



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



## LINKS TO ADDITIONAL RESOURCES



## FEATURES

- High temperature, up to 155 °C
- Magnetically shielded construction
- Excellent DC/DC energy storage up to 2 MHz
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Packaging information: [SMD packaging](#)
- Material categorization: for definitions of compliance please see [www.vishay.com/doc299912](http://www.vishay.com/doc299912)



**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 <sub>0</sub> 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) <sup>(1)</sup>	SATURATION CURRENT DC TYP. (A)		SRF TYP. (MHz)
					20 % DROP <sup>(2)</sup>	30 % DROP <sup>(3)</sup>	
IHLP6767GZE_R47M51	0.47	0.89	0.95	65	76	110	52.3
IHLP6767GZE_1R0M51	1	1.36	1.46	53	42	60	35.5
IHLP6767GZE_1R5M51	1.5	1.72	1.85	40.5	40	55	24
IHLP6767GZE_2R2M51	2.2	2.25	2.41	38.5	38	41	19.8
IHLP6767GZE_3R3M51	3.3	3.06	3.27	32.2	32	40	16.5
IHLP6767GZE_4R7M51	4.7	4.89	5.23	24	26	35	14
IHLP6767GZE_5R6M51	5.6	5.86	6.30	23	23	33	11.5
IHLP6767GZE_6R8M51	6.8	7.5	8.06	21	22	32	10.4
IHLP6767GZE_8R2M51	8.2	8.6	9.23	17.5	14.5	19	9.4
IHLP6767GZE_100M51	10	10.2	10.91	16	13	18.5	7.7
IHLP6767GZE_150M51	15	15.85	16.96	12.5	13	16	8.55
IHLP6767GZE_220M51	22	21.28	22.27	11.7	11	15	5.97
IHLP6767GZE_330M51	33	36.2	38.9	8.8	9.4	13.7	4.43
IHLP6767GZE_470M51	47	52.7	56.4	7.25	7	10.1	3.72

## 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
- <sup>(1)</sup> DC current (A) that will cause an approximate ΔT of 40 °C
- <sup>(2)</sup> DC current (A) that will cause L<sub>0</sub> to drop approximately 20 %
- <sup>(3)</sup> DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %



## DESCRIPTION

<b>IHLP-6767GZ-51</b>	<b>2.2 <math>\mu</math>H</b>	<b><math>\pm 20\%</math></b>	<b>TAPE AND REEL</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

## GLOBAL PART NUMBER

<b>I H L P</b>	<b>6 7 6 7 G Z</b>	<b>E K</b>	<b>2 R 2</b>	<b>M</b>	<b>5 1</b>
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		<b>EK</b> = tape and reel	<b>2R2</b> = 2.2 $\mu$ H	<b>M</b> = $\pm 20\%$ <b>N</b> = $\pm 30\%$	

## PACKAGE CODE OPTIONS

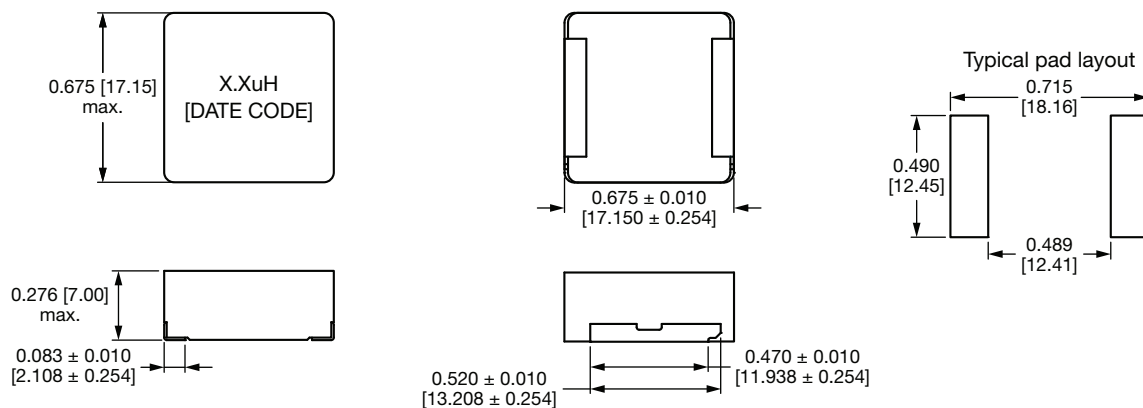
**EK** = tape and reel packaging (250 pcs on 13-inch reel)

**ER** = tape and reel packaging (200 pcs on 13-inch reel)

### Note

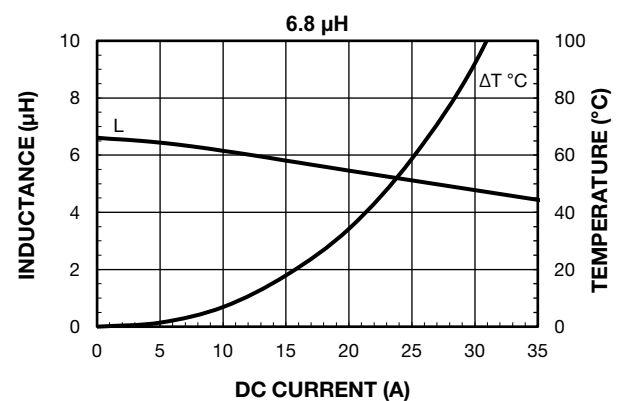
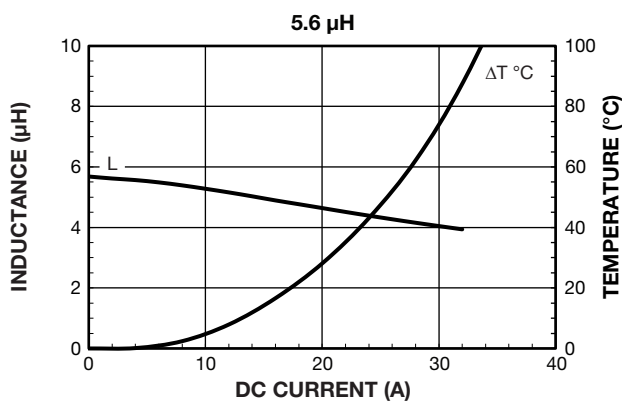
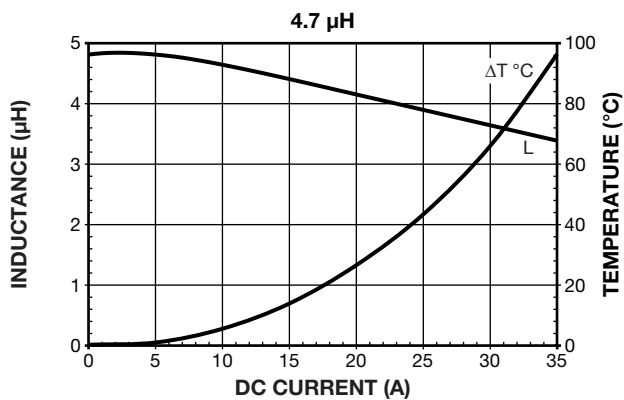
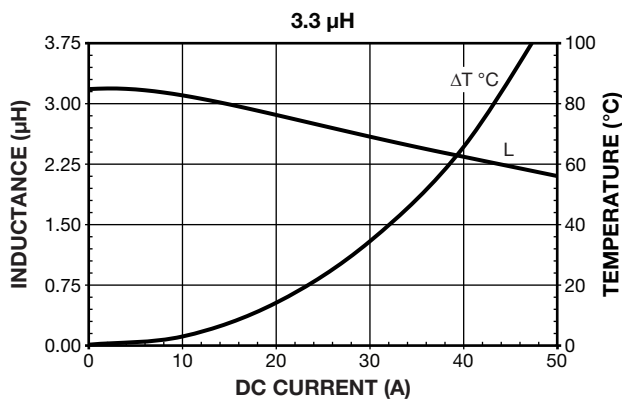
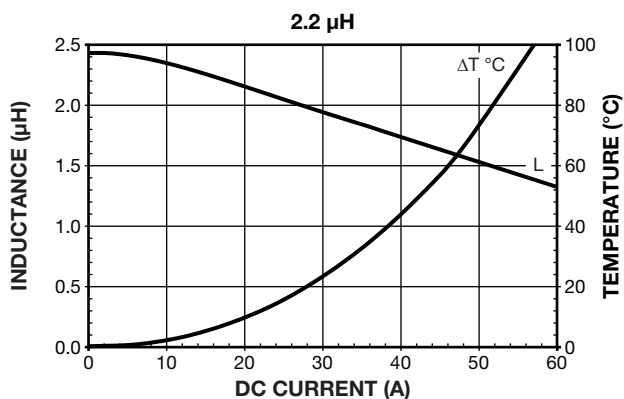
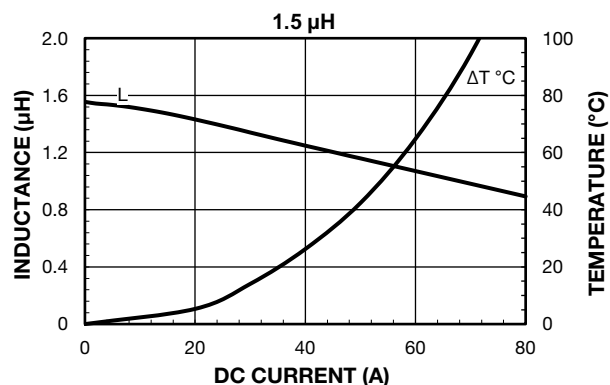
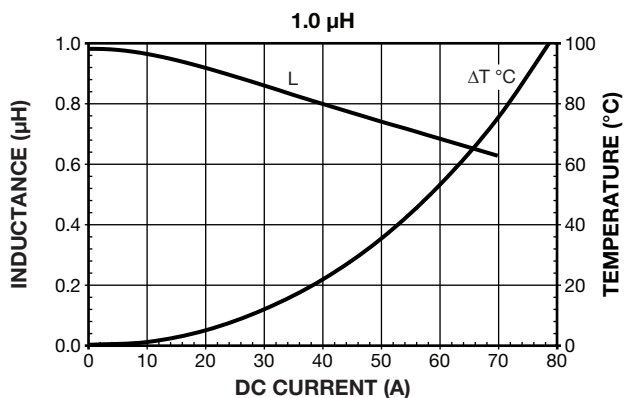
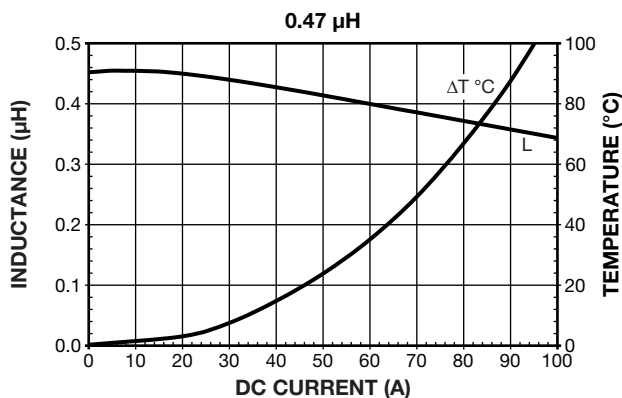
- For additional packaging details see ["Packaging Methods"](#)

## DIMENSIONS in inches [millimeters]



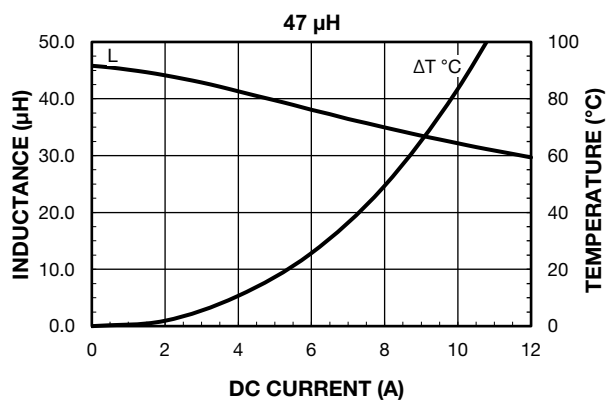
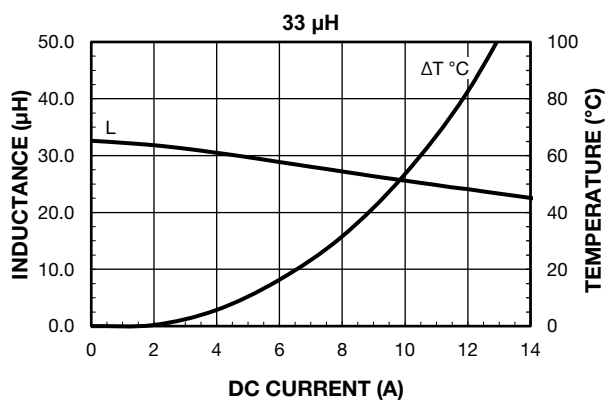
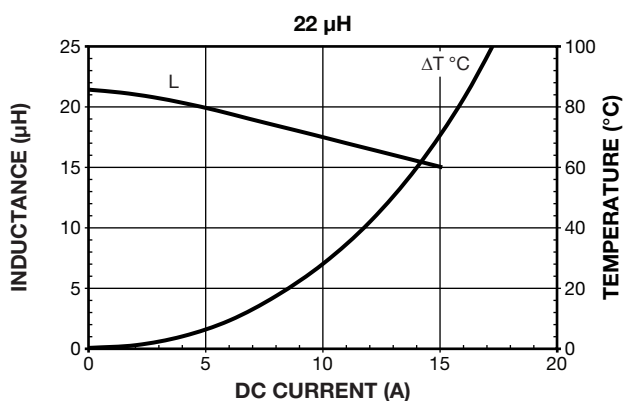
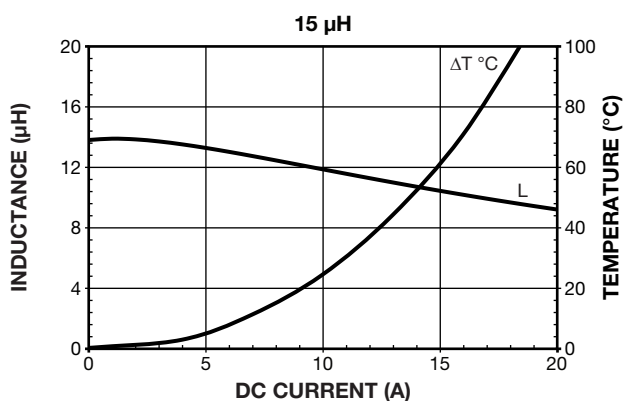
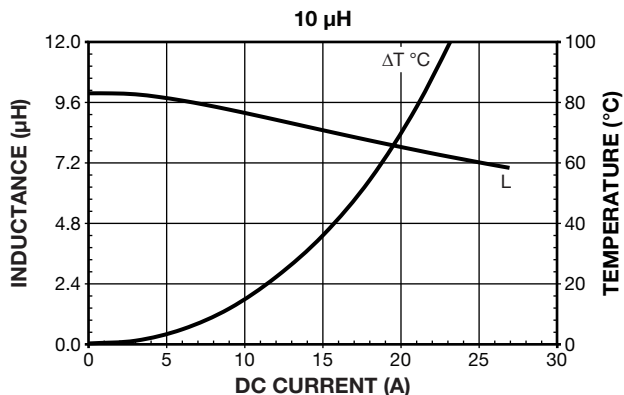
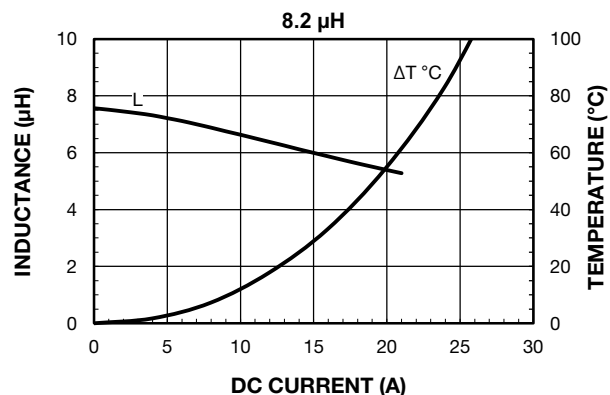


PERFORMANCE GRAPHS



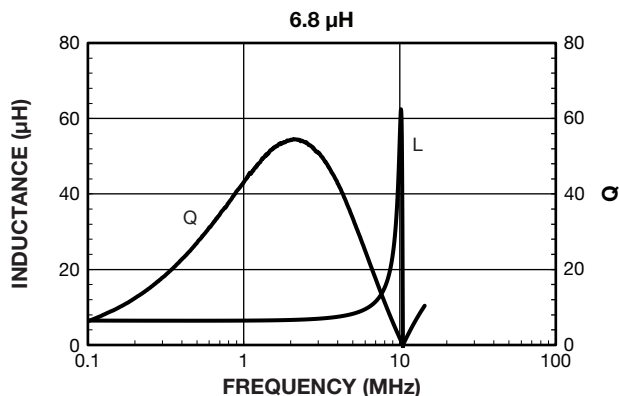
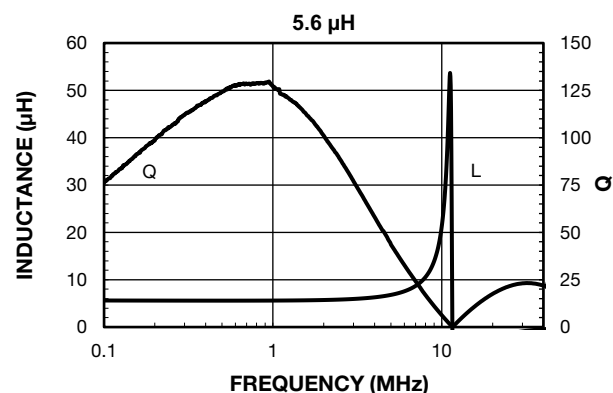
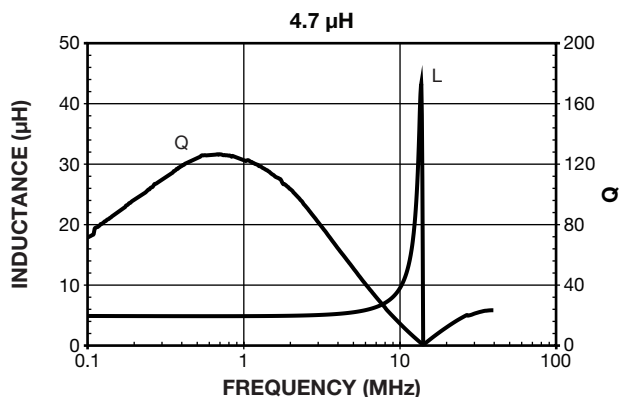
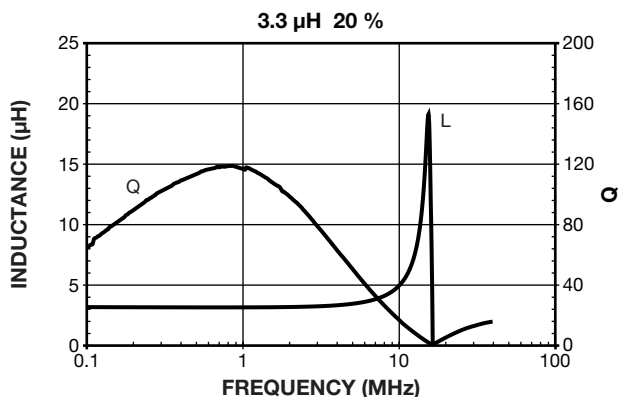
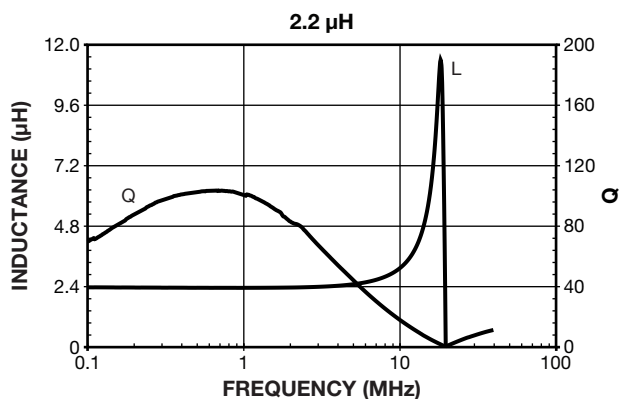
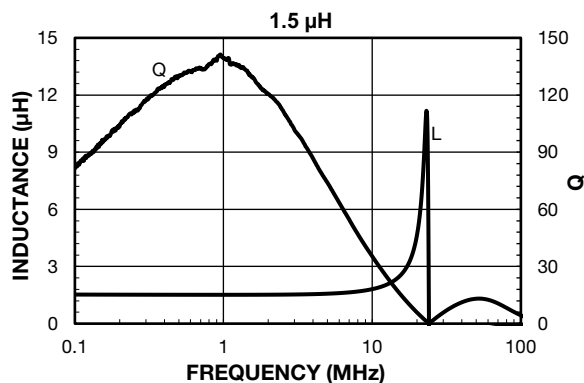
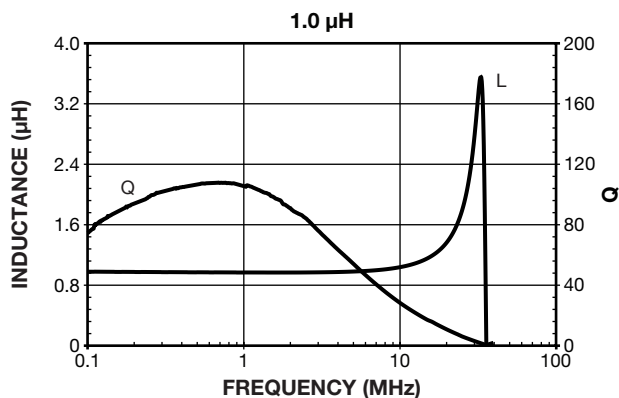
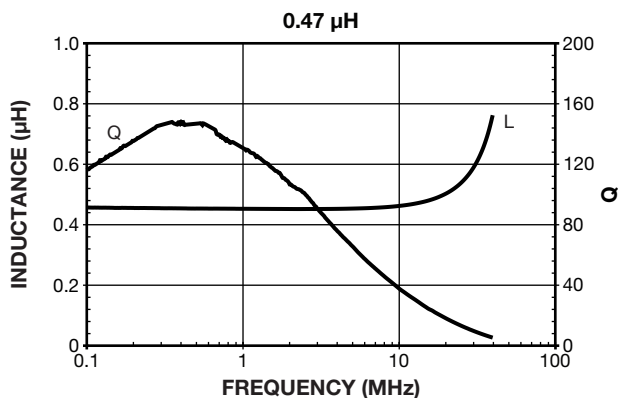


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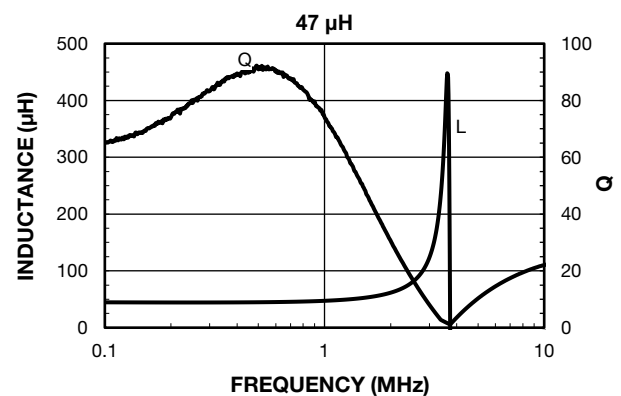
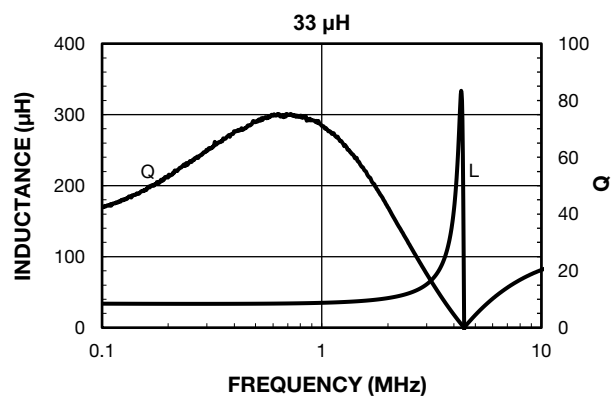
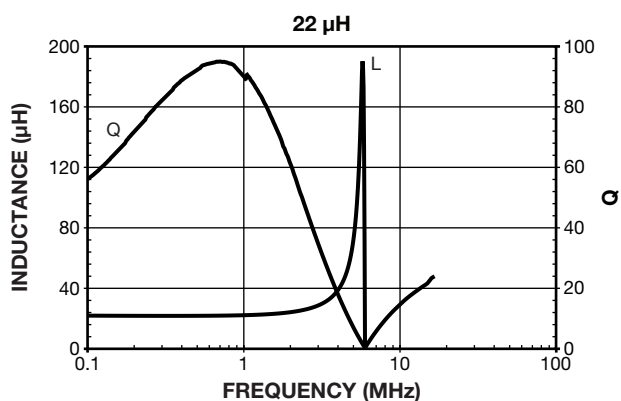
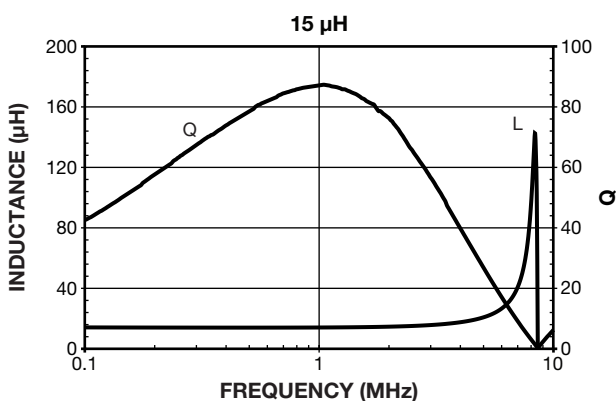
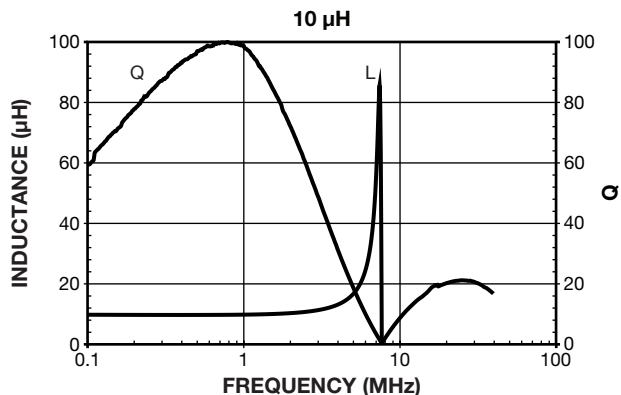
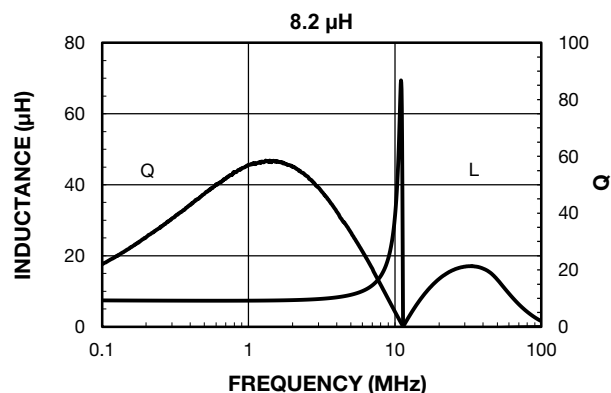


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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