

IHLP® Commercial Inductors, Low DCR Series



LINKS TO ADDITIONAL RESOURCES



RoHS
COMPLIANT
HALOGEN
FREE

FEATURES

- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 MHz filter inductor applications up SRF (see “Standard Electrical Specifications” table)
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

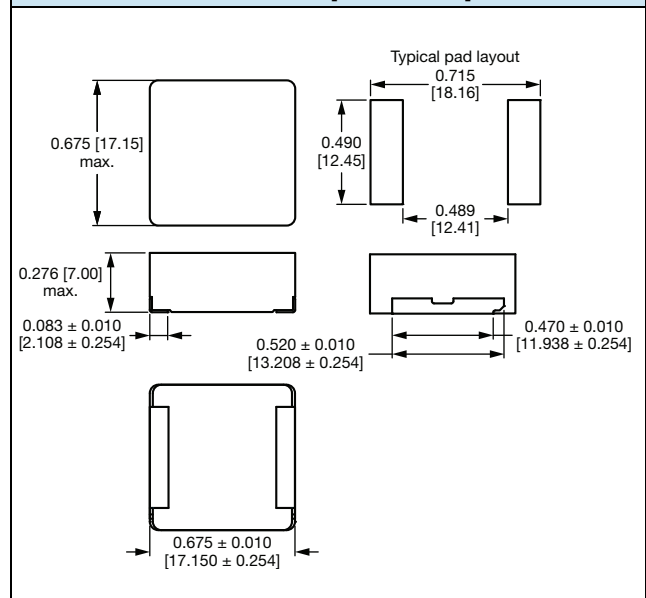
- PDA / notebook / desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

STANDARD ELECTRICAL SPECIFICATIONS						
L ₀ 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) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾	SRF TYP. (MHz)	
0.33	0.67	0.73	75.5	55	78	
0.47	0.78	0.87	72	57	60	
0.56	0.83	0.91	61	66	40	
0.68	0.97	1.07	60	45	39	
0.82	0.98	1.08	56.5	45	36	
1.0	1.21	1.27	55.5	32	34	
1.5	1.54	1.62	48	31	26	
2.2	1.85	1.98	43.5	28	19	
3.3	2.79	2.93	35	27	16	
4.7	3.98	4.18	30	21	10.7	
5.6	4.23	4.44	28	21	11.8	
6.8	5.86	6.15	22.5	18.5	10.0	
8.2	7.71	8.10	21	18	10.0	
10.0	8.89	9.33	19	17	8.0	
15.0	13.7	14.4	14	12	7.5	
22.0	20.0	21.0	12	9.5	4.3	
33.0	35.1	37.0	10.7	9	4.8	
47.0	40.7	42.7	8.7	8.6	4.1	
56.0	55	57.8	7.2	4.2	2.9	
68.0	72.1	75.7	6.1	4.5	3.0	
82.0	87.3	91.7	5.5	4.5	2.6	
100.0	105	110	5.0	4.0	2.1	

Notes

- All test data is referenced to 25 °C ambient
 - Operating temperature range -55 °C to +125 °C
 - The part temperature (ambient + temp. rise) should not exceed 125 °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) = 50 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 %

DIMENSIONS in inches [millimeters]





DESCRIPTION					
IHLP-6767GZ-11	4.7 μ H	$\pm 20 \%$	EK	e3	
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 K	4 R 7	M	1 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EK = tape and reel	4R7 = 4.7 μ H	M = $\pm 20 \%$ N = $\pm 30 \%$	

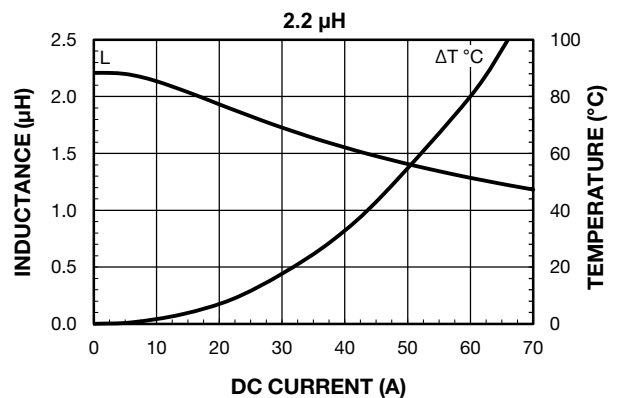
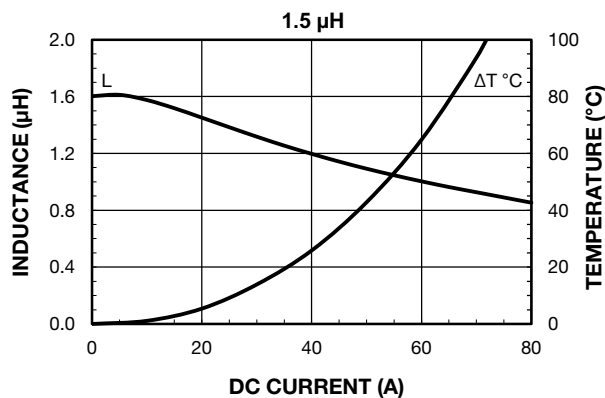
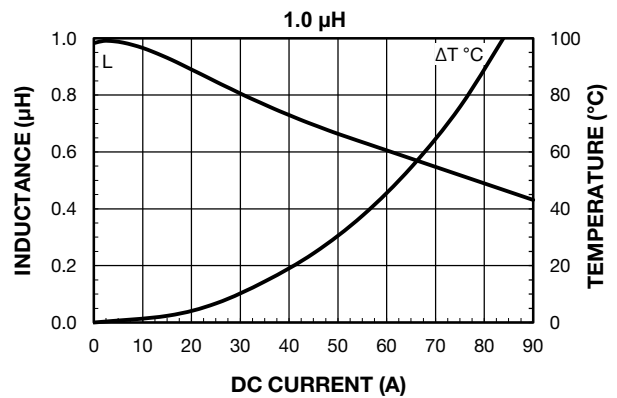
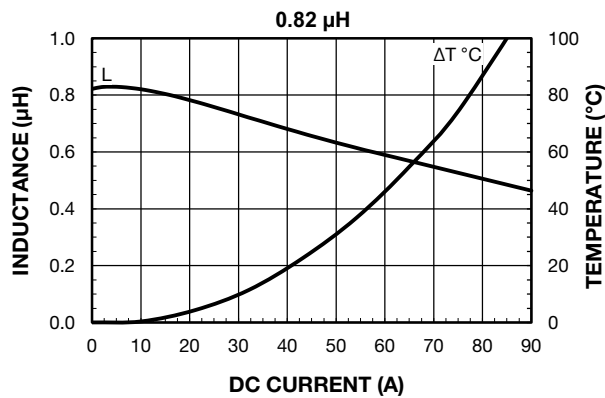
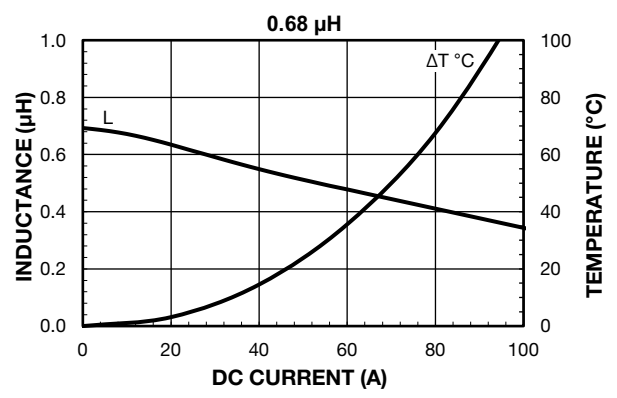
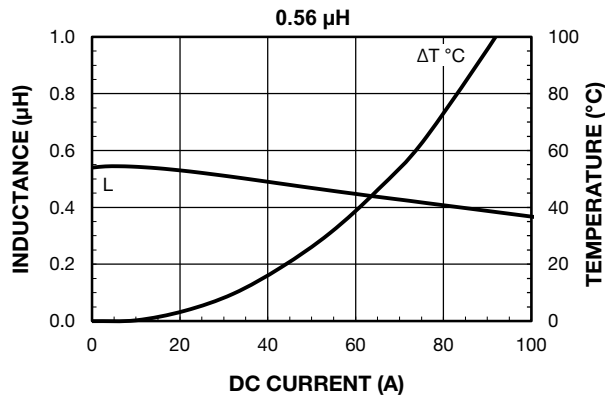
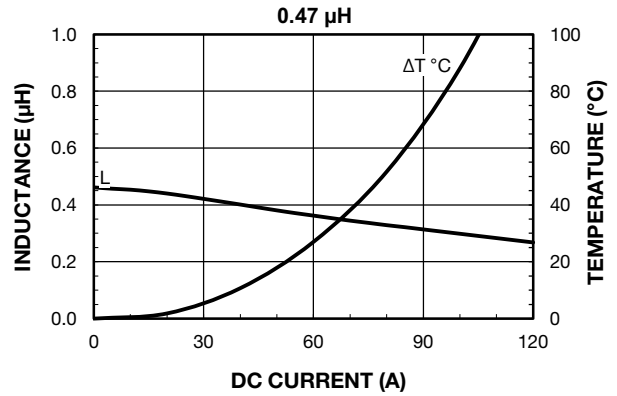
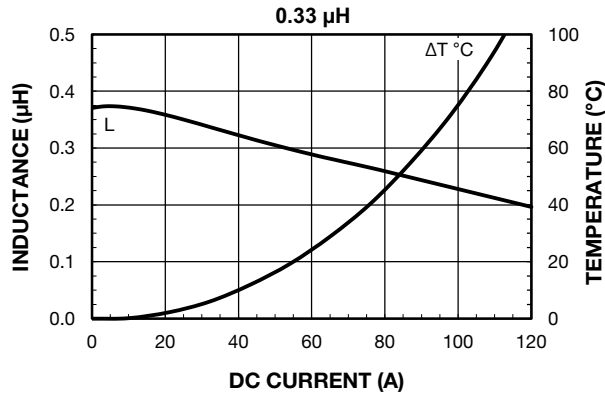
PACKAGE CODE OPTIONS
EK = tape and reel packaging (250 pcs on 13-inch reel)
ER = tape and reel packaging (200 pcs on 13-inch reel)

Note

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

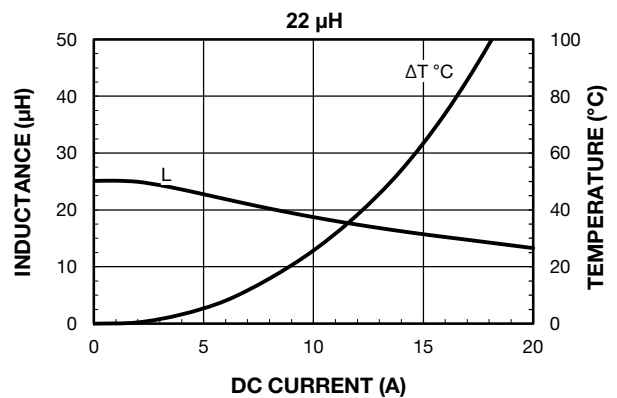
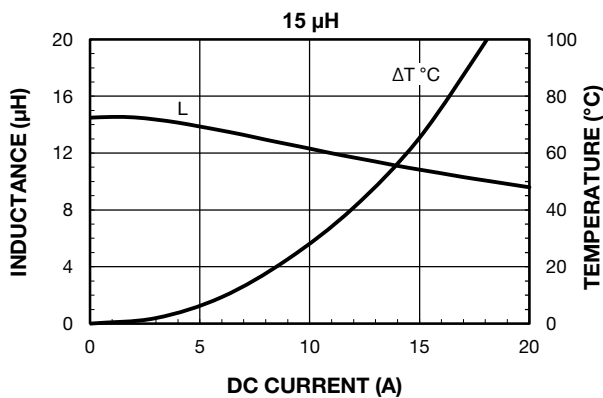
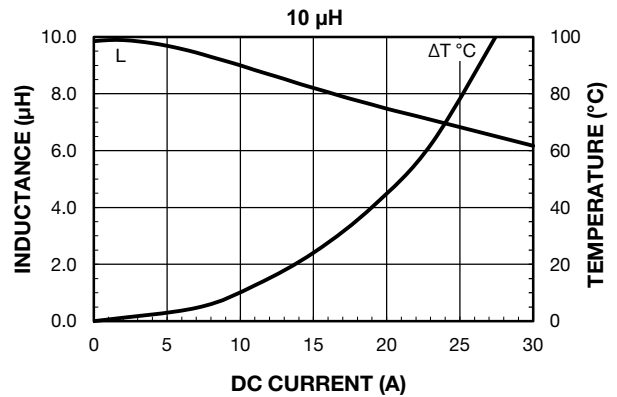
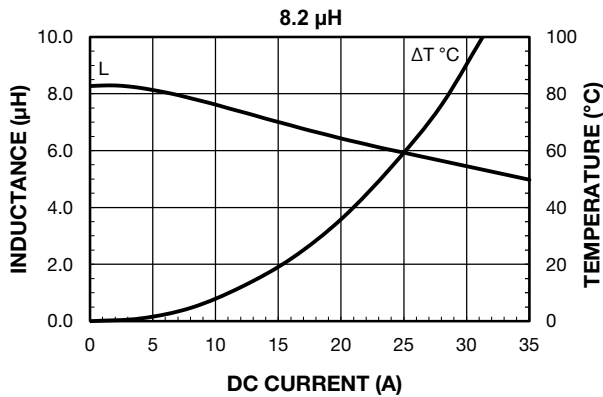
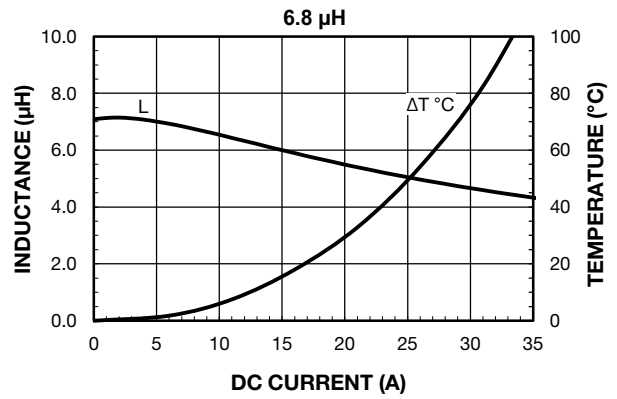
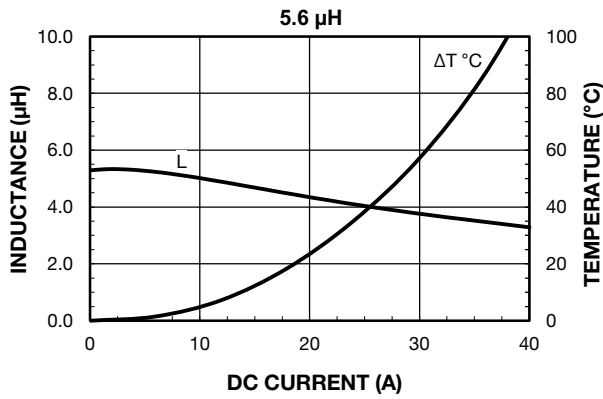
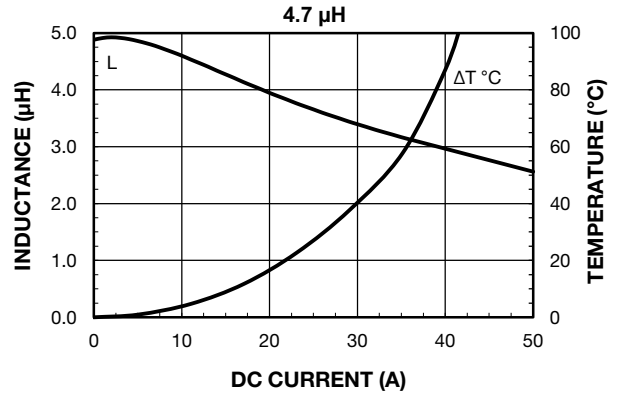
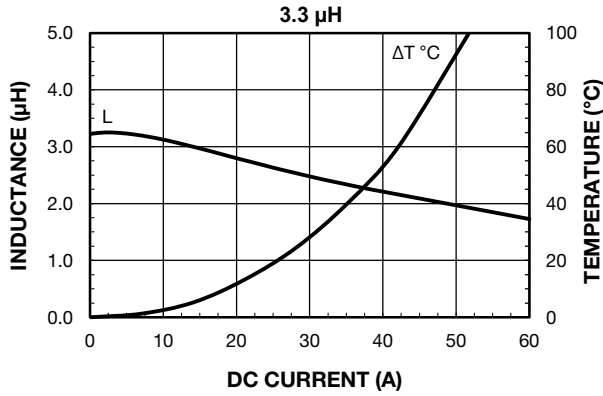


PERFORMANCE GRAPHS



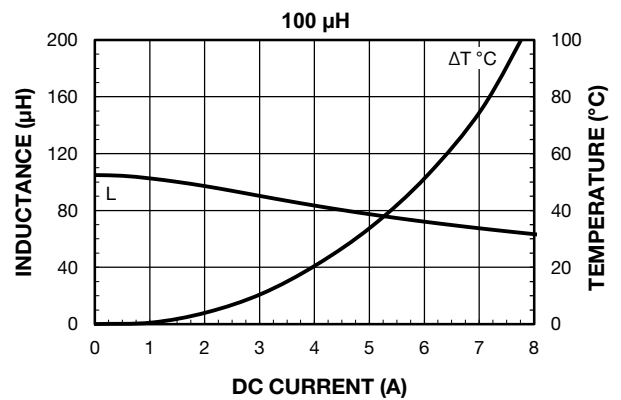
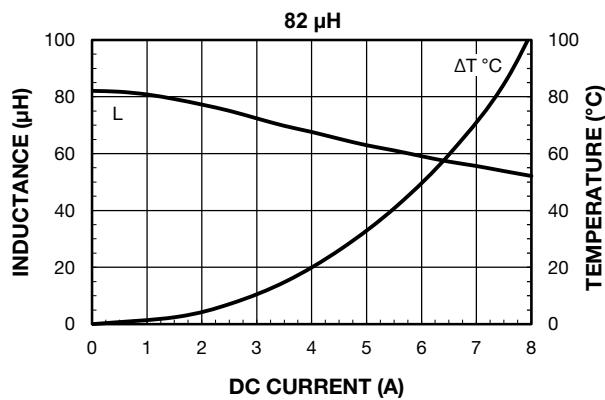
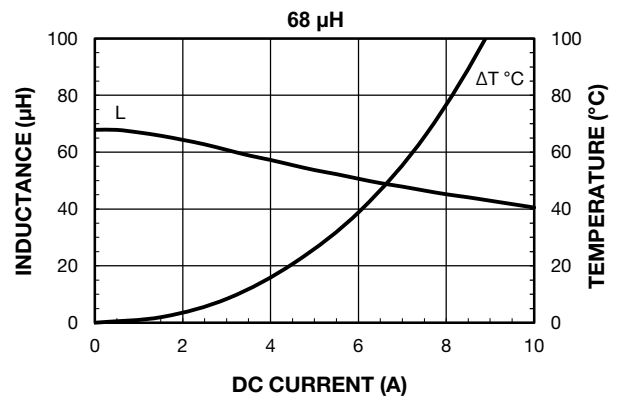
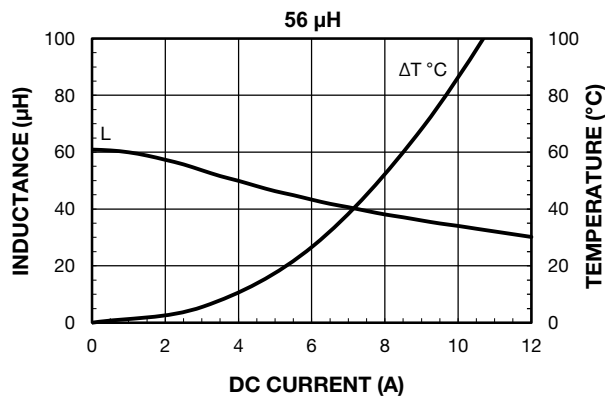
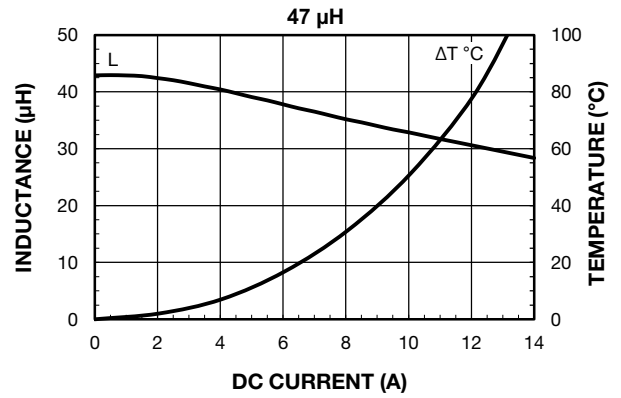
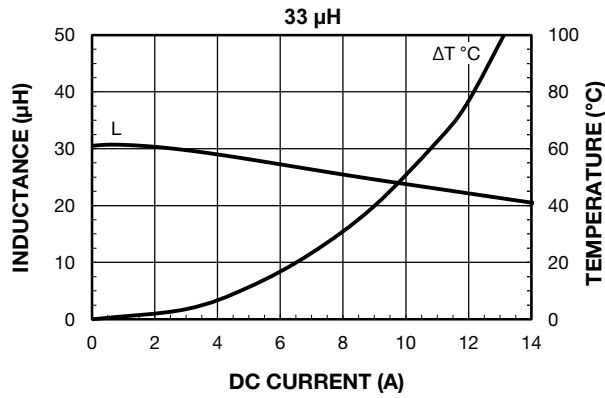


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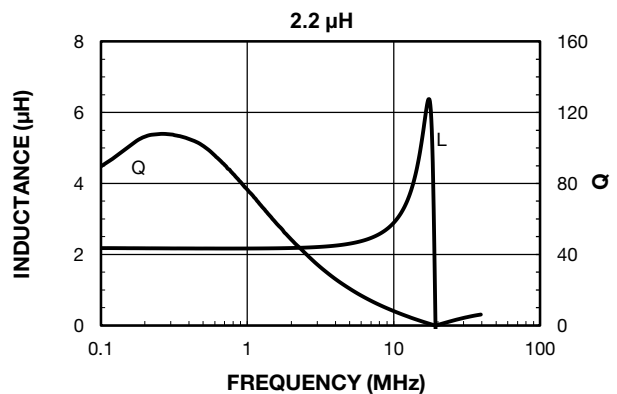
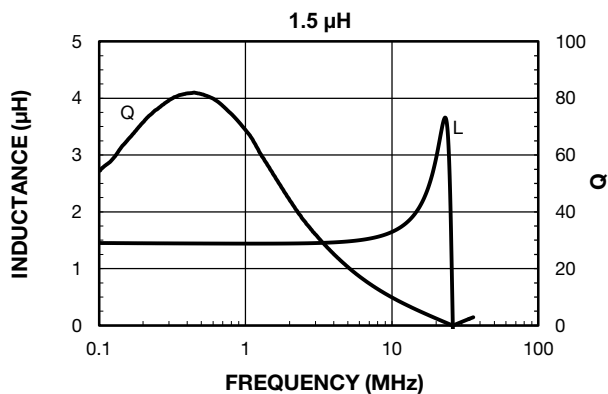
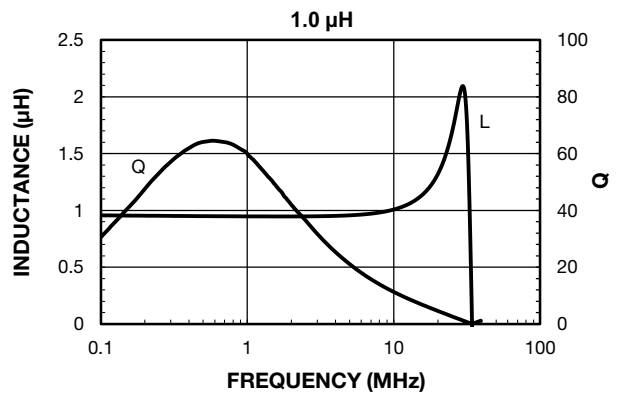
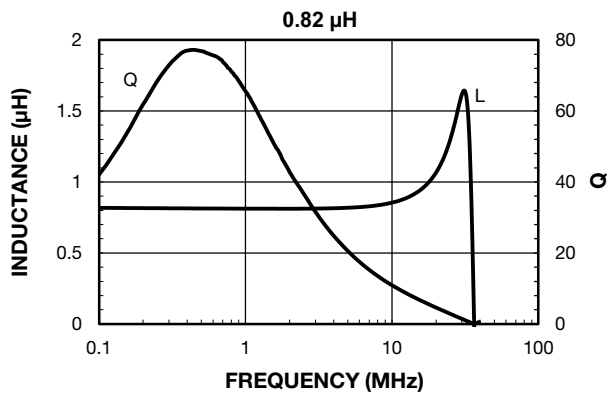
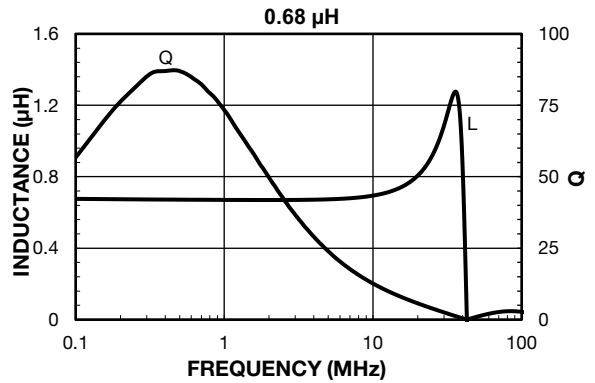
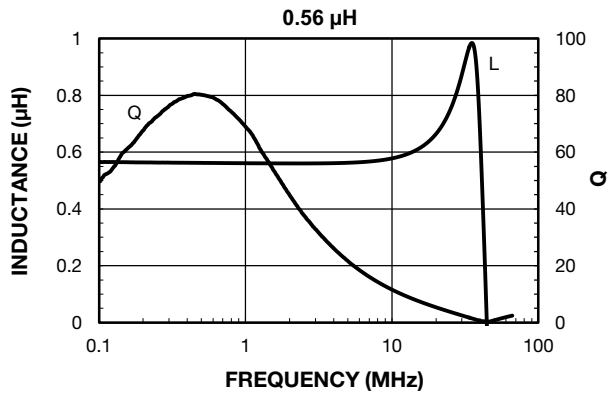
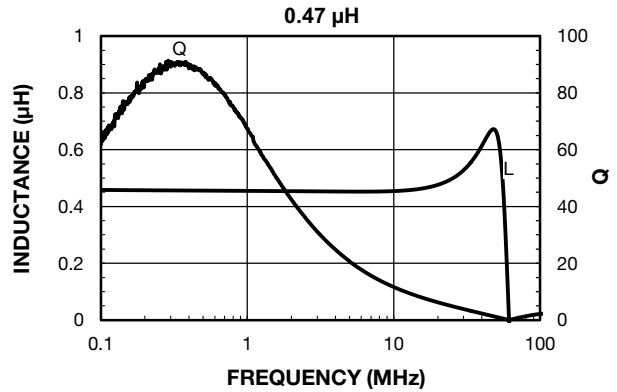
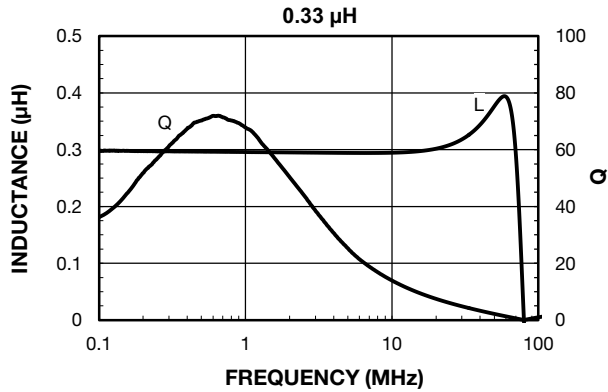


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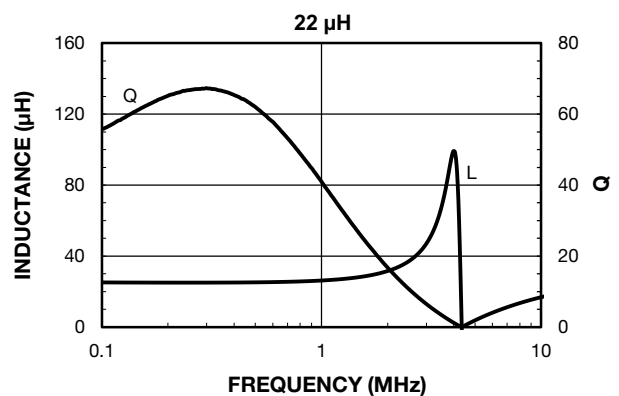
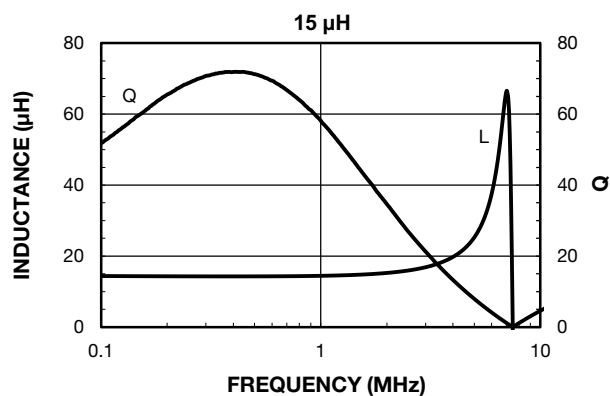
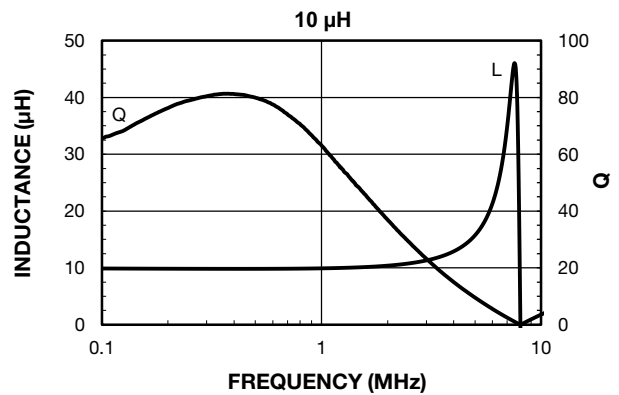
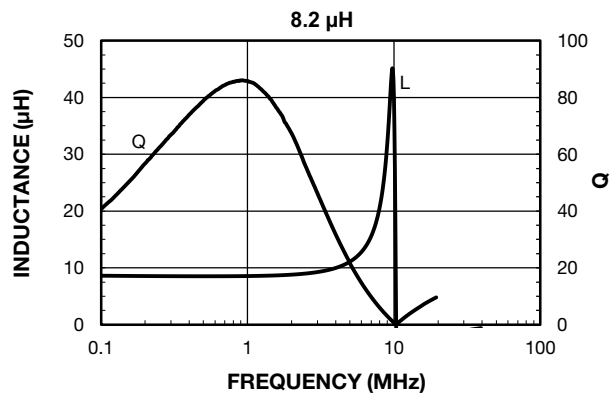
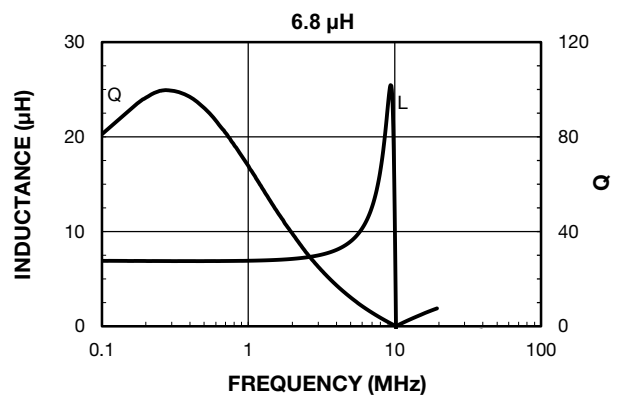
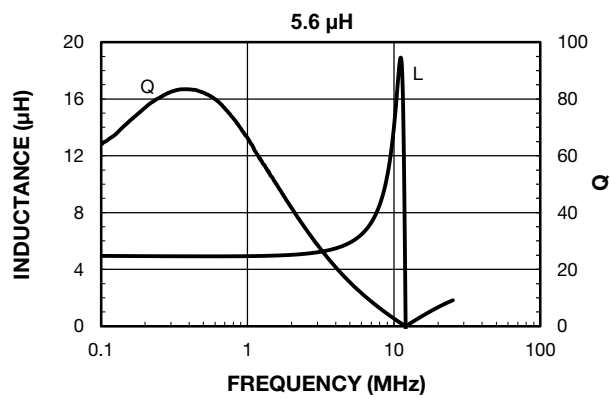
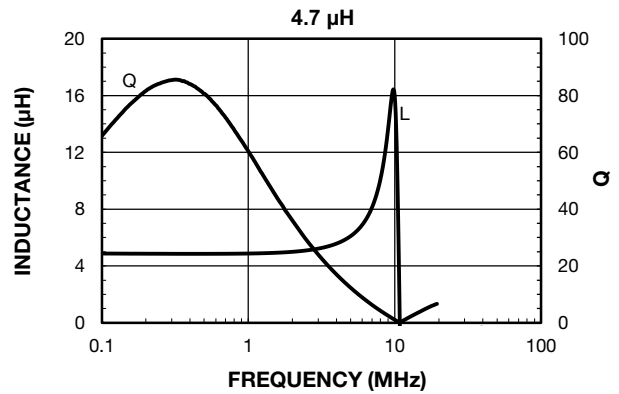
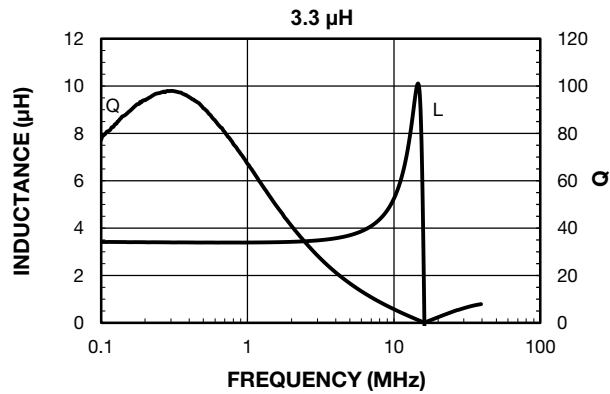


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



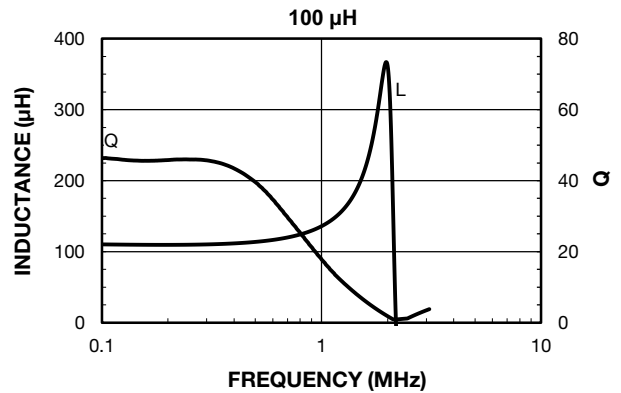
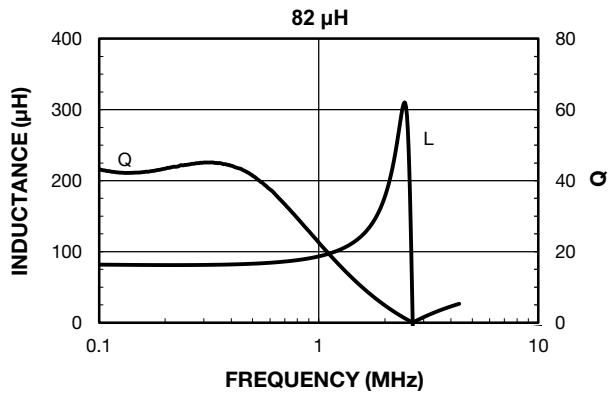
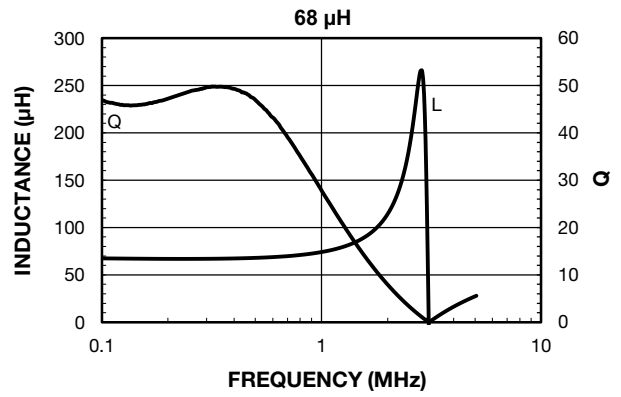
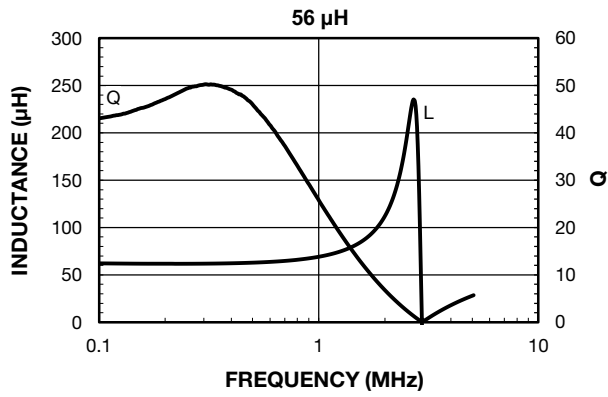
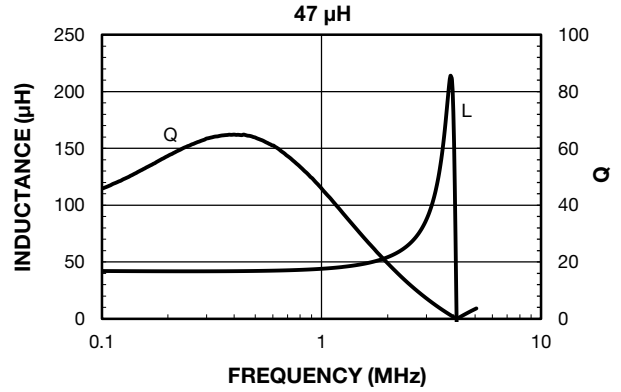
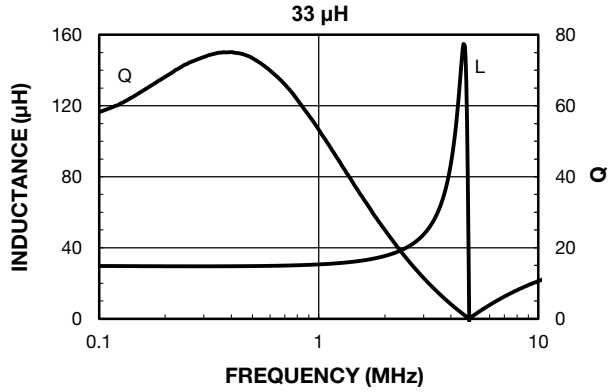


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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