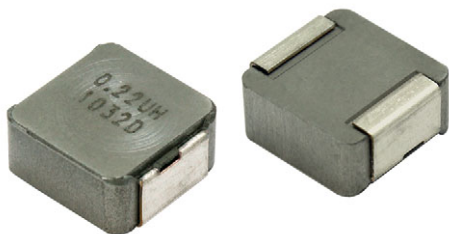




IHLP® Automotive Inductors, High Temperature (180 °C) Series



LINKS TO ADDITIONAL RESOURCES



Calculators

STANDARD ELECTRICAL SPECIFICATIONS					
L_0 INDUCTANCE $\pm 20\%$ AT 100 kHz, 0.25 V, 0 A (μ H)	DCR TYP. 25 °C (m Ω)	DCR MAX. 25 °C (m Ω)	HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾	SRF TYP. (MHz)
0.22	1.68	1.86	36.0	32.0	117
0.47	2.38	2.55	27.0	19.0	77
0.68	3.30	3.53	21.5	16.2	51
0.82	3.70	4.00	20.0	16.0	49
1.0	4.58	4.90	19.0	16.2	45
1.5	6.78	7.25	15.5	14.0	35
2.2	11.70	12.50	11.5	14.0	32
3.3	15.40	16.48	10.6	11.8	23
4.7	26.60	28.46	7.2	9.1	18
5.6	29.60	31.67	6.9	9.0	18
10	50.00	53.50	5.1	5.2	13
15	62.00	66.34	4.8	3.6	10
22	103.00	110.21	3.7	3.8	9
33	149.00	159.43	3.1	3.2	6.1

Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +180 °C
- The part temperature (ambient + temp. rise) should not exceed 180 °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
- ⁽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 %

FEATURES

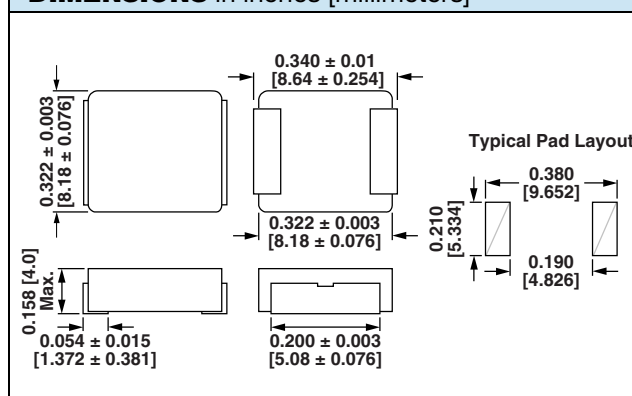
- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- Operating temperature up to 180 °C
- Lowest DCR/ μ H, in this package size
- Handles high transient current spikes up to 10 times the current rating, depending on the duration
- Ultra low buzz noise, due to composite construction
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS
COMPLIANTHALOGEN
FREEGREEN
(5-2008)

APPLICATIONS

- Brushless DC motor for auto EGR (exhaust gas recycle) pump
- ADAS (advanced driver-assistance systems)
- Body electronics
 - LED lighting
 - Infotainment / driver information
 - Mirror / window / door soft close control
- EMI filter up to 180 °C
- Storage inductors for GaN switched-mode power supply applications

DIMENSIONS in inches [millimeters]





DESCRIPTION

IHLP3232DZ-8A	10 μH	± 20 %	EK	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I H L P	3 2 3 2 D Z	E K	1 0 0	M	8 A
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EK = tape and reel	100 = 10 μ H	M = ± 20 %	

PACKAGE CODE OPTIONS

EK = tape and reel packaging (1250 pcs on 13-inch reel)

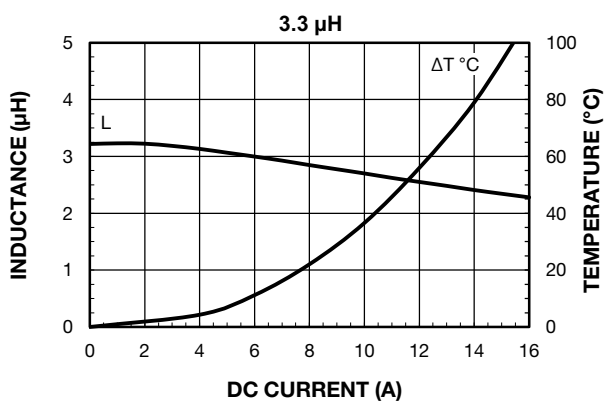
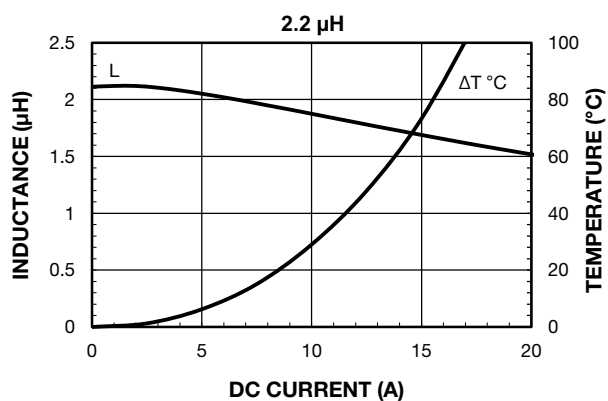
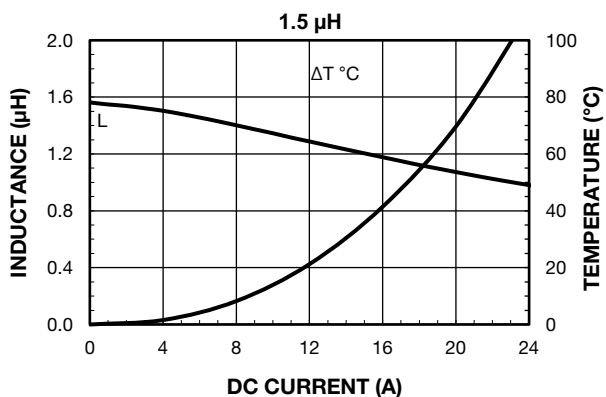
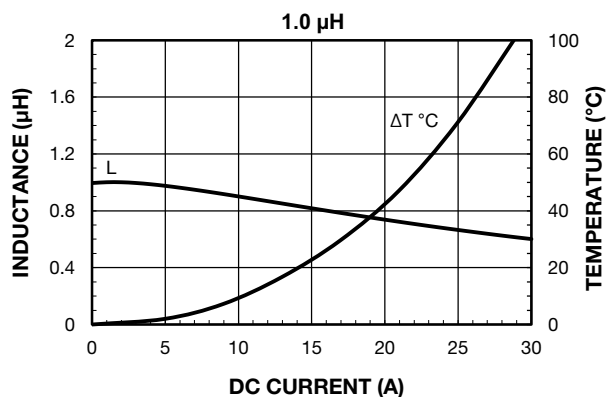
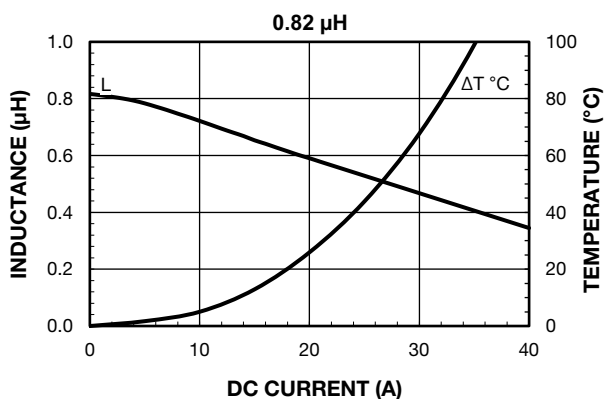
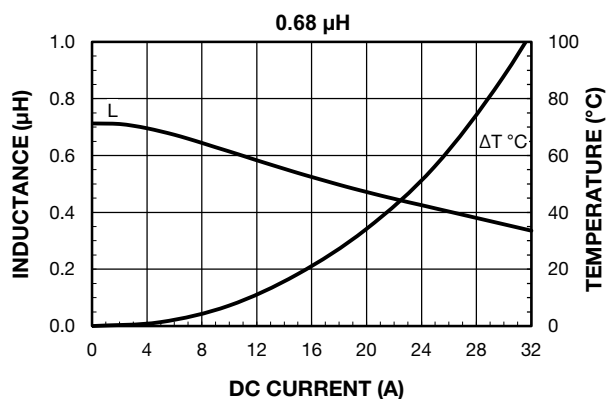
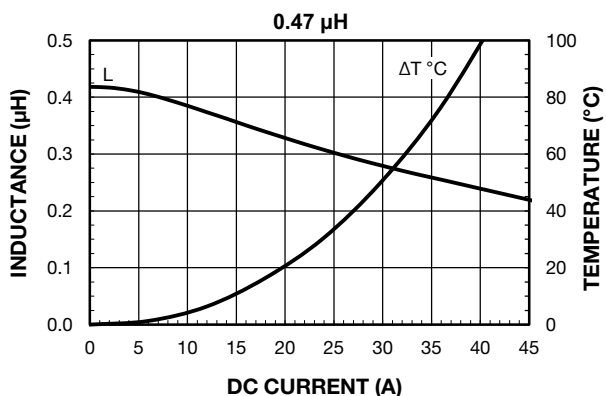
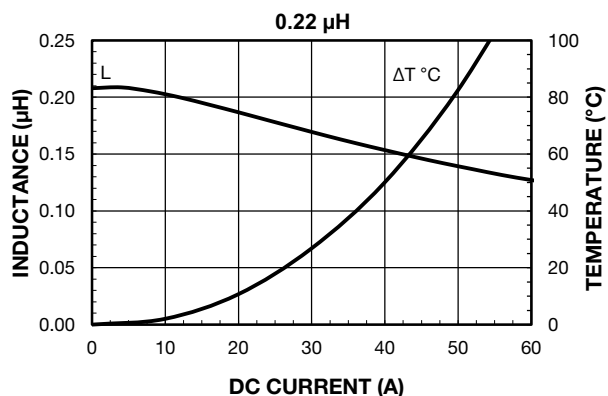
ER = tape and reel packaging (500 pcs on 13-inch reel)

Note

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

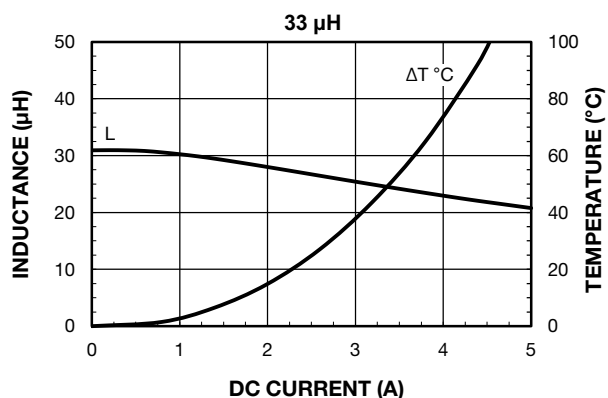
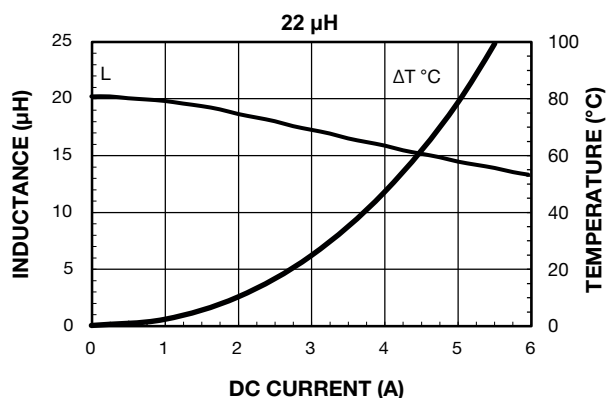
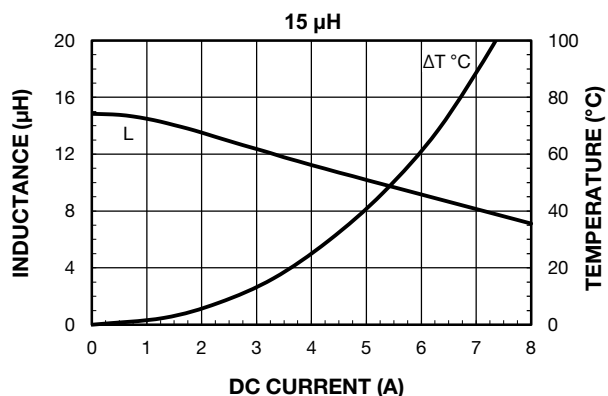
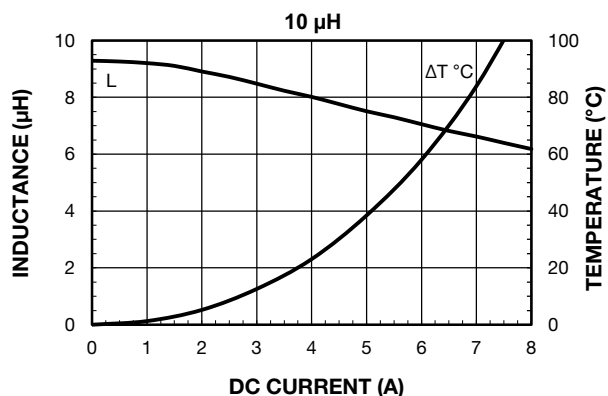
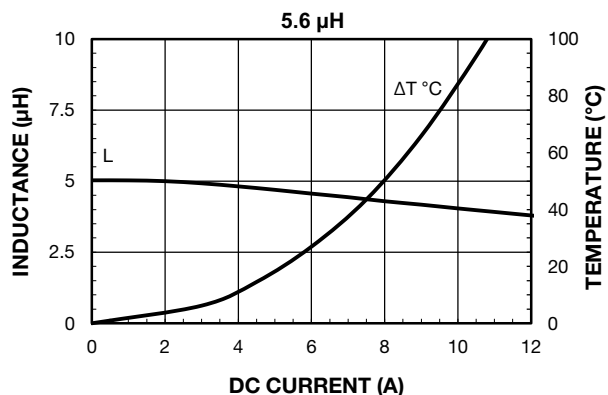
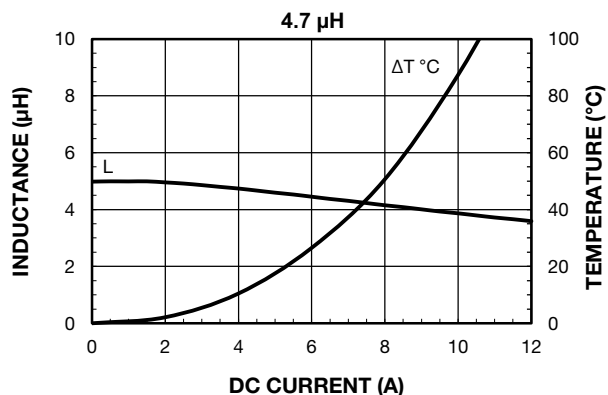


PERFORMANCE GRAPHS



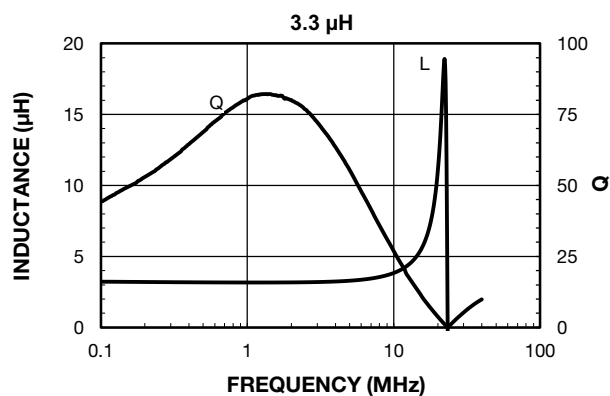
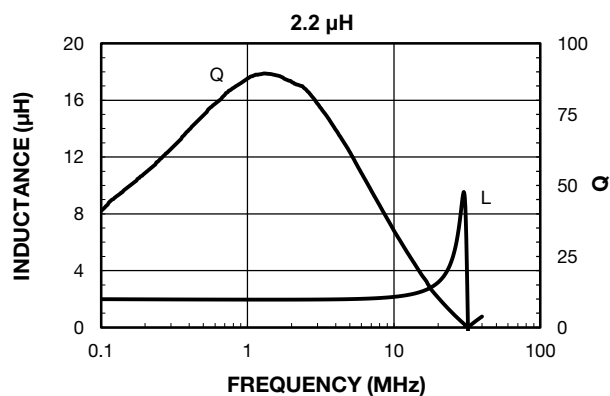
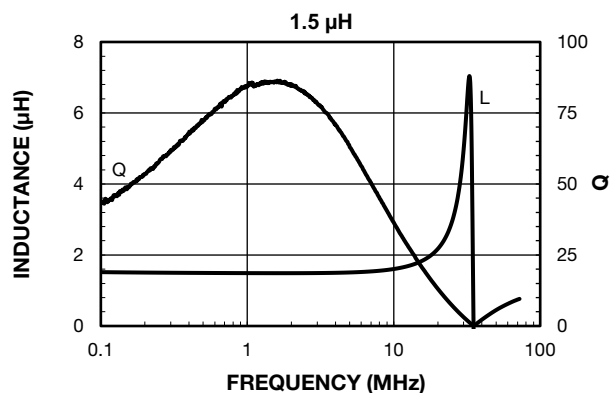
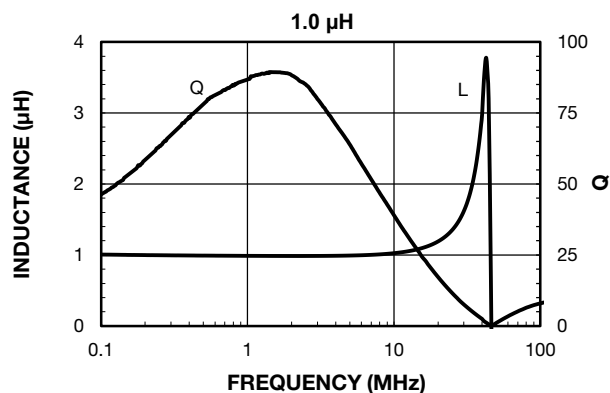
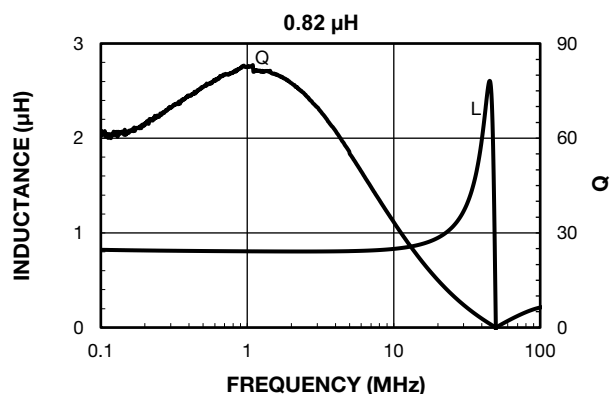
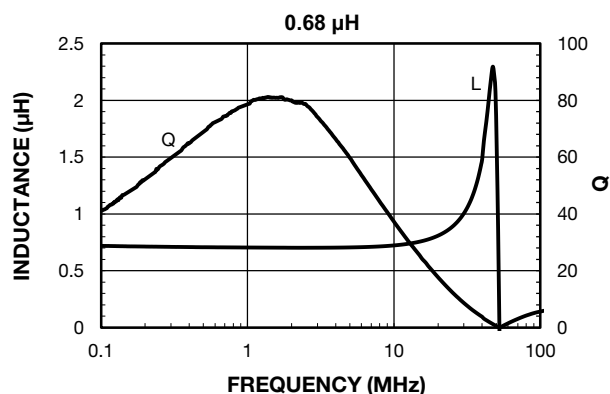
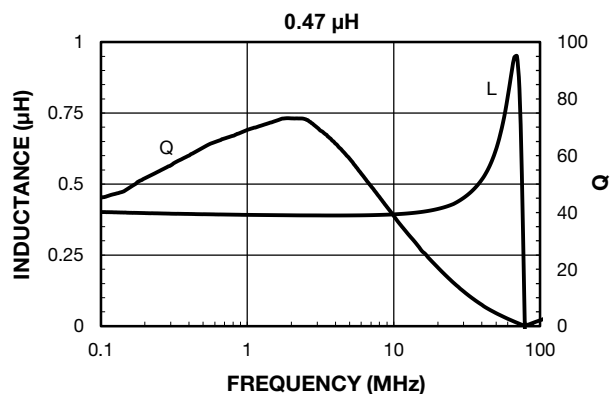
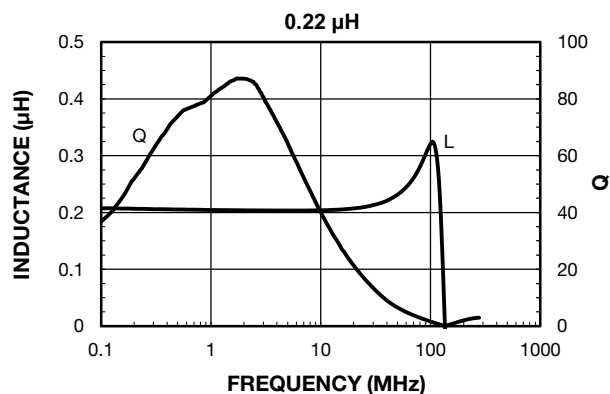


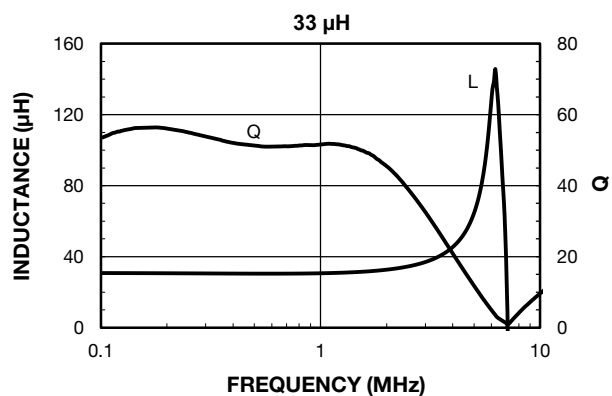
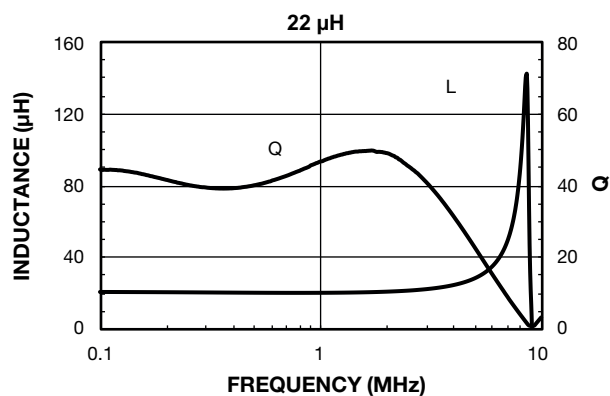
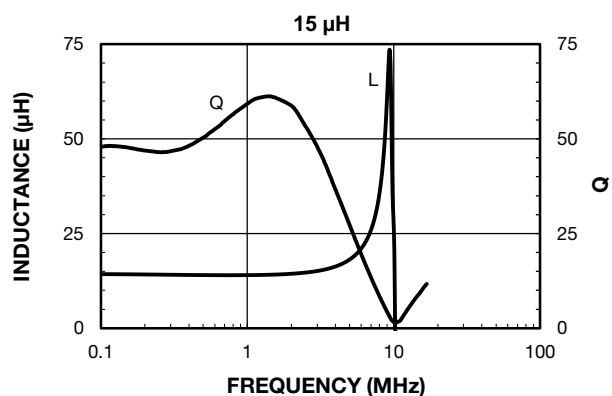
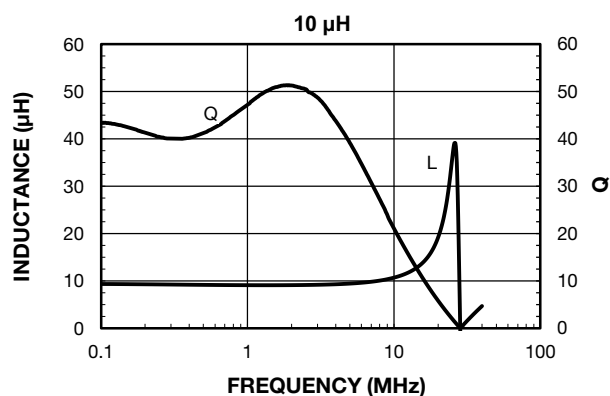
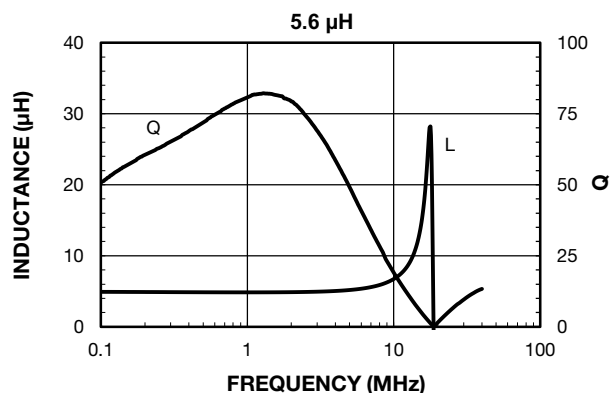
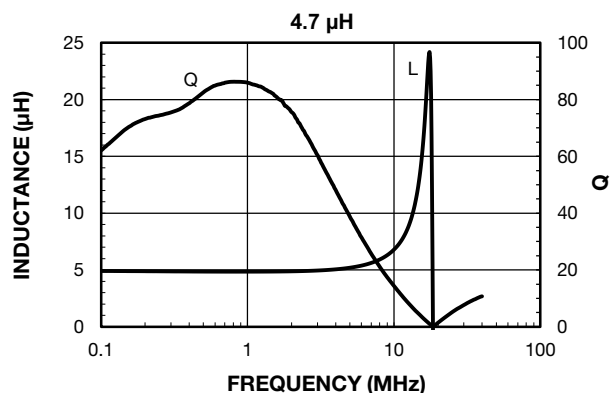
PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY




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