



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



## LINKS TO ADDITIONAL RESOURCES



3D Models



Design Tools

## APPLICATIONS

- Engine and transmission control units
- Diesel injection drivers
- DC/DC converters for entertainment / navigation systems
- Noise suppression for motors: windshield wipers / power seats / power mirrors / heating and ventilation blowers / HID lighting
- LED drivers
- Filter applications

## 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
- AEC-Q200 qualified
- IHLP design; PATENT(S): [www.vishay.com/patents](http://www.vishay.com/patents)
- Packaging information: [SMD packaging](#)
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

RoHS  
COMPLIANTHALOGEN  
FREEGREEN  
(5-2008)

## 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>	
IHLP6767GZERR47M5A	0.47	0.89	0.95	65	76	110	52.3
IHLP6767GZER1R0M5A	1	1.36	1.46	53	42	60	35.5
IHLP6767GZER1R5M5A	1.5	1.72	1.85	40.5	40	55	24
IHLP6767GZER2R2M5A	2.2	2.25	2.41	38.5	38	41	19.8
IHLP6767GZER3R3M5A	3.3	3.06	3.27	32.2	32	40	16.5
IHLP6767GZER4R7M5A	4.7	4.89	5.23	24	26	35	14
IHLP6767GZER5R6M5A	5.6	5.86	6.30	23	23	33	11.5
IHLP6767GZER6R8M5A	6.8	7.5	8.06	21	22	32	10.4
IHLP6767GZER8R2M5A	8.2	8.6	9.23	17.5	14.5	19	9.4
IHLP6767GZER100M5A	10	10.2	10.91	16	13	18.5	7.7
IHLP6767GZER150M5A	15	15.85	16.96	12.5	13	16	8.55
IHLP6767GZER220M5A	22	21.28	22.27	11.7	11	15	5.97
IHLP6767GZER330M5A	33	36.2	38.9	8.8	9.4	13.7	4.43
IHLP6767GZER470M5A	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 %

PATENT(S): [www.vishay.com/patents](http://www.vishay.com/patents)

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



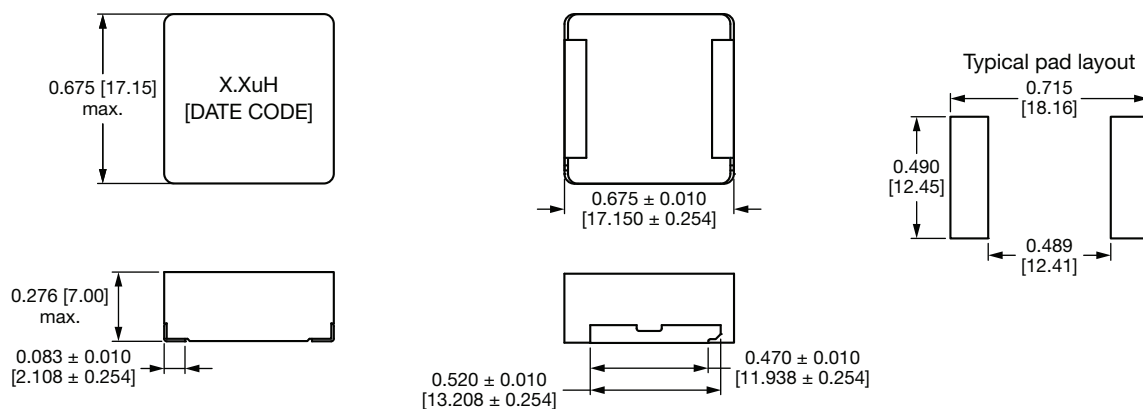
## DESCRIPTION

<b>IHLP-6767GZ-5A</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

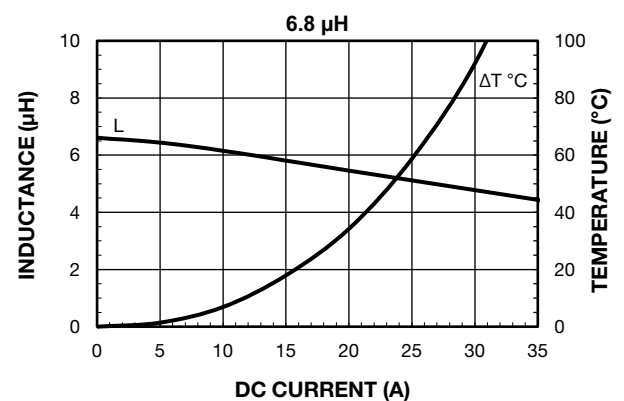
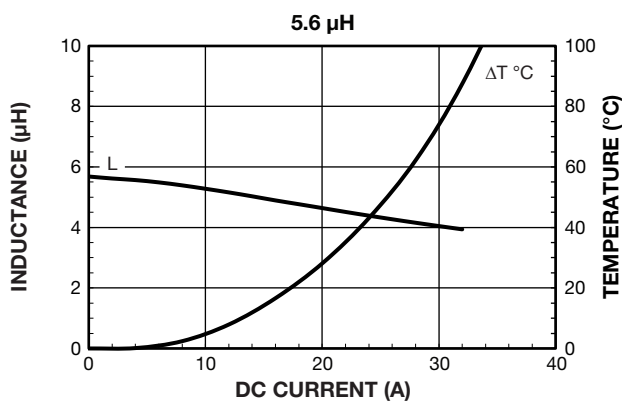
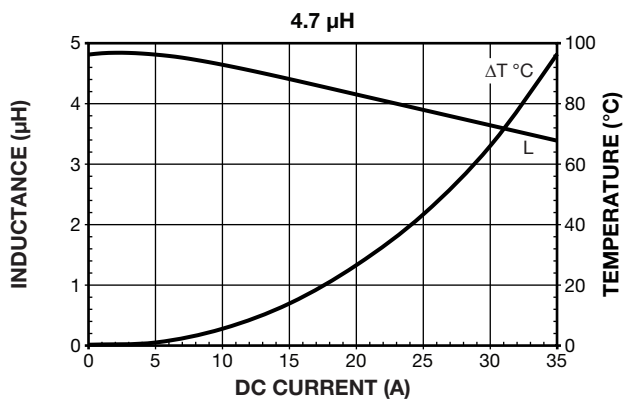
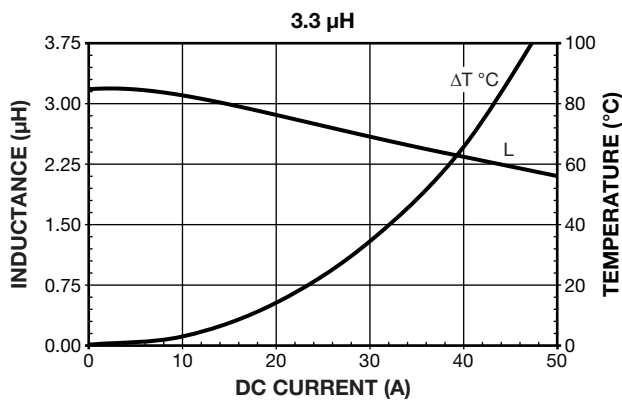
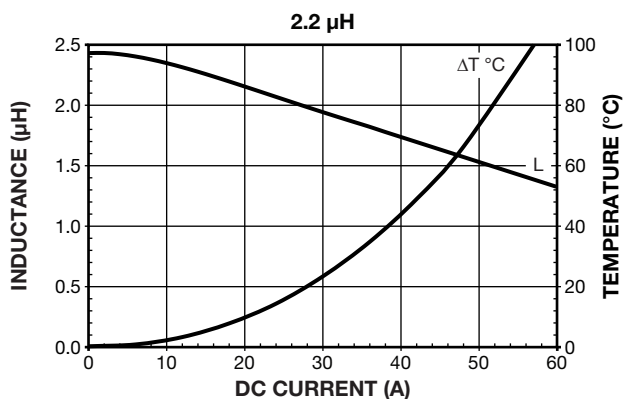
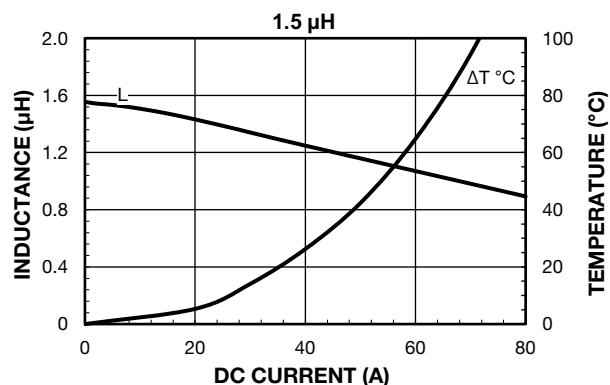
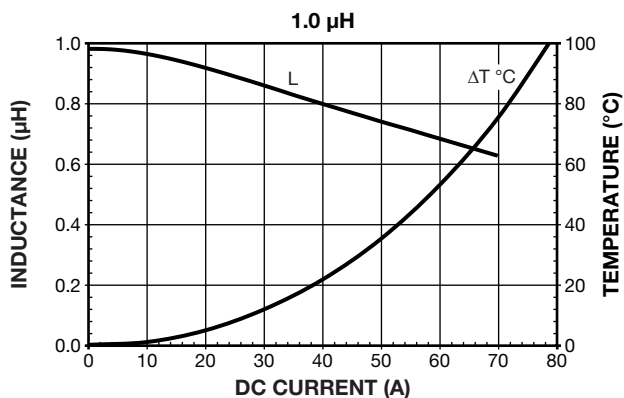
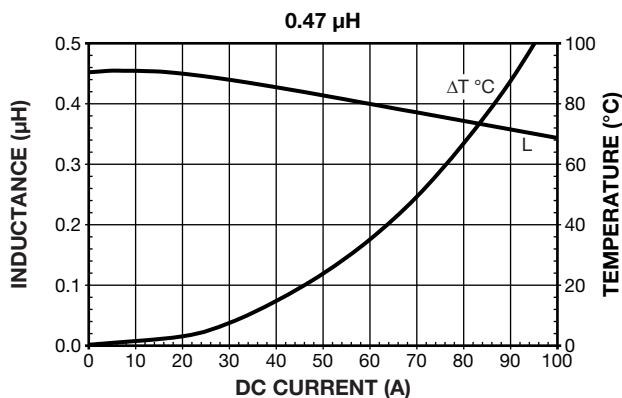
I	H	L	P	6	7	6	7	G	Z	E	R	2	R	2	M	5	A
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

## DIMENSIONS in inches [millimeters]



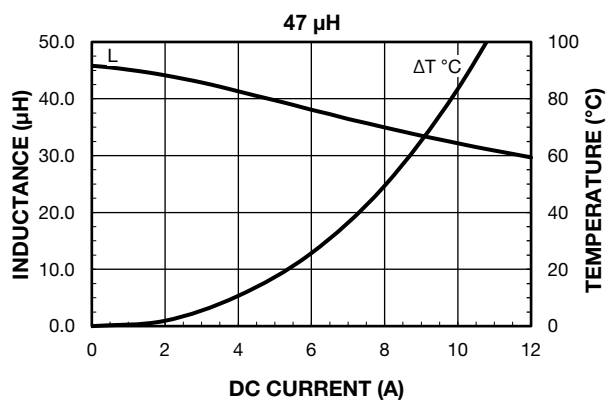
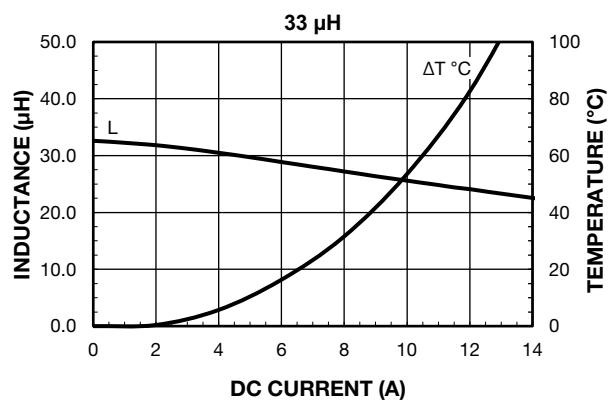
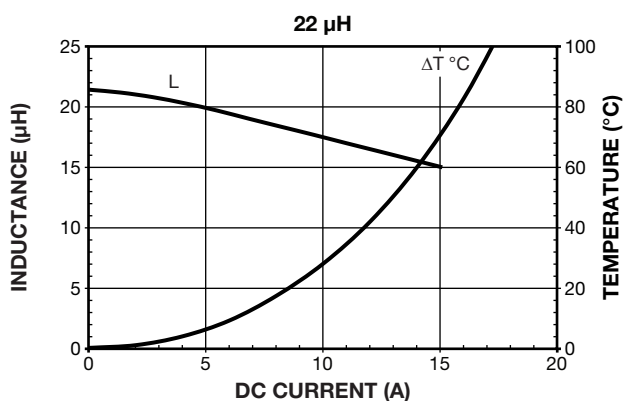
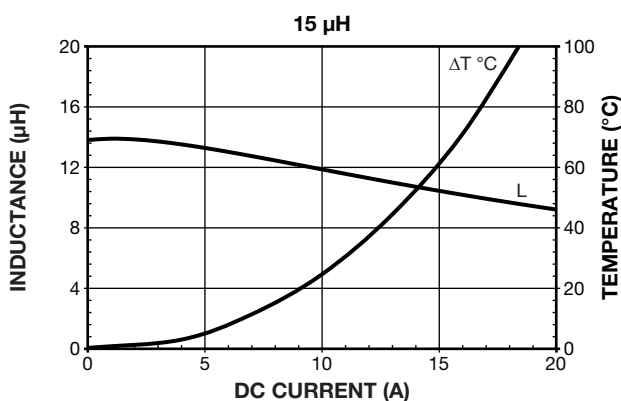
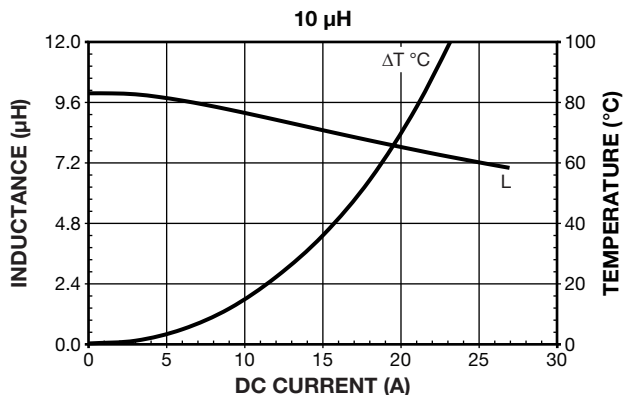
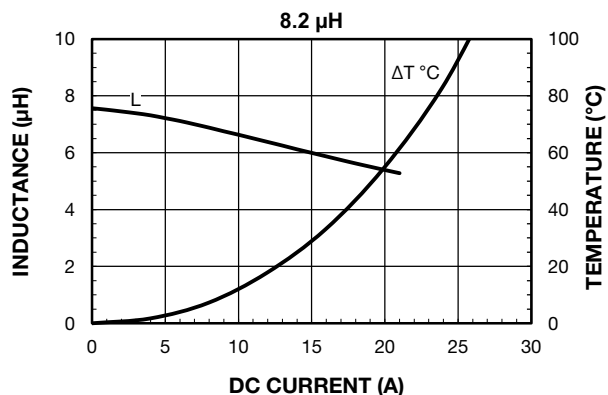


PERFORMANCE GRAPHS



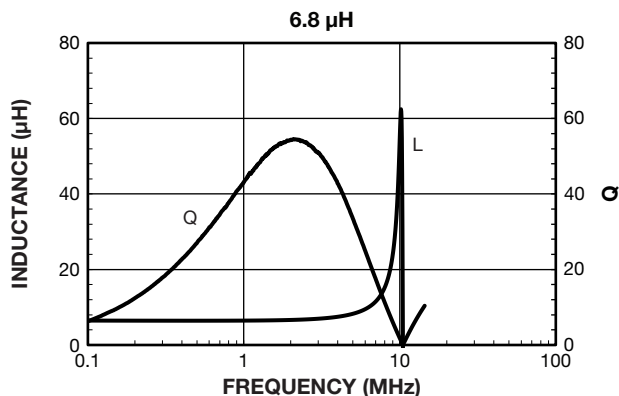
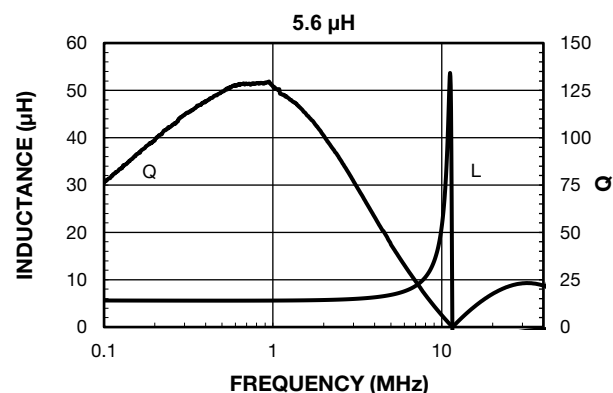
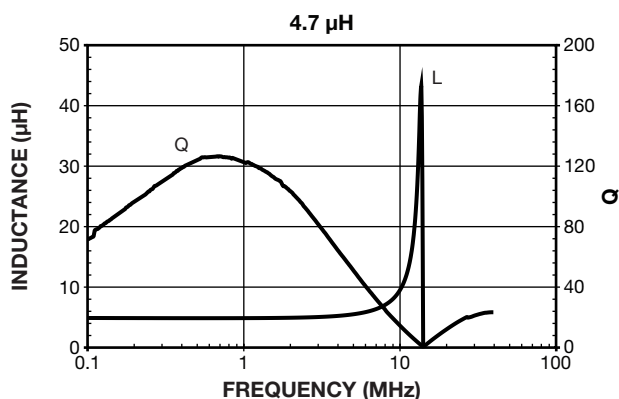
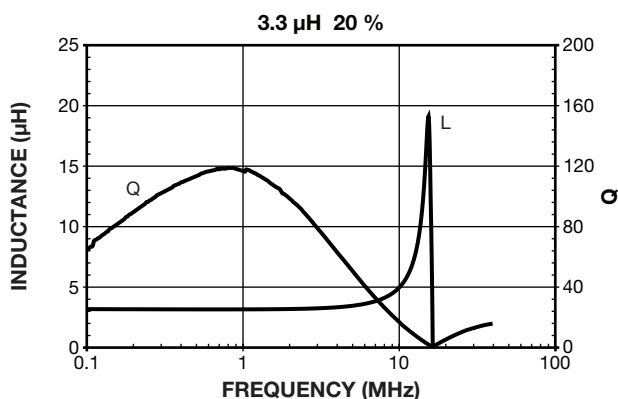
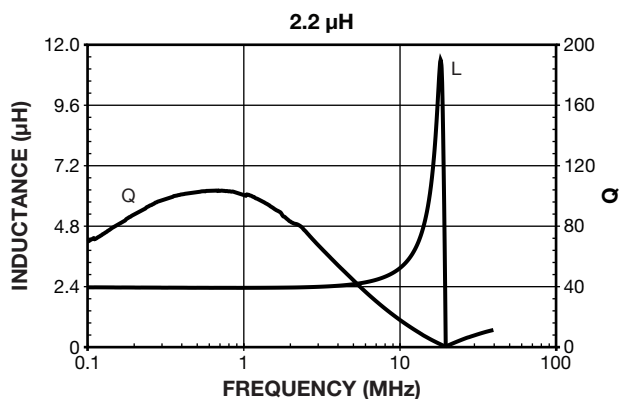
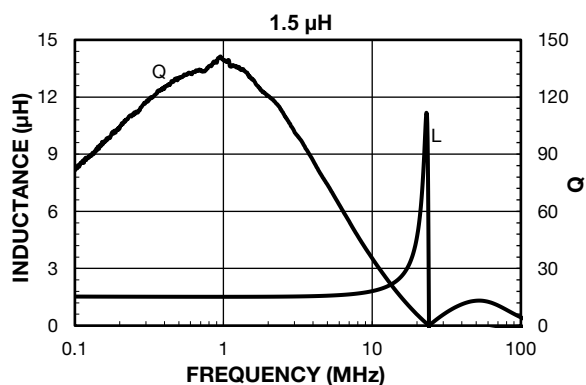
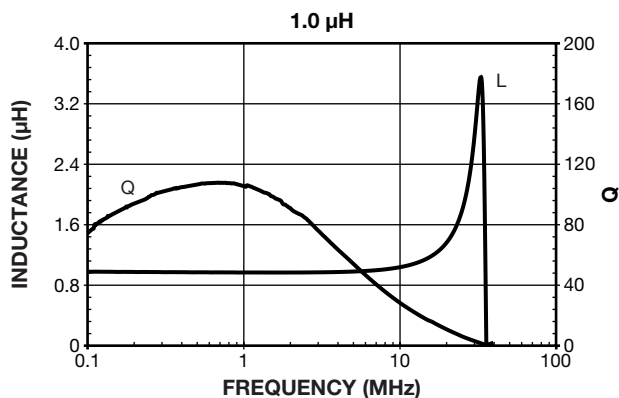
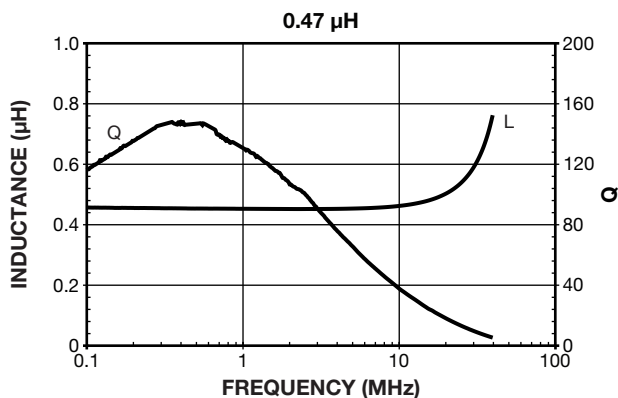


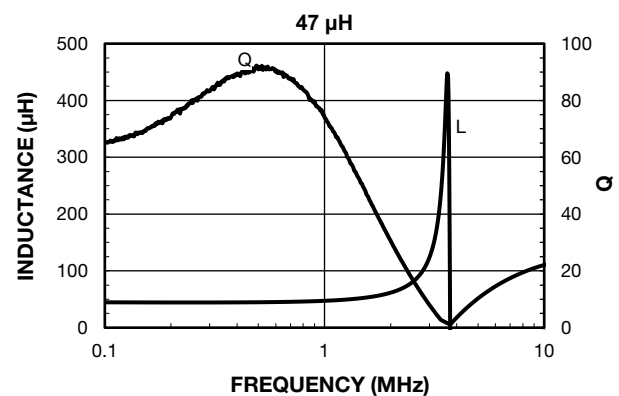
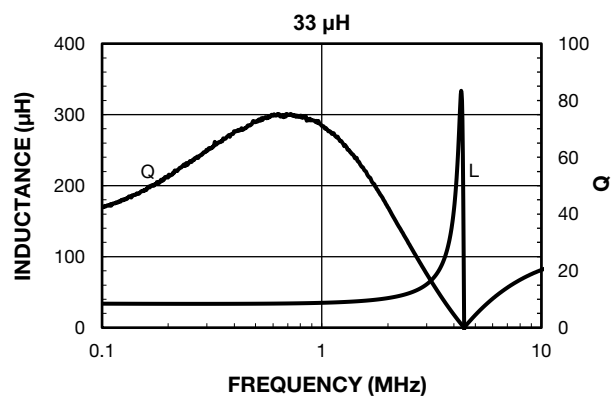
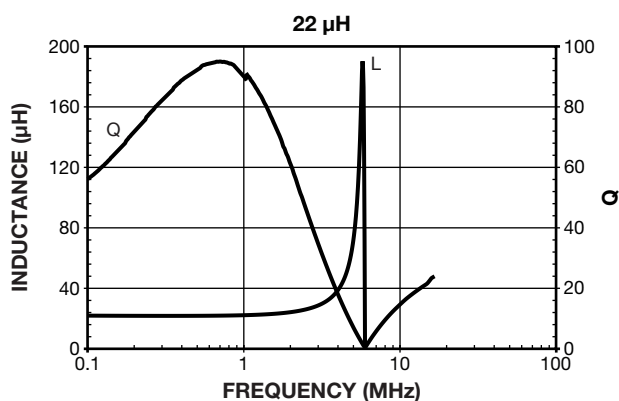
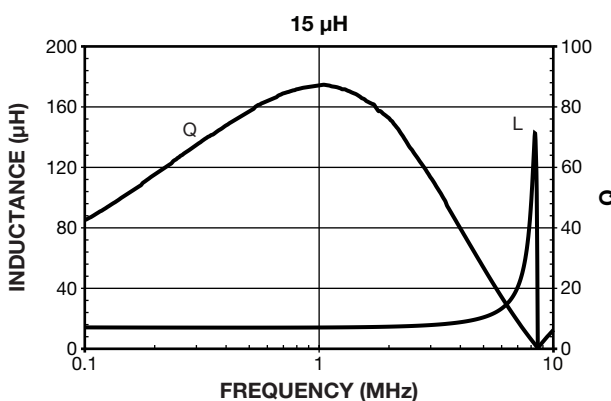
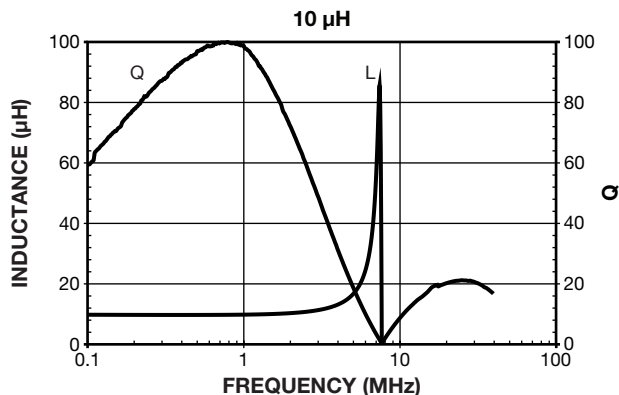
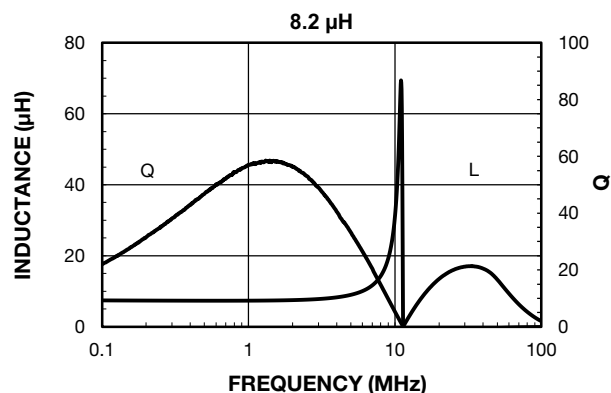
PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



**PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY**




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