

IHLP® Commercial Inductors, Low DCR Series



DESIGN SUPPORT TOOLS AVAILABLE



RoHS
COMPLIANT
HALOGEN
FREE

FEATURES

- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- Operating temperature up to 125 °C
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- IHLP design. PATENT(S): www.vishay.com/patents
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

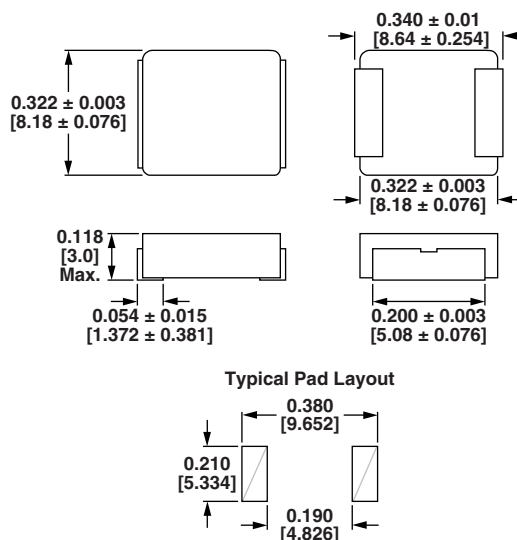
- PDA/notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered device
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)

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)
0.22	1.51	1.62	36.0	24.0	151
0.33	2.22	2.38	27.0	18.0	101
0.47	2.54	2.72	24.0	18.0	69
0.68	3.73	3.99	20.0	15.2	59
0.82	4.55	4.87	18.5	15.0	53
1.0	6.07	6.49	16.0	14.8	51
1.5	8.29	9.94	12.5	11.3	35
2.2	13.70	14.70	10.4	10.4	30
4.7	26.70	28.60	7.6	5.4	21
6.8	35.30	37.80	6.5	5.0	17
8.2	43.60	46.70	5.9	4.2	16
10	51.50	55.10	5.3	3.8	12
15	79.70	85.30	4.3	3.8	11
22	123.0	132.0	3.6	2.8	7.7
33	166.0	177.0	3.1	2.1	5.6

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]



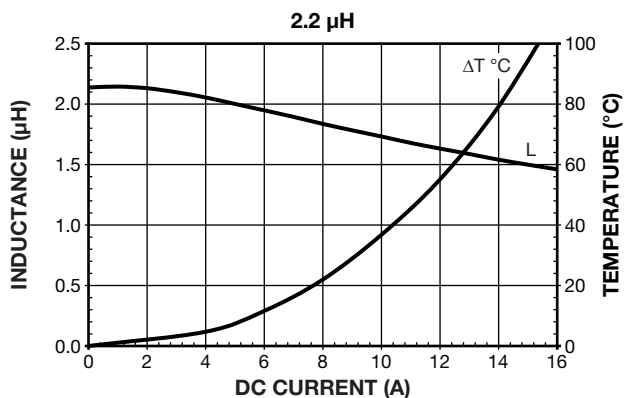
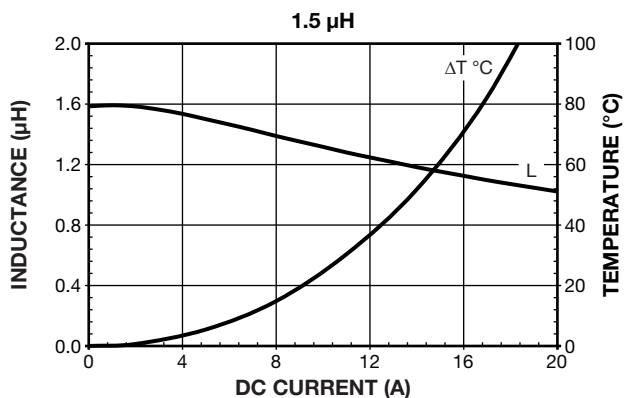
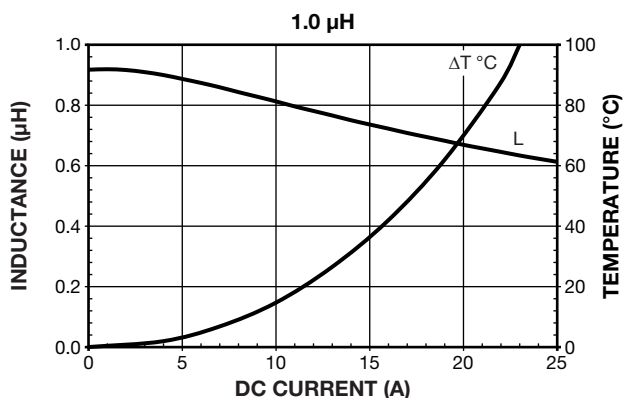
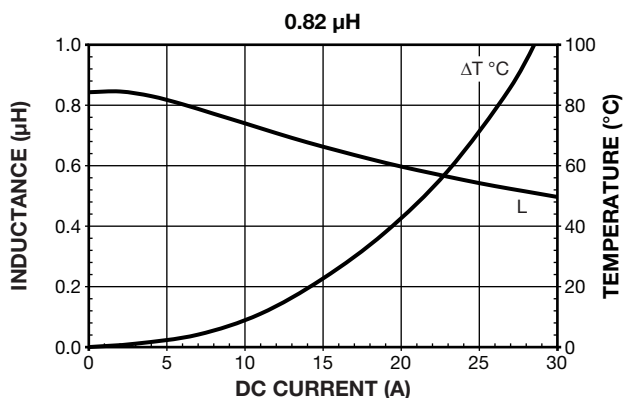
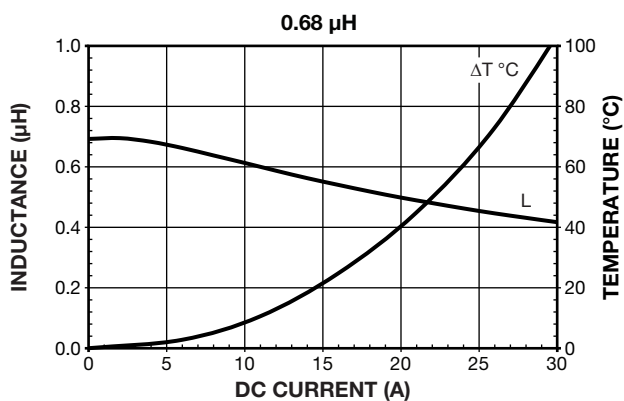
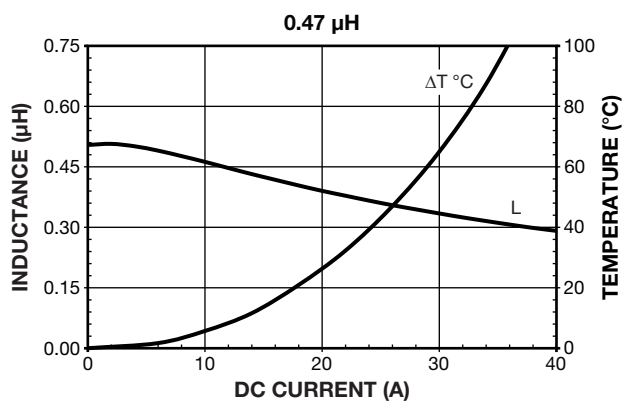
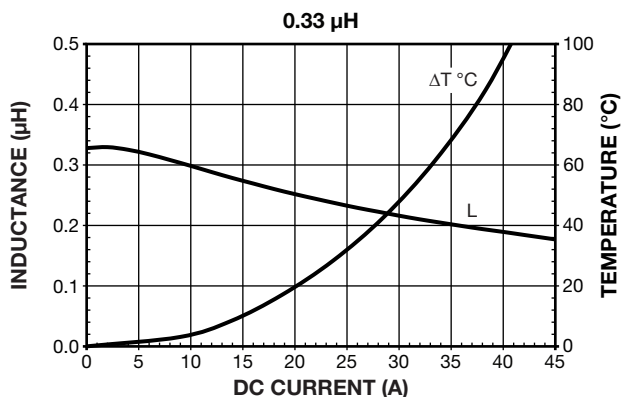
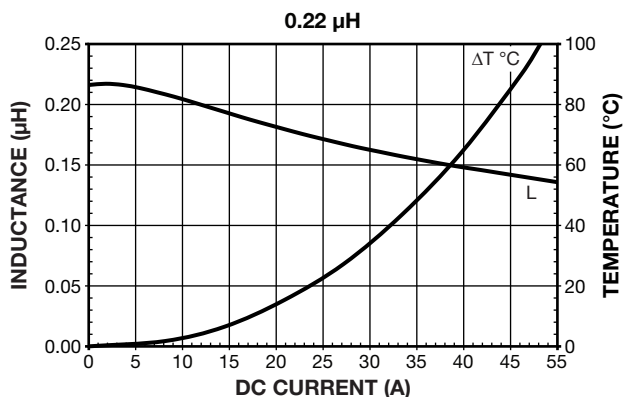
DESCRIPTION																	
IHLP-3232CZ-11		4.7 μH	± 20 %		ER		e3										
MODEL		INDUCTANCE VALUE	INDUCTANCE TOLERANCE		PACKAGE CODE		JEDEC® LEAD (Pb)-FREE STANDARD										
GLOBAL PART NUMBER																	
I	H	L	P	3	2	3	2	C	Z	E	R	4	R	7	M	1	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

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

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

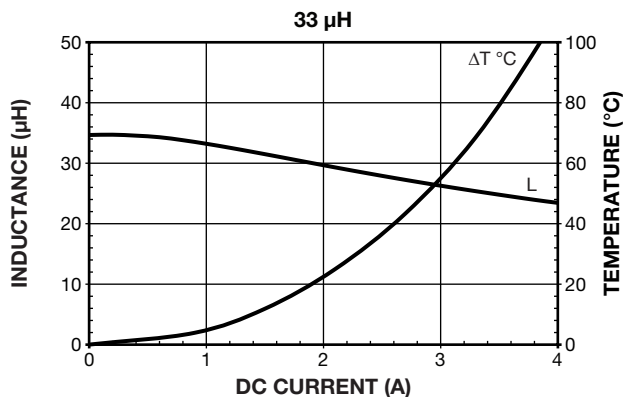
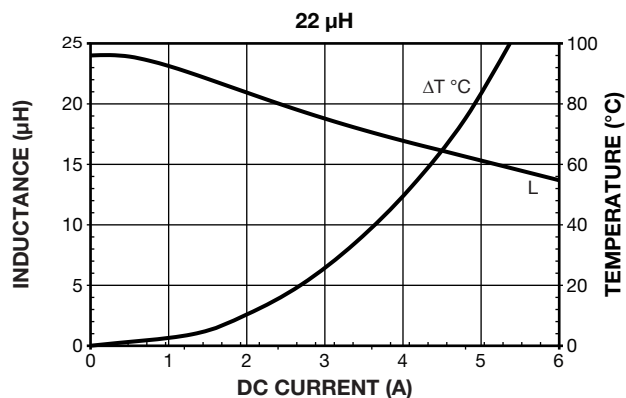
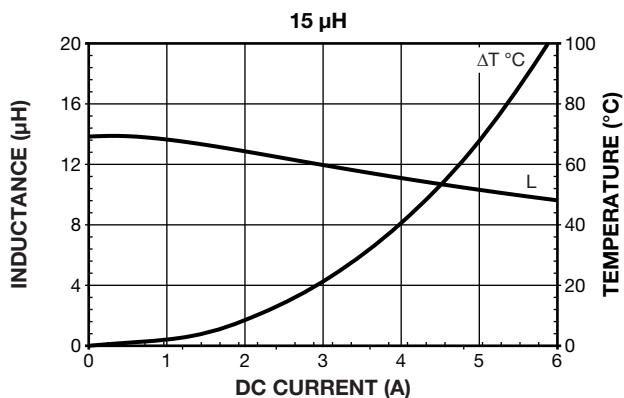
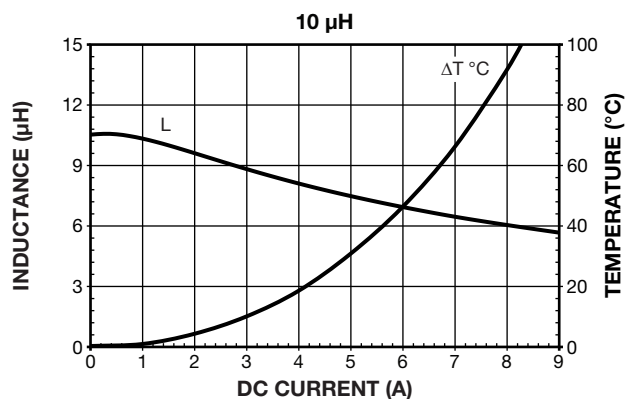
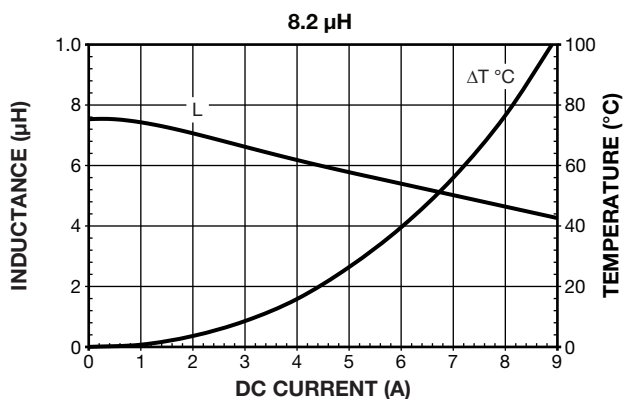
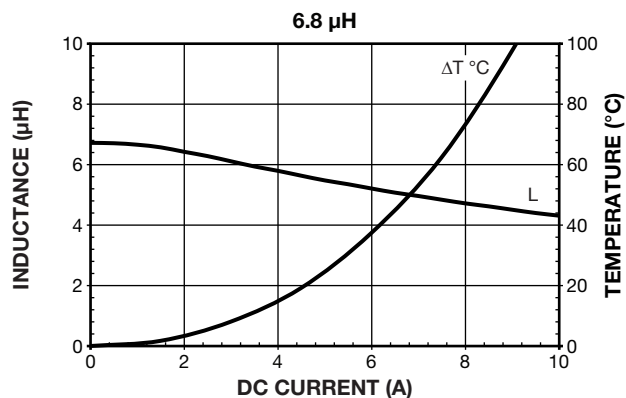
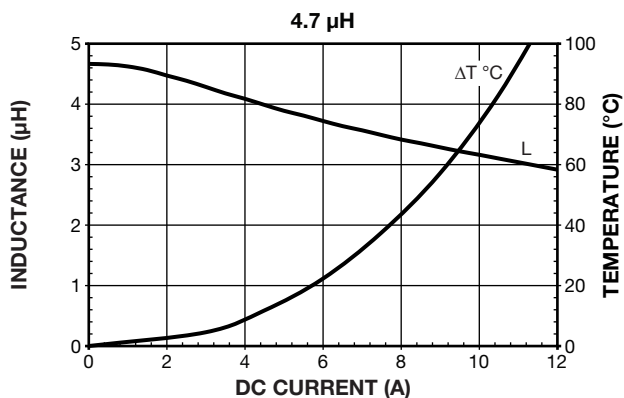


PERFORMANCE GRAPHS



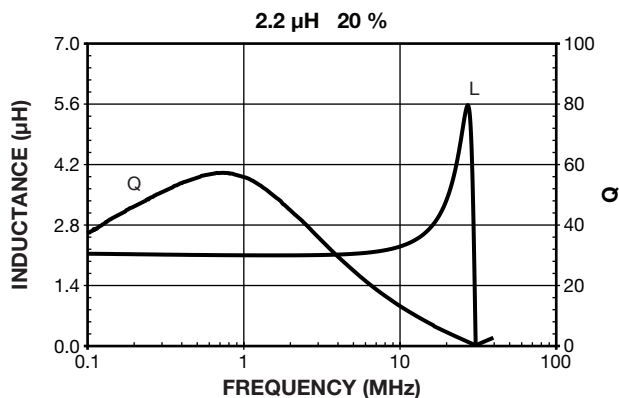
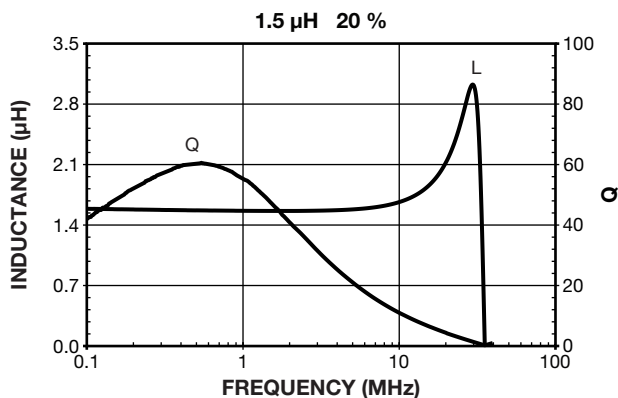
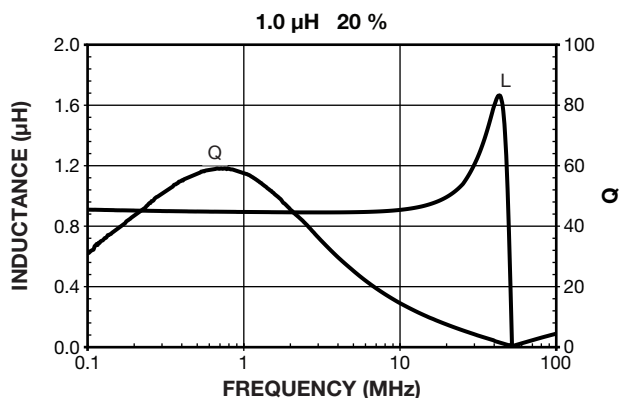
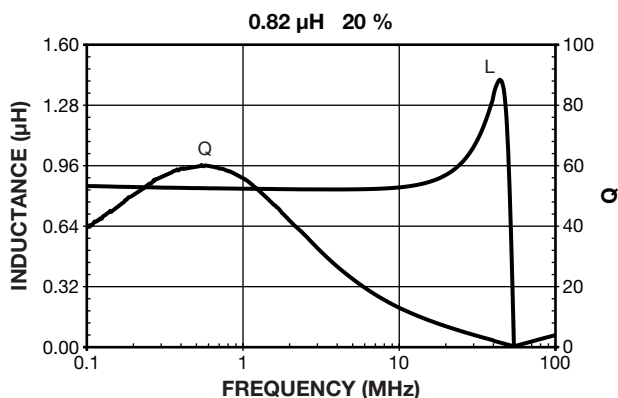
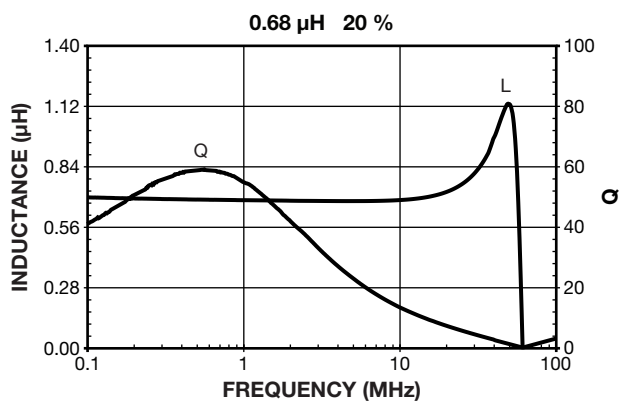
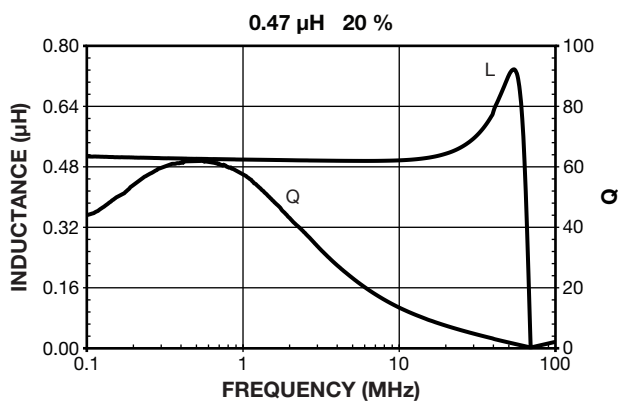
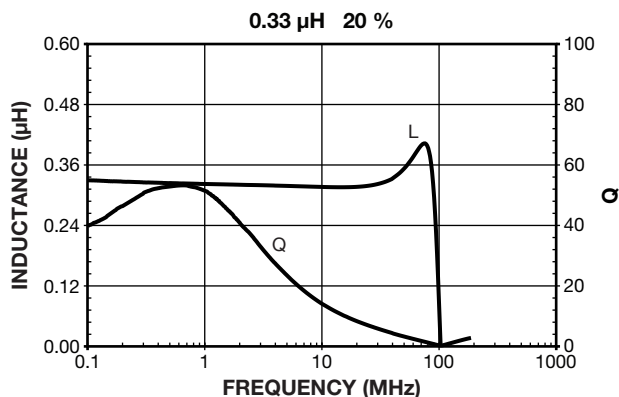
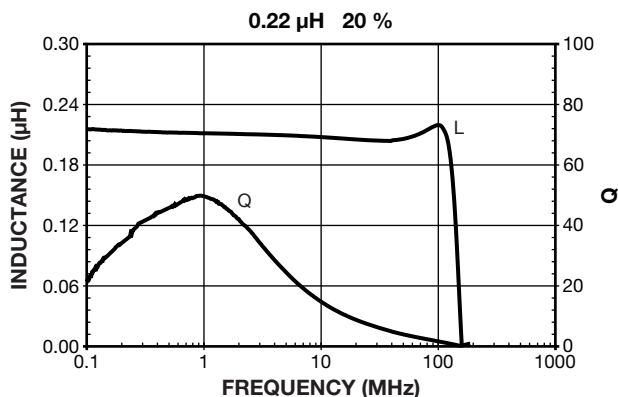


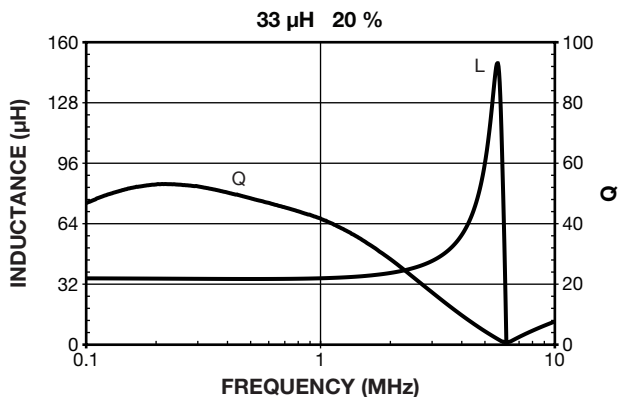
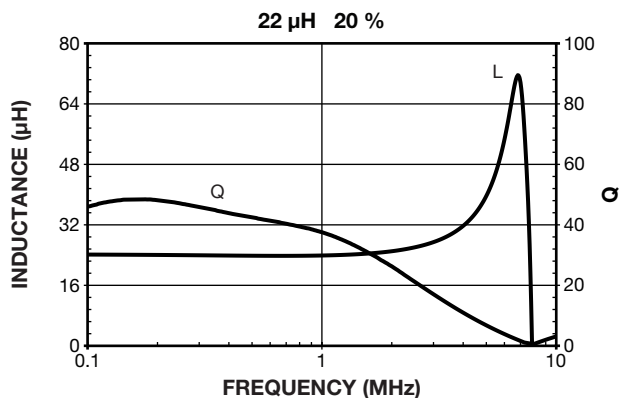
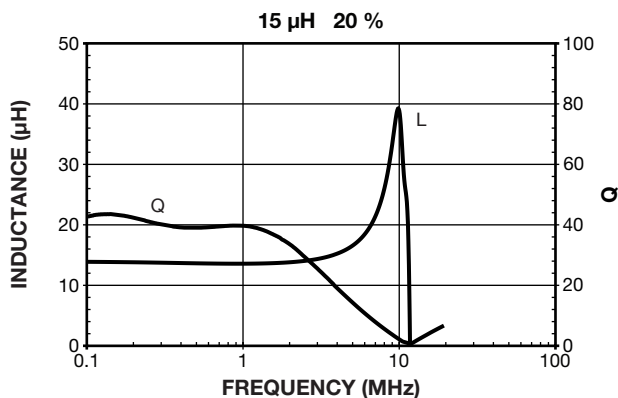
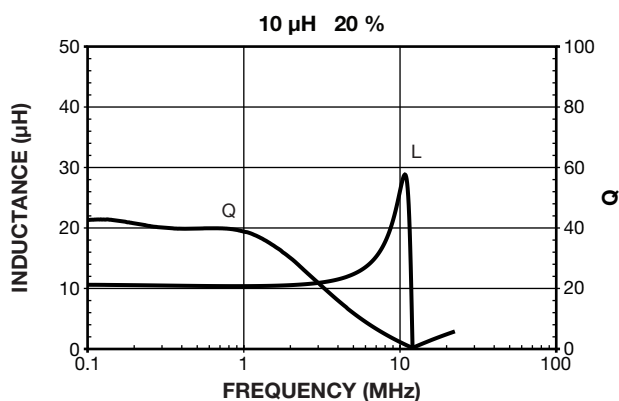
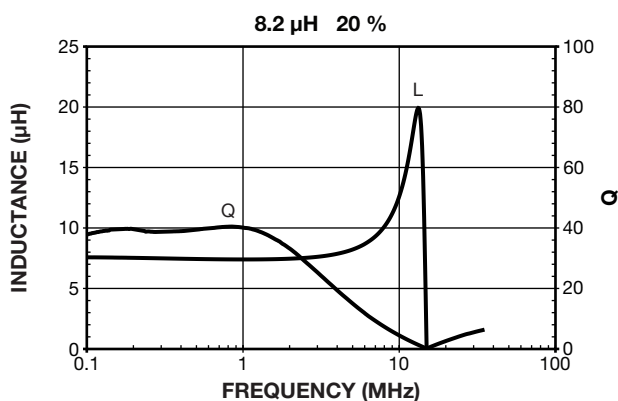
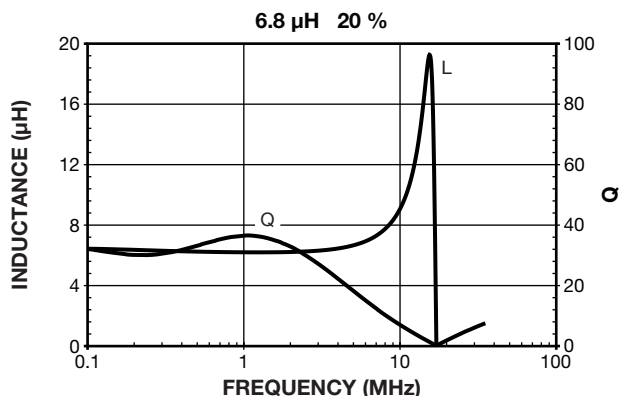
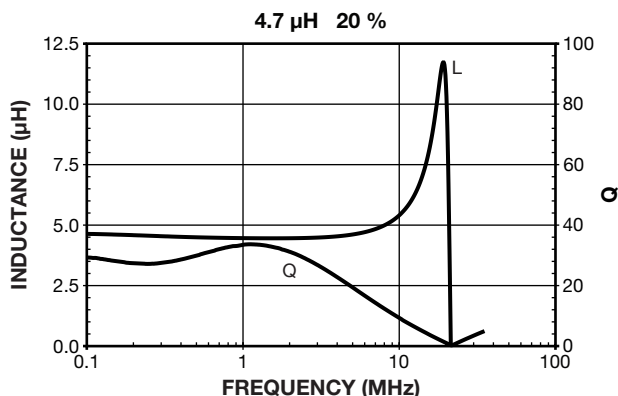
PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY




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