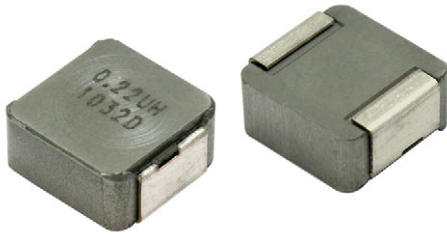




IHLP® Automotive Inductors, High Temperature (155 °C) Series



FEATURES

- Magnetically shielded construction
- Operating temperature up to 155 °C
- Handles high transient current spikes without saturation
- 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
COMPLIANT

HALOGEN
FREE

GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



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 blower / HID lighting
- LED drivers

STANDARD ELECTRICAL SPECIFICATIONS

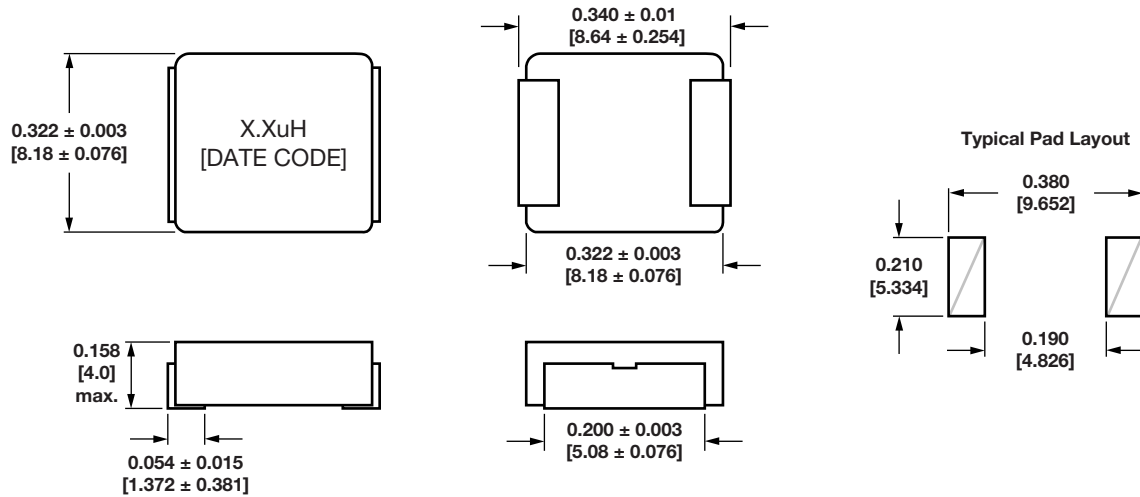
PART NUMBER	L ₀ INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP. (A)		SRF TYP. (MHz)
					20 % DROP ⁽²⁾	30 % DROP ⁽³⁾	
IHLP3232DZE_R22M5A	0.22	1.68	1.86	36	32	44	117
IHLP3232DZE_R47M5A	0.47	2.38	2.55	27	19	24	77
IHLP3232DZE_R68M5A	0.68	3.3	3.53	21.5	12	17	51
IHLP3232DZE_R82M5A	0.82	3.7	4	20	15	22	49
IHLP3232DZE_1R0M5A	1.0	4.58	4.9	19	15	22	45
IHLP3232DZE_1R5M5A	1.5	6.78	7.25	15.5	14	20	35
IHLP3232DZE_2R2M5A	2.2	11.7	12.5	11.5	14	20	32
IHLP3232DZE_3R3M5A	3.3	15.4	16.48	10.6	11.8	16	23
IHLP3232DZE_4R7M5A	4.7	26.6	28.46	7.2	9.1	12	18
IHLP3232DZE_5R6M5A	5.6	29.6	31.67	6.9	9	12	18
IHLP3232DZE_6R8M5A	6.8	33.5	35.9	6.8	6.3	9.2	15.3
IHLP3232DZE_100M5A	10	50	53.5	5.1	5.2	7	13
IHLP3232DZE_150M5A	15	62	66.34	4.8	3.6	4.5	10
IHLP3232DZE_220M5A	22	103	110.21	3.7	3.8	5	9
IHLP3232DZE_330M5A	33	149	159.43	3.1	3.2	4.2	6.1

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
- (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 %
 (3) DC current (A) that will cause L₀ to drop approximately 30 %



DIMENSIONS in inches [millimeters]



DESCRIPTION

IHLP3232DZ-5A	10 μH	$\pm 20 \%$	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	5 A
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EK = tape and reel	100 = 10 μ H	M = $\pm 20 \%$	

PACKAGE CODE OPTIONS

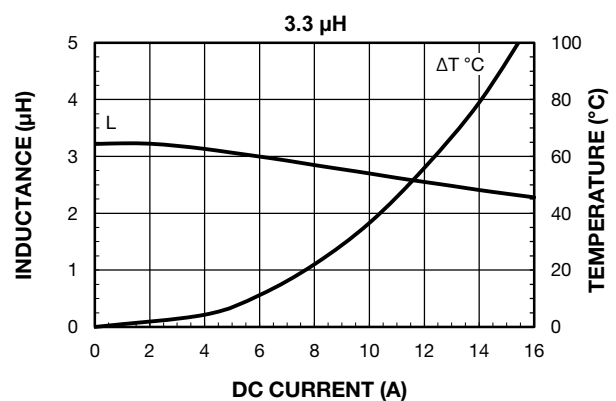
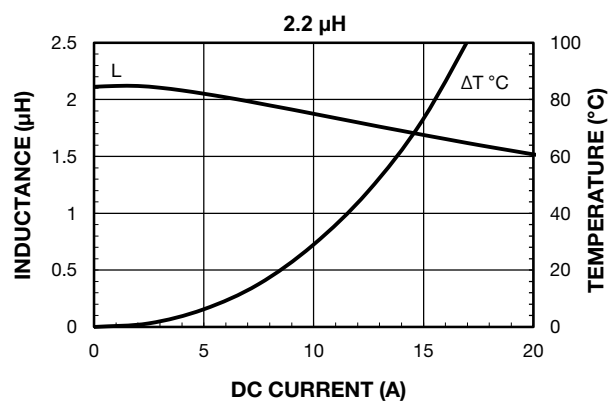
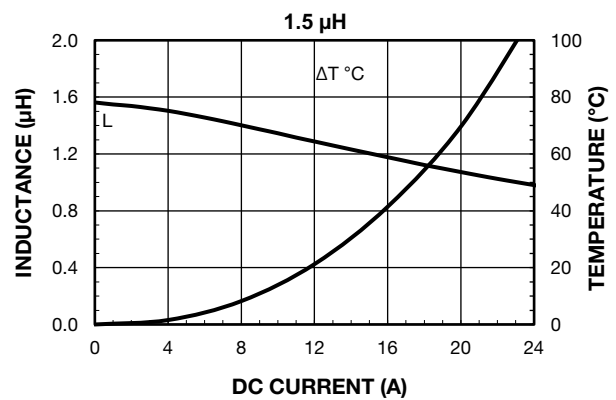
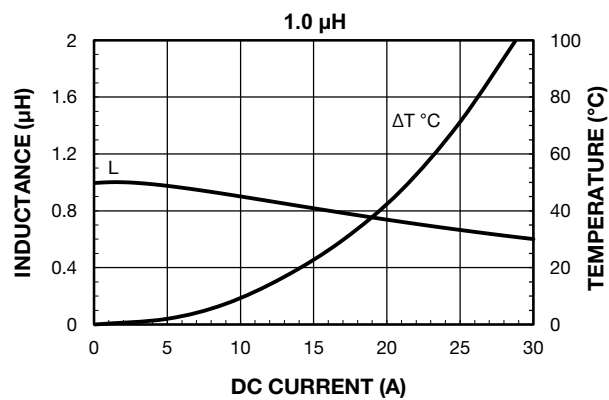
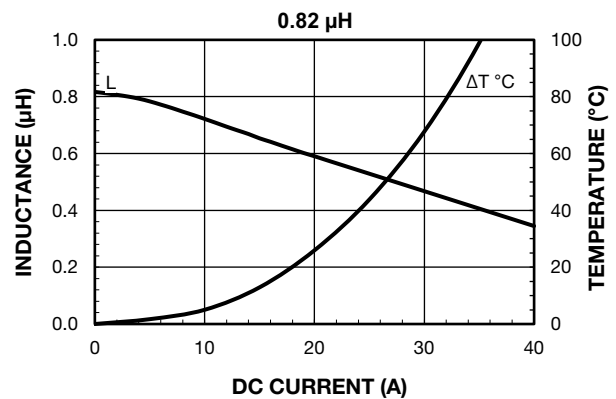
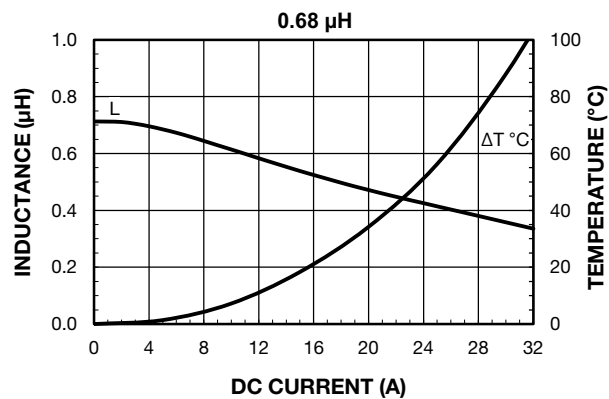
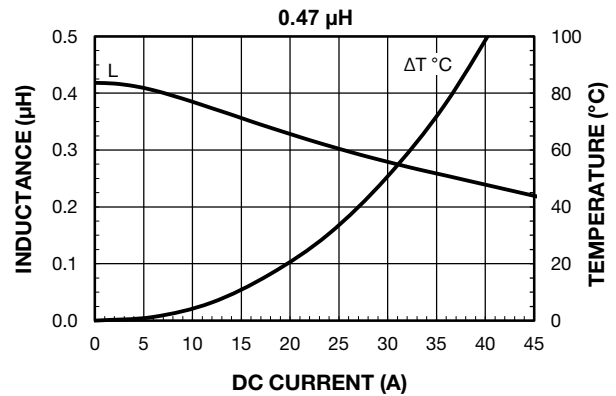
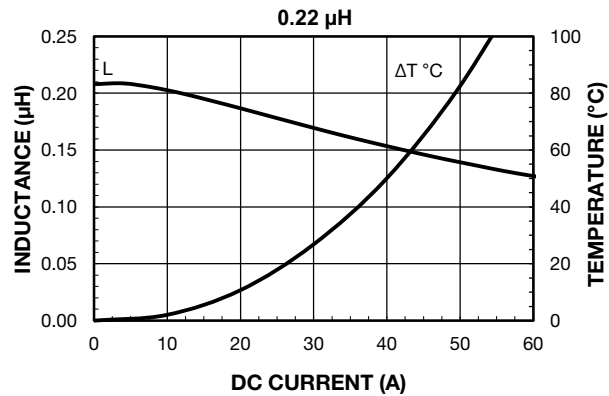
- EK** = tape and reel packaging (1250 pcs on 13-inch reel)
- ER** = tape and reel packaging (500 pcs on 13-inch reel)

Note

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

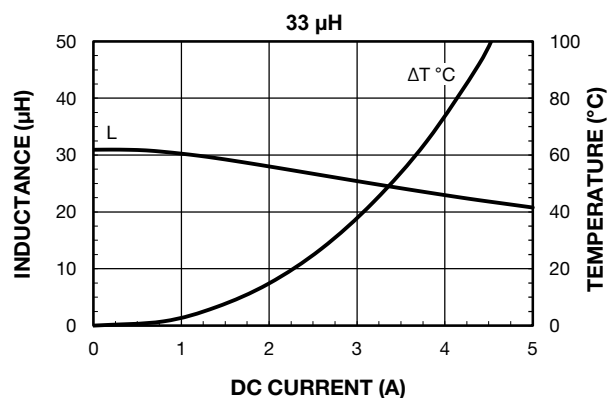
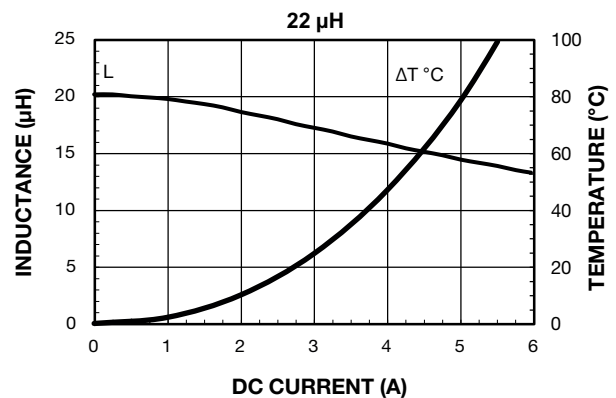
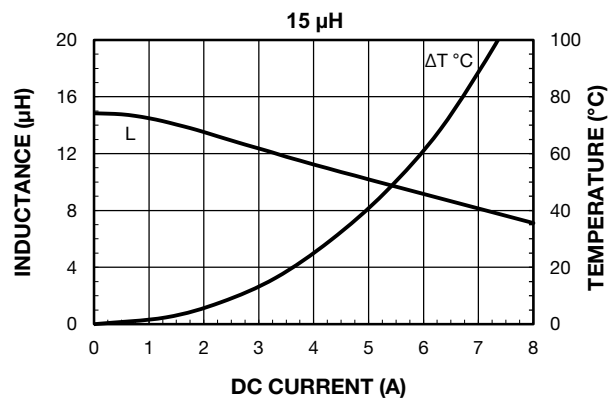
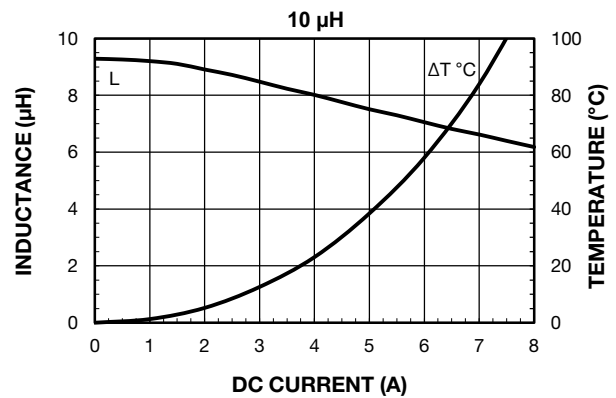
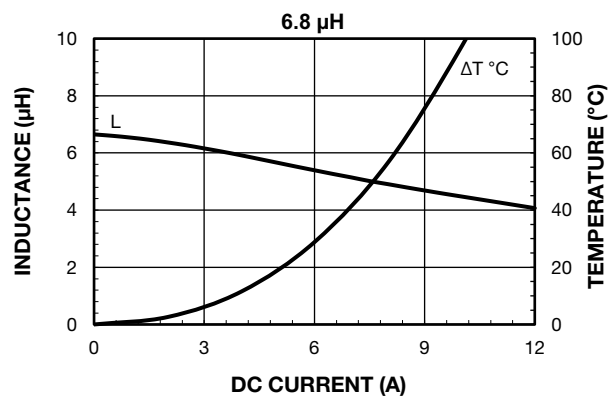
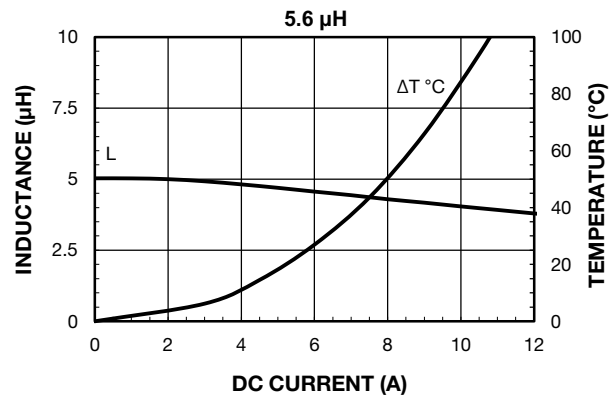
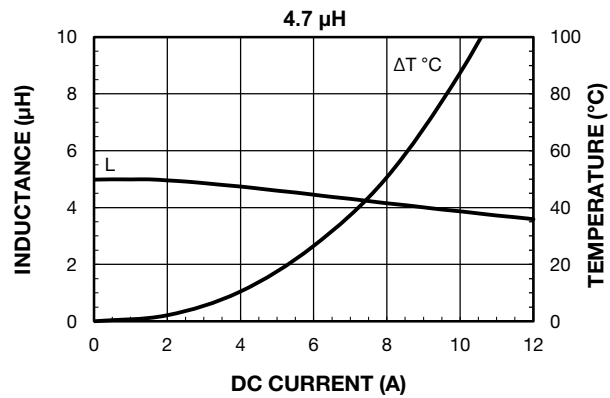


PERFORMANCE GRAPHS



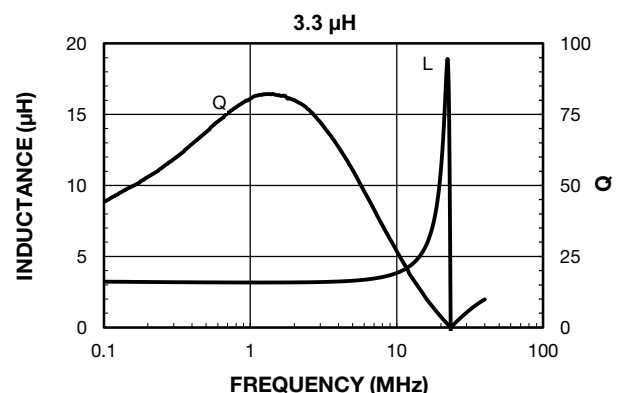
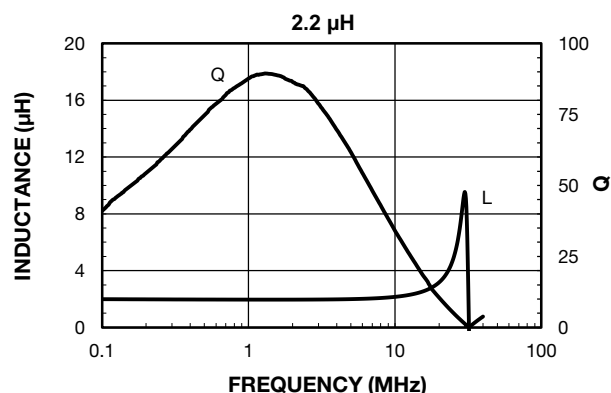
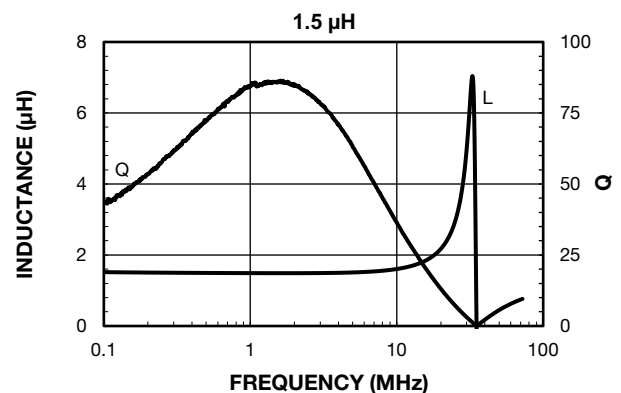
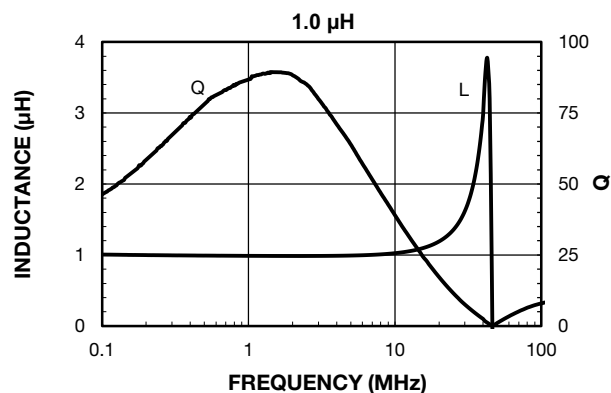
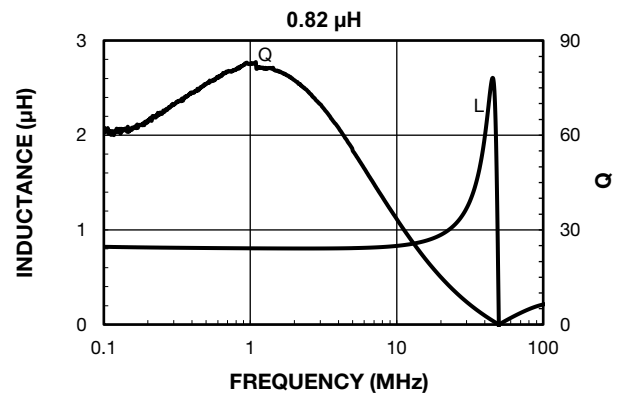
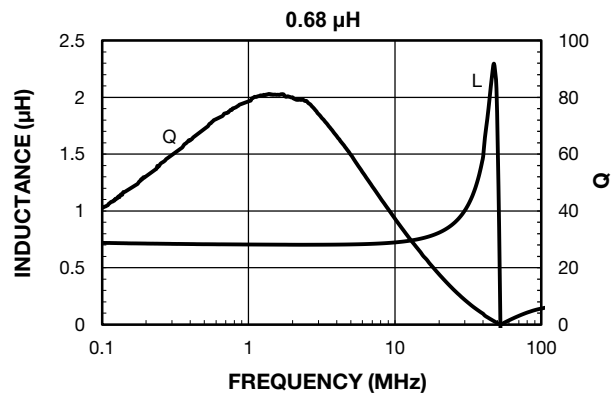
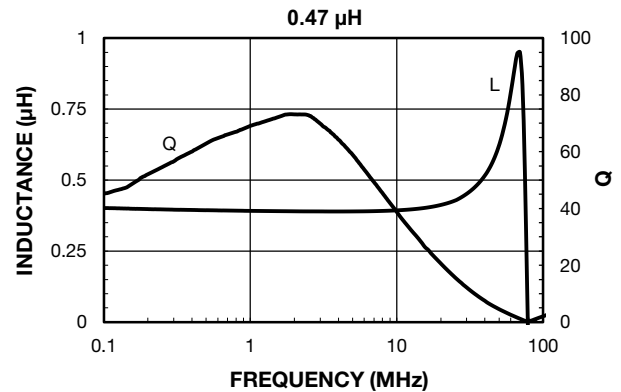
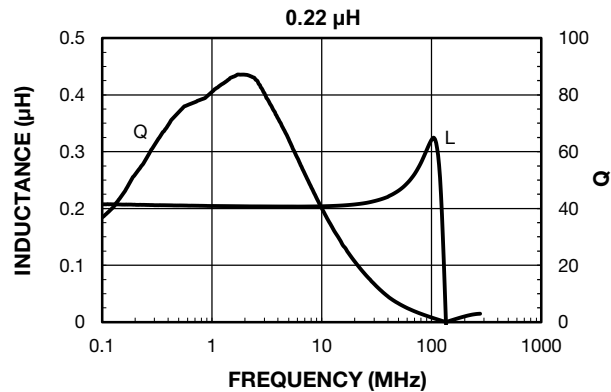


PERFORMANCE GRAPHS



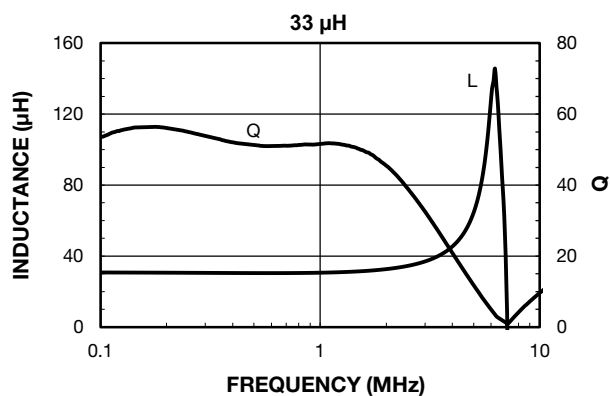
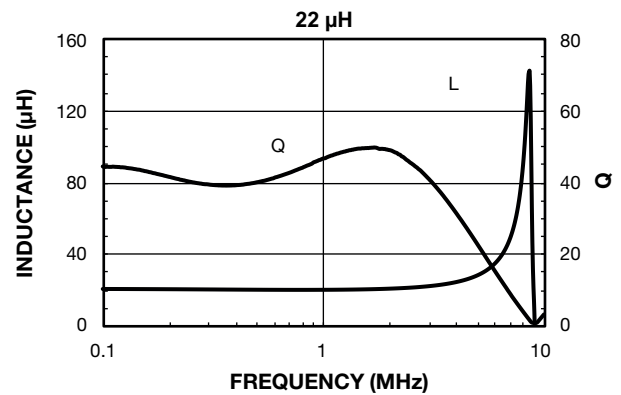
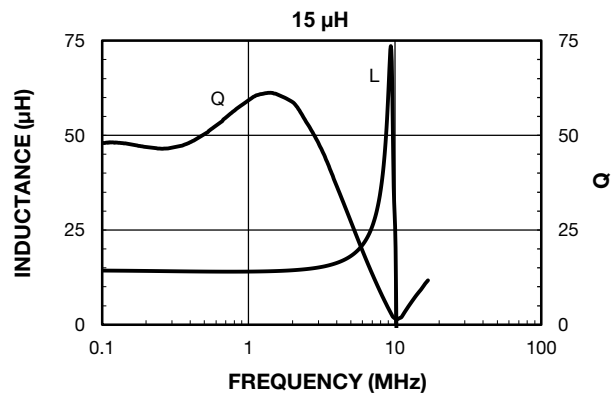
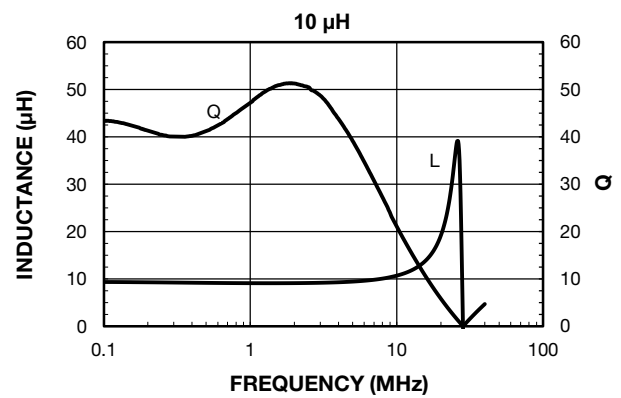
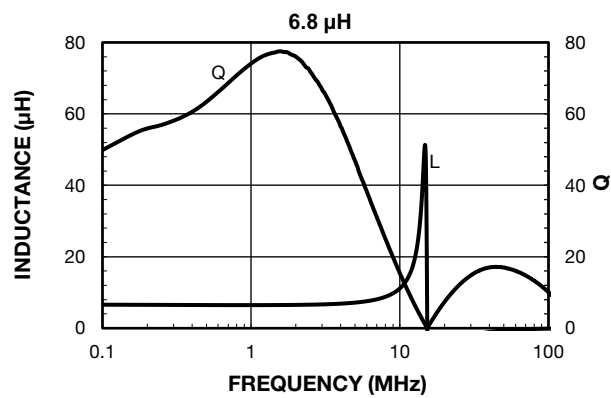
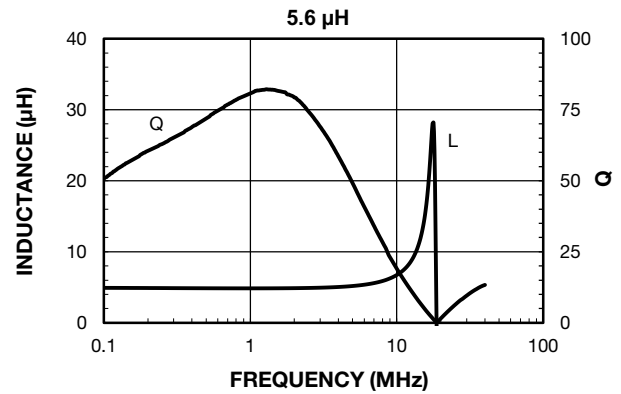
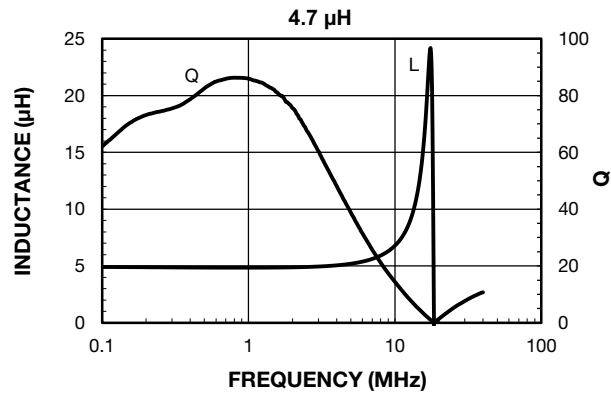


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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