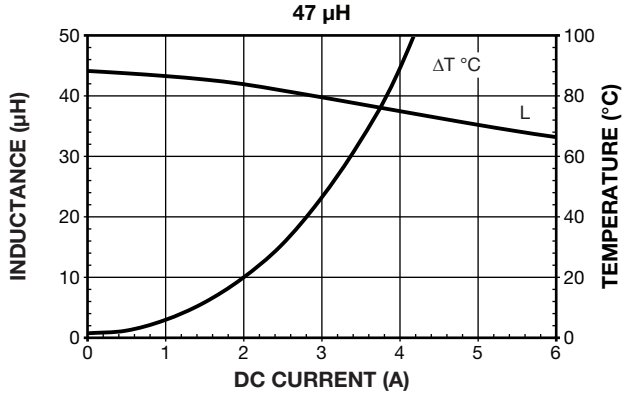
22 µH



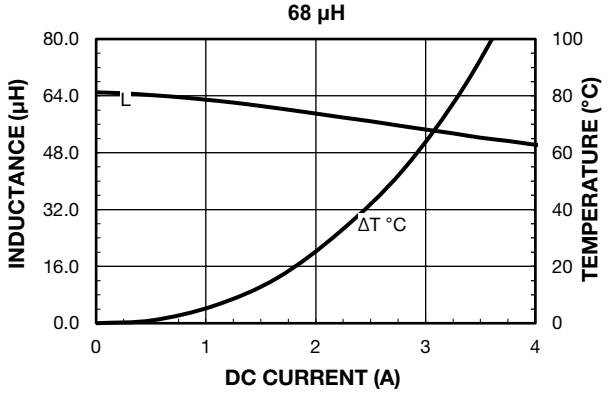
33 µH



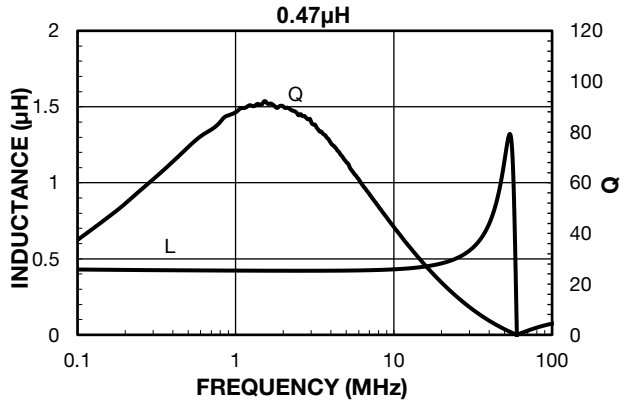
47 µH

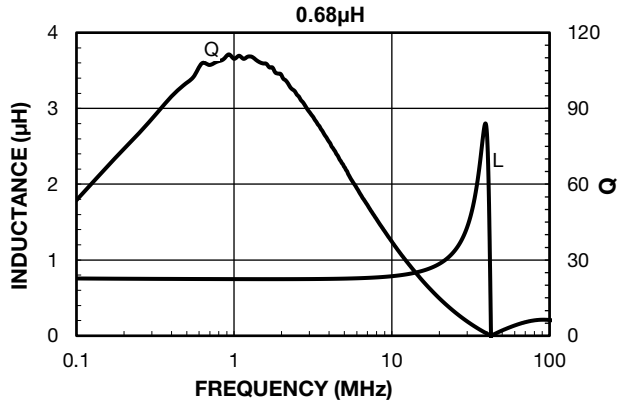


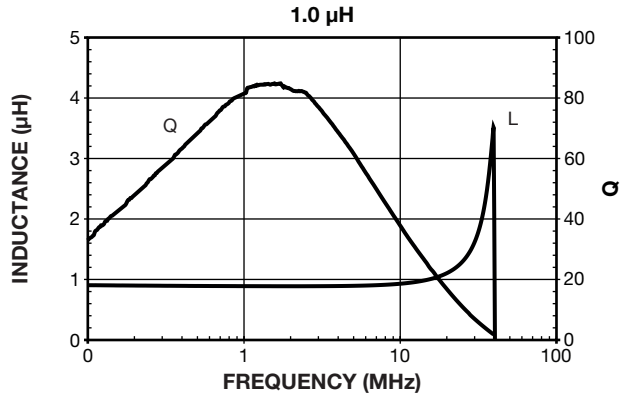
68 µH

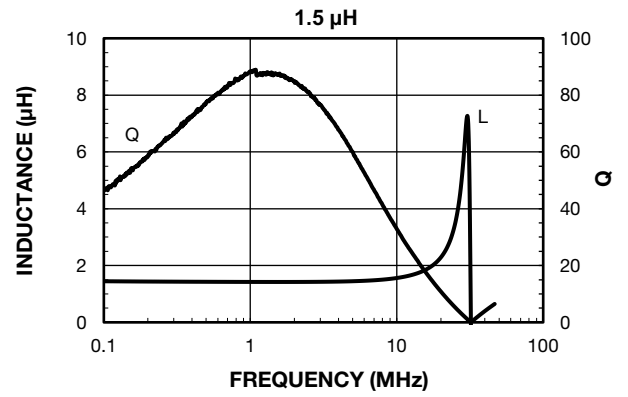


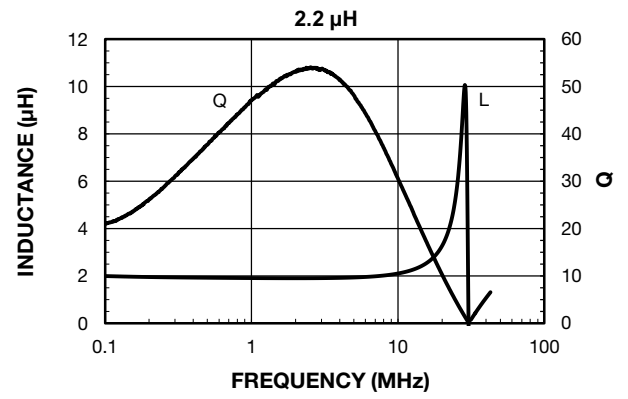
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY

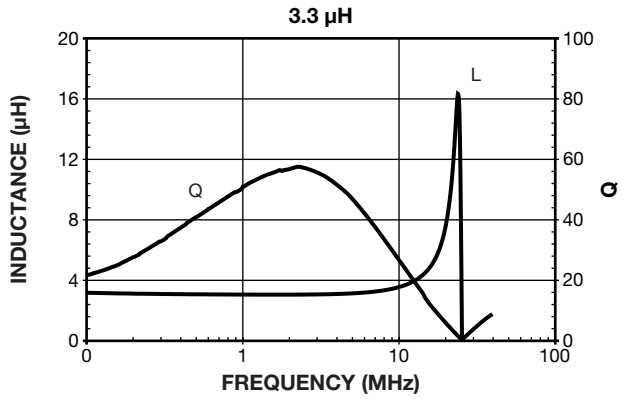


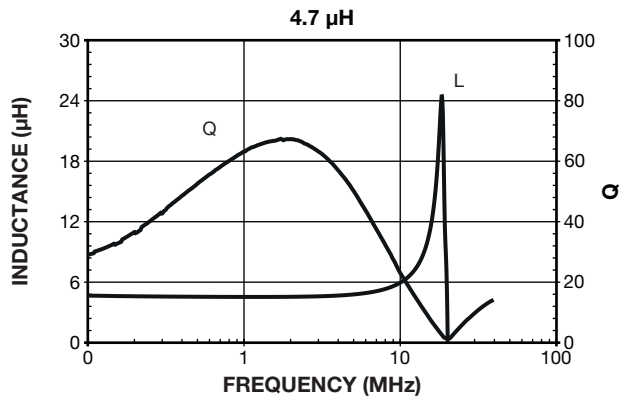


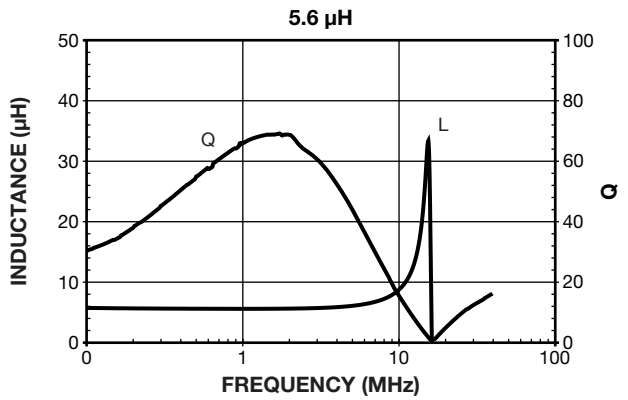












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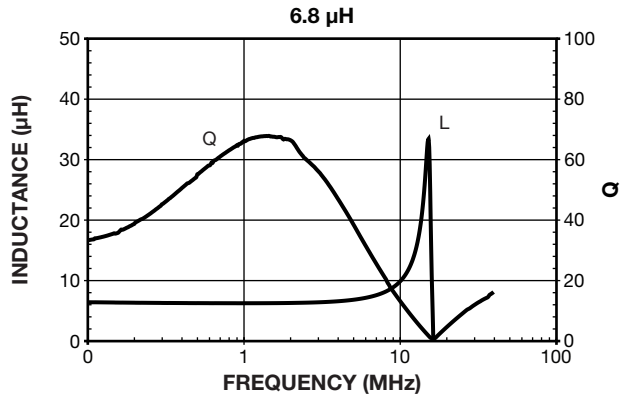

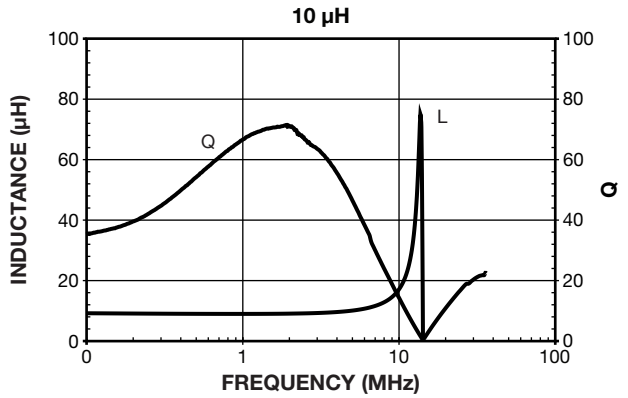

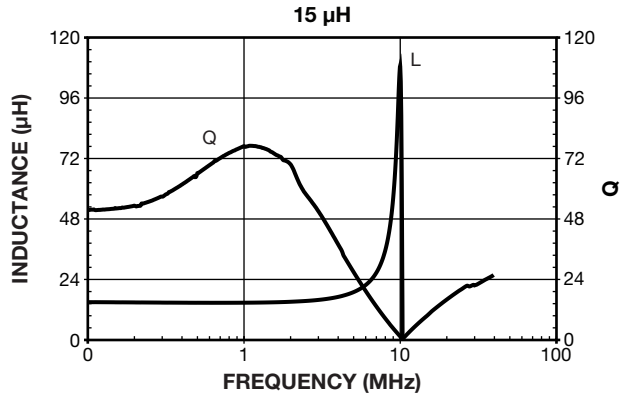

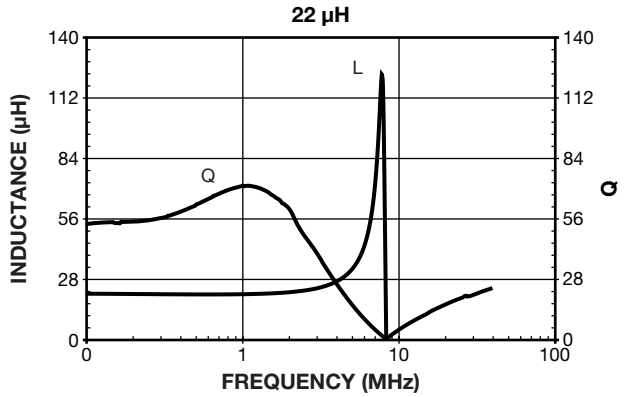

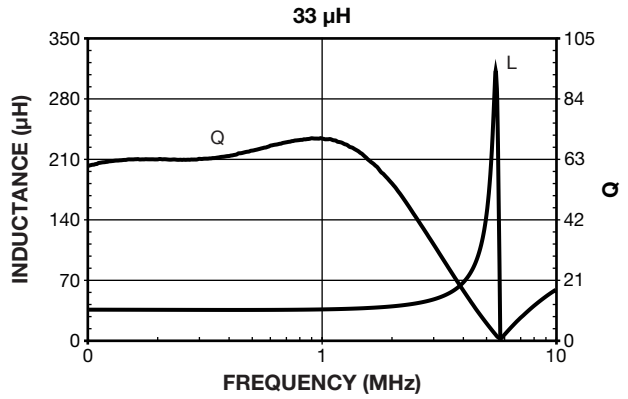

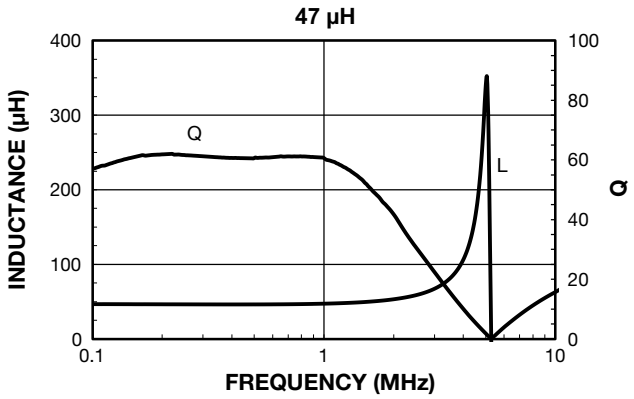

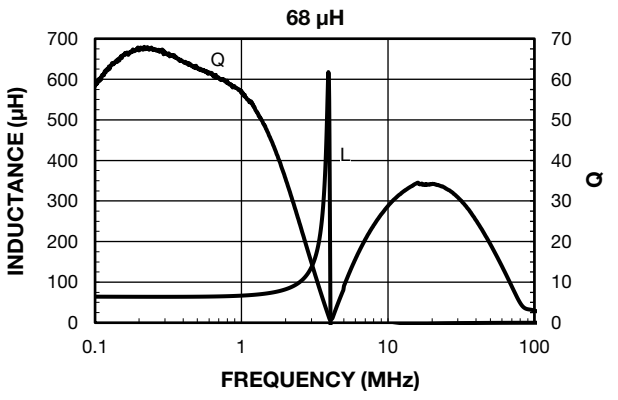

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