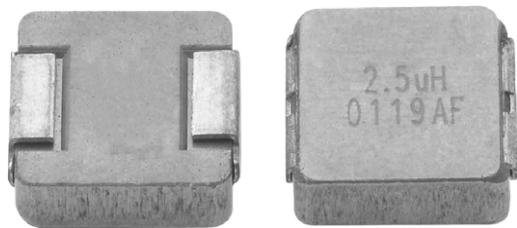


## IHLP® Tin / Lead Inductors, High Saturation Series



### FEATURES

- Lowest height (1.8 mm) in this package footprint
- Shielded construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to SRF (see Standard Electrical Specifications table)
- Lowest DCR/ $\mu$ H, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- 60/40 tin/lead terminations

### LINKS TO ADDITIONAL RESOURCES


[Calculators](#)

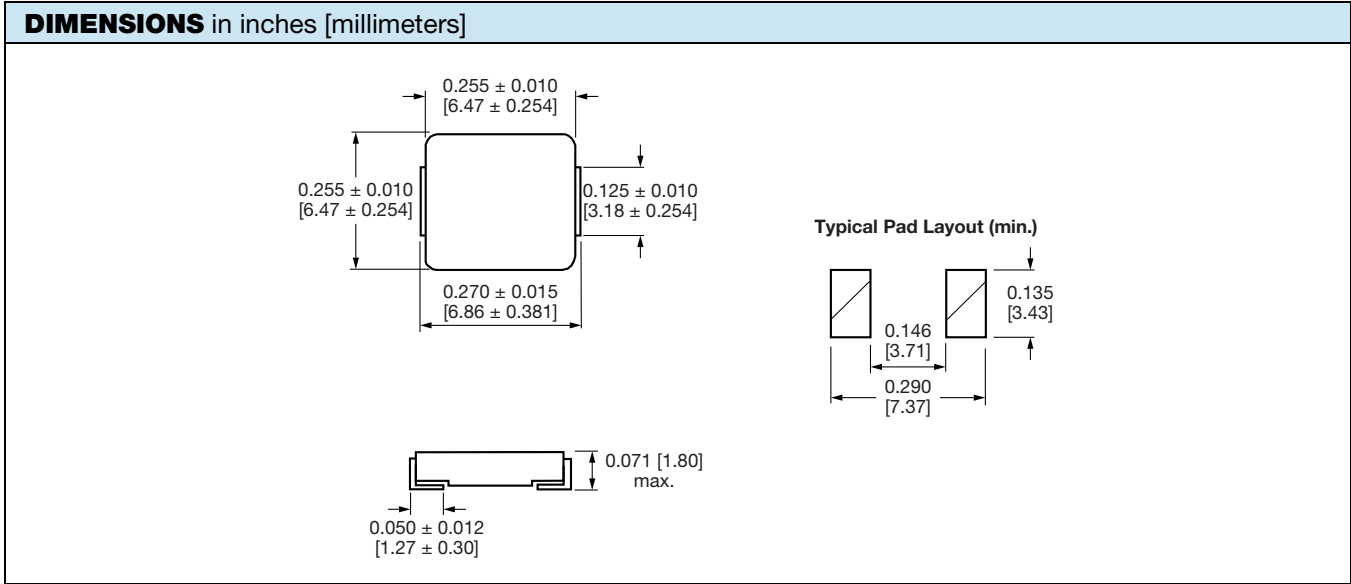
### APPLICATIONS

- 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							
PART NUMBER	L <sub>0</sub> INDUCTANCE $\pm 20\%$ AT 100 kHz, 0.25 V, 0 A ( $\mu$ H)	DCR TYP. 25 °C (m $\Omega$ )	DCR MAX. 25 °C (m $\Omega$ )	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>	
IHLP2525AHRZR10ML1	0.10	3.0	3.5	23.6	38.5	46.3	288
IHLP2525AHRZR15ML1	0.15	4.7	5.2	19.5	29.7	40.0	222
IHLP2525AHRZR22ML1	0.22	5.3	5.7	16.6	25.8	32.4	183
IHLP2525AHRZR33ML1	0.33	6.6	7.0	14.1	21.9	26.1	136
IHLP2525AHRZR47ML1	0.47	8.4	9.3	13.4	17.7	21.6	96
IHLP2525AHRZR68ML1	0.68	12.7	13.9	11.1	17.8	23.7	84
IHLP2525AHRZR82ML1	0.82	13.8	15.9	10.0	15.1	22.3	78
IHLP2525AHRZ1R0ML1	1.0	17.5	18.3	8.8	13.6	17.7	65
IHLP2525AHRZ1R5ML1	1.5	32.6	34.0	6.5	10.5	14.3	50
IHLP2525AHRZ2R2ML1	2.2	40.3	46.0	6.0	8.9	12.4	43
IHLP2525AHRZ2R5ML1	2.5	49.9	52.4	5.3	10.0	12.5	37
IHLP2525AHRZ3R3ML1	3.3	56.2	60.1	5.1	8.2	10.4	36
IHLP2525AHRZ4R7ML1	4.7	76.6	78.0	4.4	6.2	8.6	25

#### 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) = 75 V
- (1) DC current (A) that will cause an approximate  $\Delta T$  of 40 °C  
 (2) DC current (A) that will cause L<sub>0</sub> to drop approximately 20 %  
 (3) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %

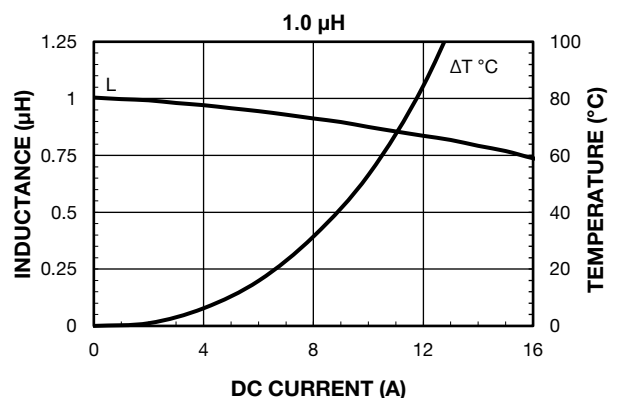
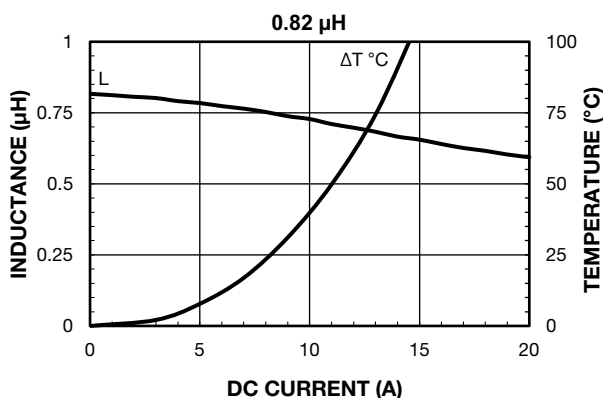
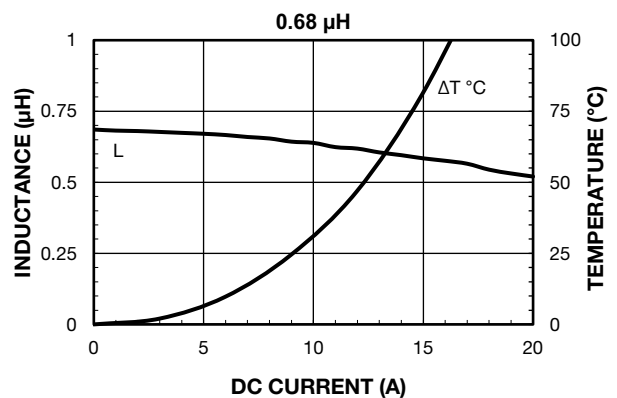
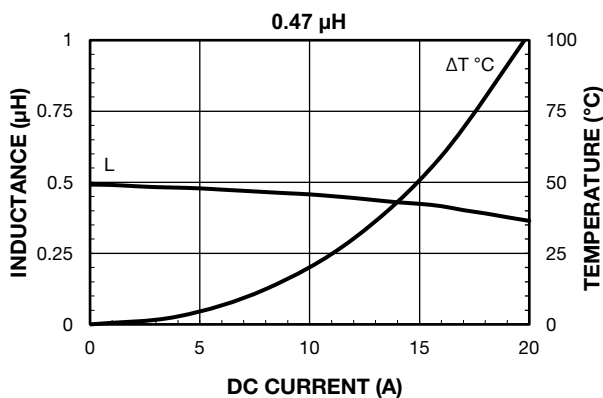
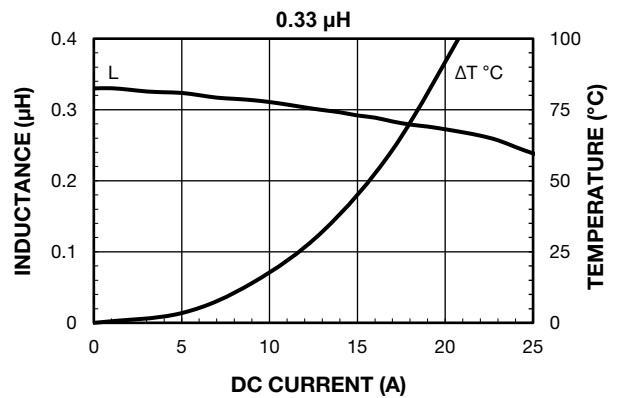
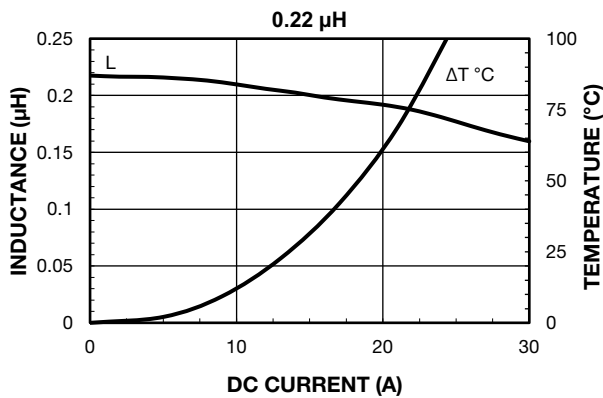
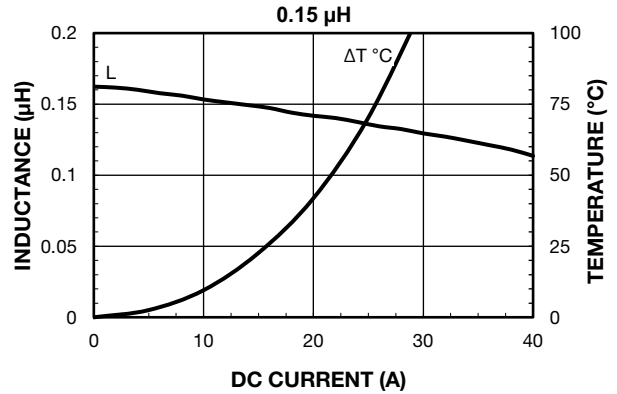
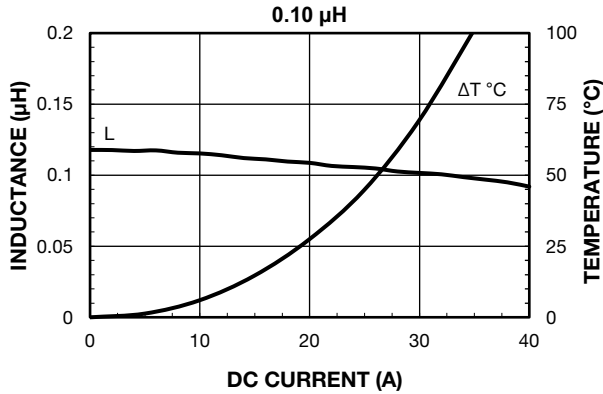


DESCRIPTION			
<b>IHLP-2525AH-L1</b>	<b>1.0 μH</b>	<b>± 20 %</b>	<b>RZ</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE

GLOBAL PART NUMBER					
<b>I H L P</b>	<b>2 5 2 5 A H</b>	<b>R Z</b>	<b>1 R 0</b>	<b>M</b>	<b>L 1</b>
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE	INDUCTANCE TOLERANCE	SERIES
		<b>RZ = tape and reel</b>	<b>1R0 = 1.0 μH</b>	<b>M = ± 20 %</b>	

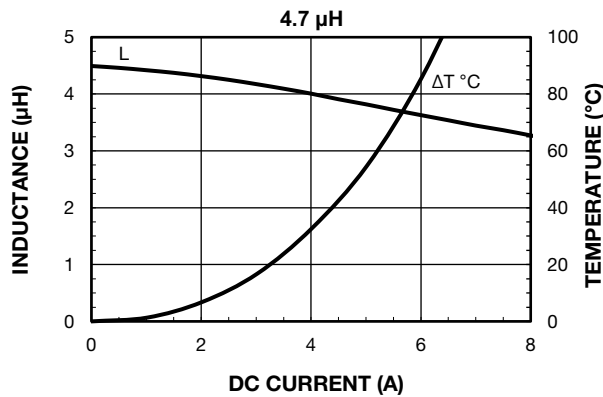
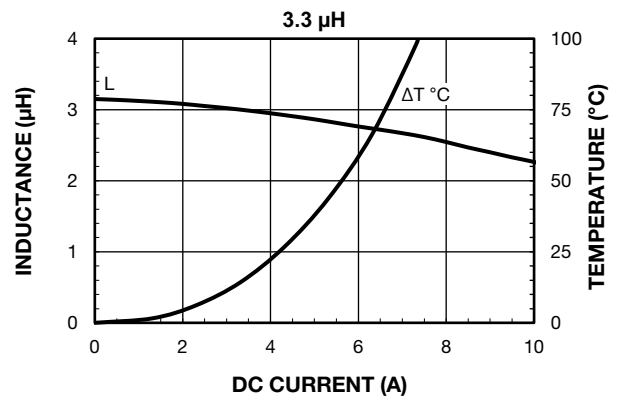
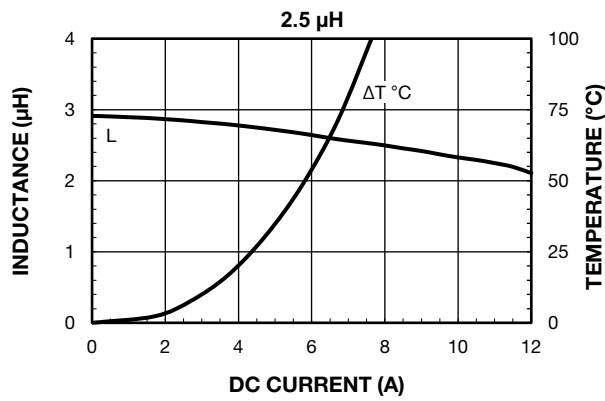
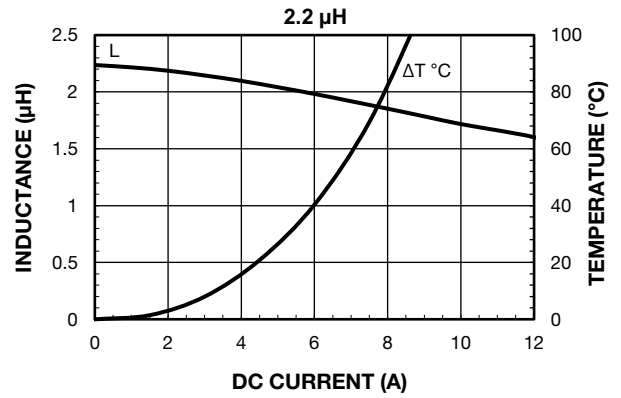
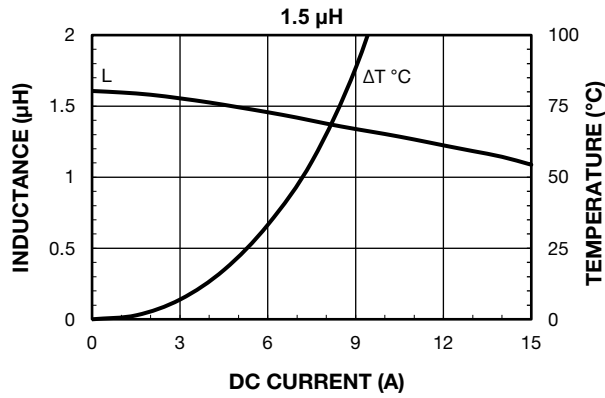


PERFORMANCE GRAPHS



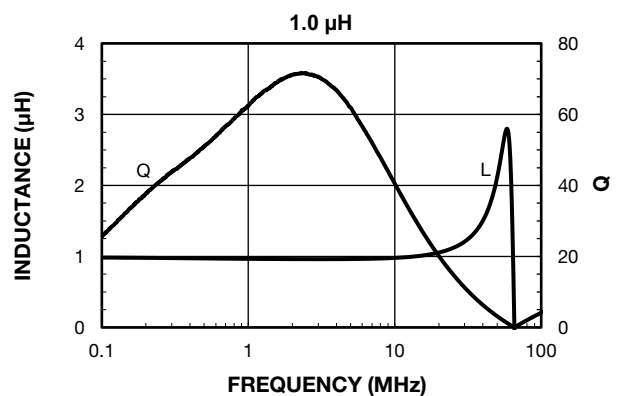
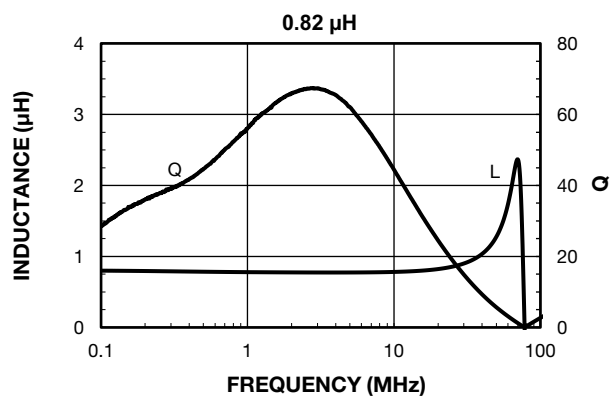
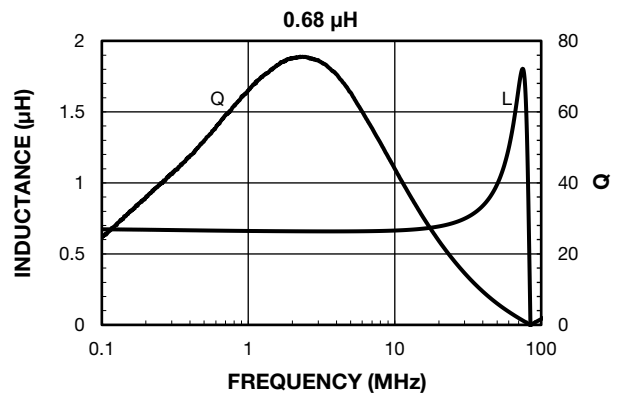
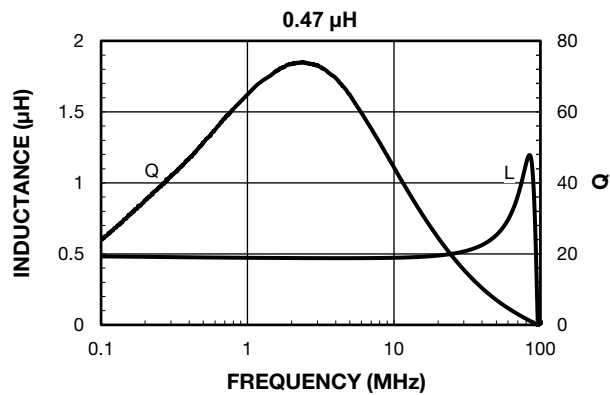
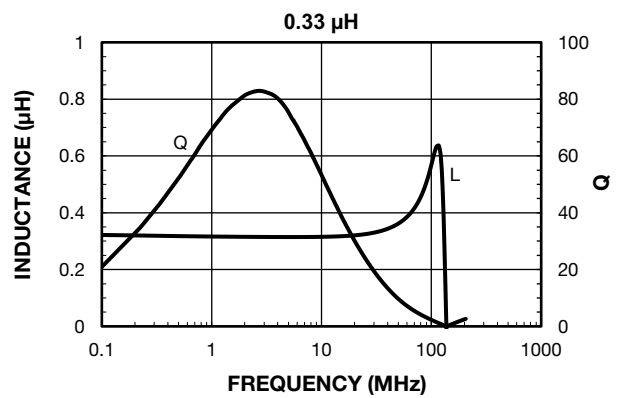
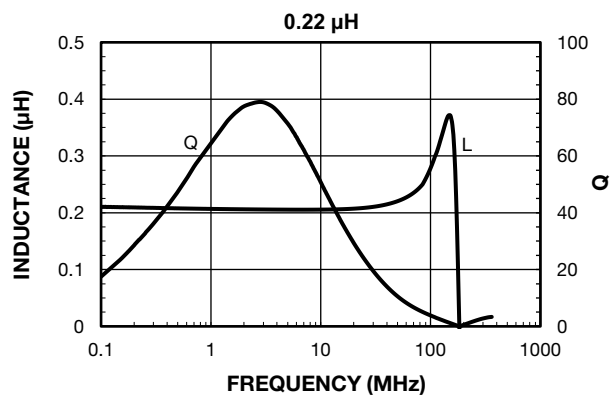
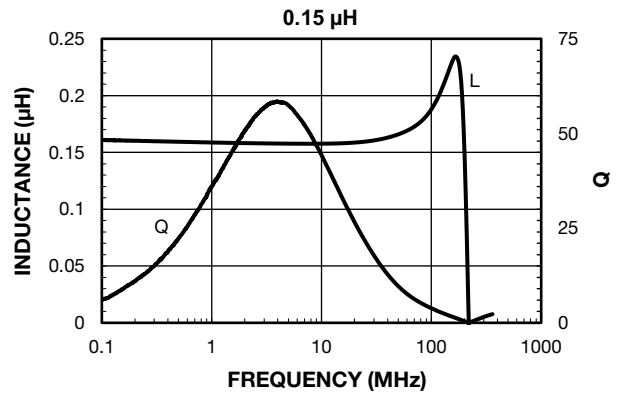
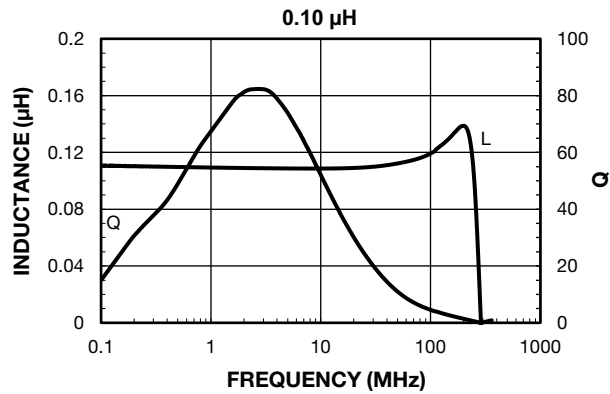


PERFORMANCE GRAPHS



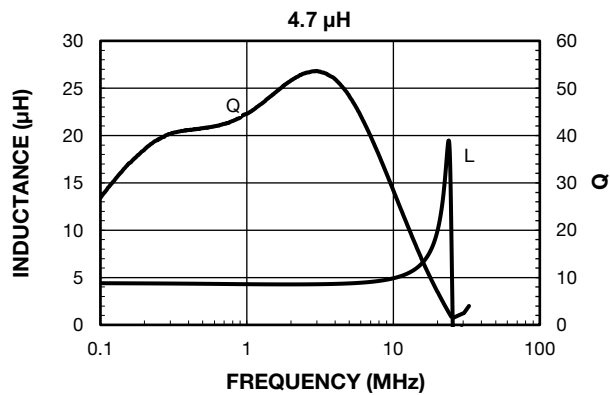
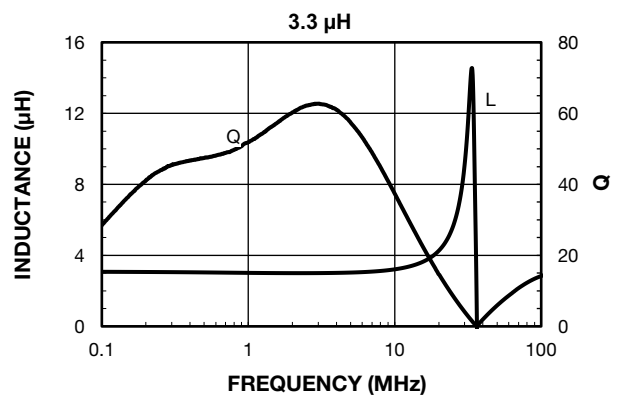
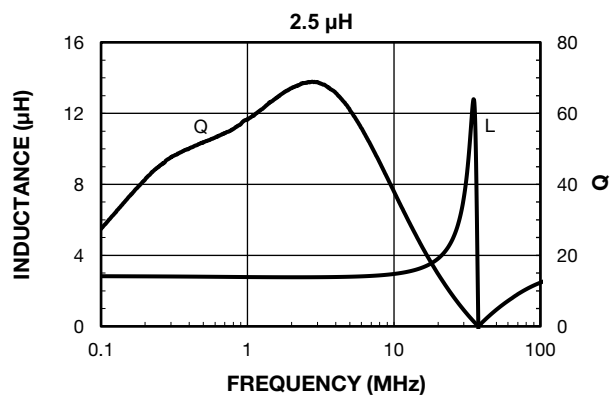
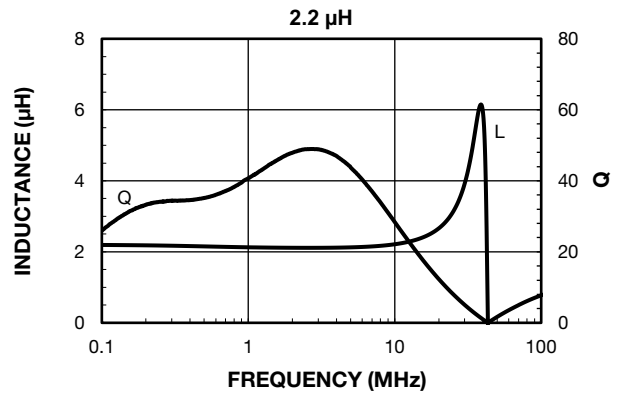
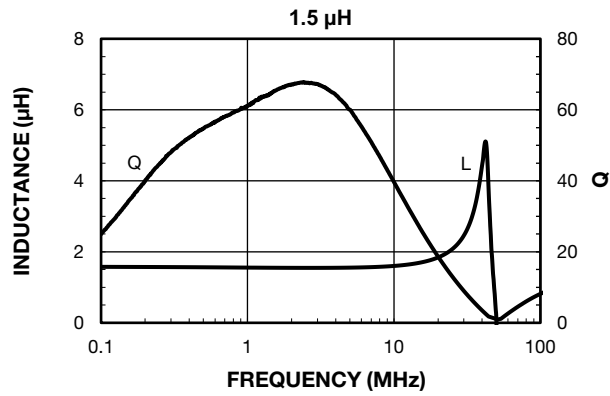


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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