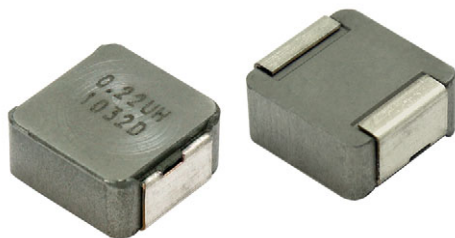




IHLP® Commercial Inductors, High Temperature (155 °C) Series



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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



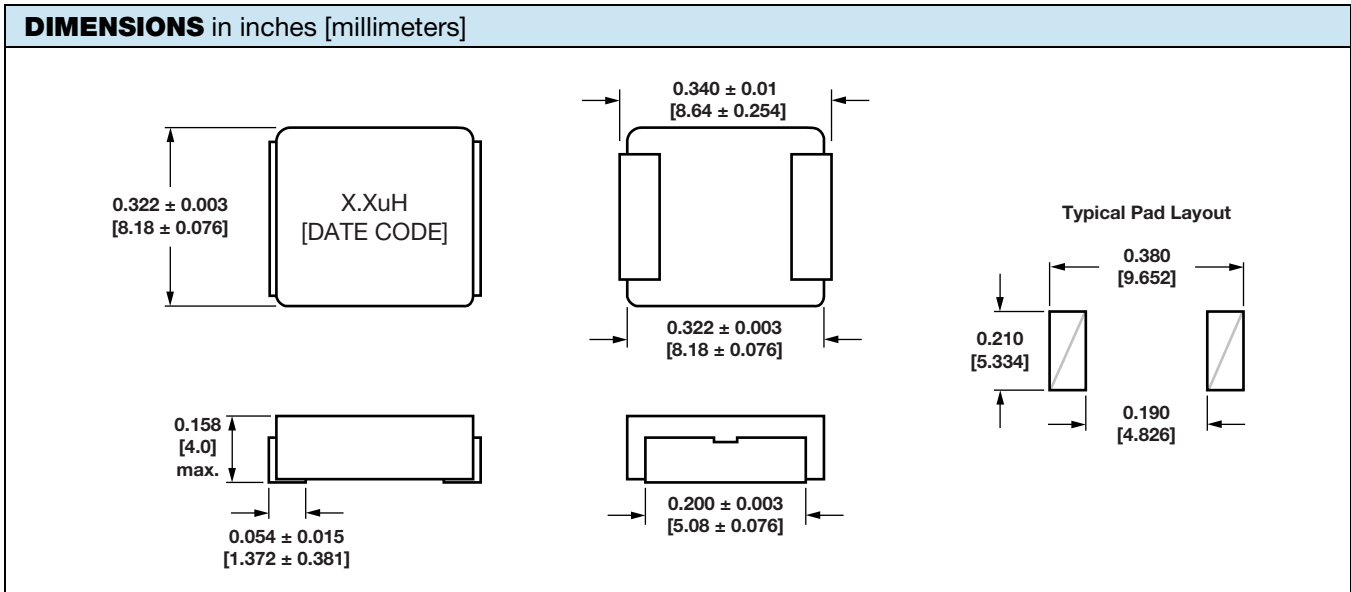
APPLICATIONS

- 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 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_R22M51 | 0.22 | |
| IHLP3232DZE_R47M51 | 0.47 | 2.38 | 2.55 | 27 | 19 | 24 | 77 |
| IHLP3232DZE_R68M51 | 0.68 | 3.3 | 3.53 | 21.5 | 12 | 17 | 51 |
| IHLP3232DZE_R82M51 | 0.82 | 3.7 | 4 | 20 | 15 | 22 | 49 |
| IHLP3232DZE_1R0M51 | 1.0 | 4.58 | 4.9 | 19 | 15 | 22 | 45 |
| IHLP3232DZE_1R5M51 | 1.5 | 6.78 | 7.25 | 15.5 | 14 | 20 | 35 |
| IHLP3232DZE_2R2M51 | 2.2 | 11.7 | 12.5 | 11.5 | 14 | 20 | 32 |
| IHLP3232DZE_3R3M51 | 3.3 | 15.4 | 16.48 | 10.6 | 11.8 | 16 | 23 |
| IHLP3232DZE_4R7M51 | 4.7 | 26.6 | 28.46 | 7.2 | 9.1 | 12 | 18 |
| IHLP3232DZE_5R6M51 | 5.6 | 29.6 | 31.67 | 6.9 | 9 | 12 | 18 |
| IHLP3232DZE_6R8M51 | 6.8 | 33.5 | 35.9 | 6.8 | 6.3 | 9.2 | 15.3 |
| IHLP3232DZE_100M51 | 10 | 50 | 53.5 | 5.1 | 5.2 | 7 | 13 |
| IHLP3232DZE_150M51 | 15 | 62 | 66.34 | 4.8 | 3.6 | 4.5 | 10 |
| IHLP3232DZE_220M51 | 22 | 103 | 110.21 | 3.7 | 3.8 | 5 | 9 |
| IHLP3232DZE_330M51 | 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 %



| DESCRIPTION | | | | | |
|---------------|------------------|----------------------|--------------|--------------------------------|--|
| IHLP3232DZ-51 | 10 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 | 3 2 3 2 D Z | E K | 1 0 0 | M | 5 1 |
| PRODUCT FAMILY | SIZE | PACKAGE CODE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | SERIES |
| | | EK = tape and reel | 100 = 10 μ H | M = $\pm 20\%$ | |

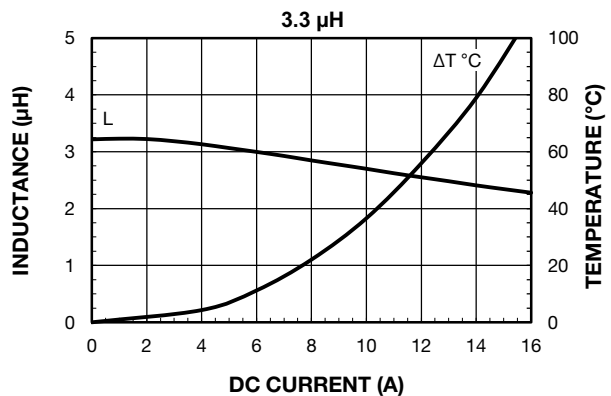
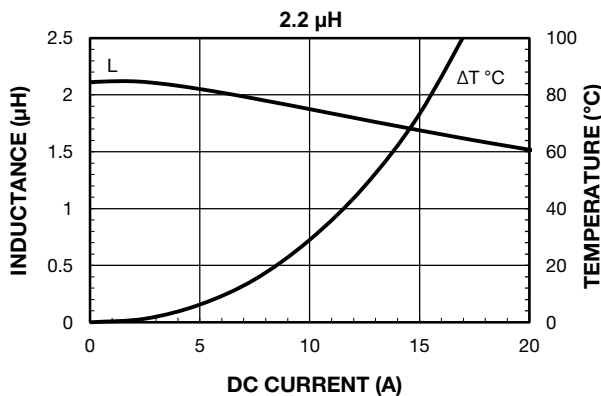
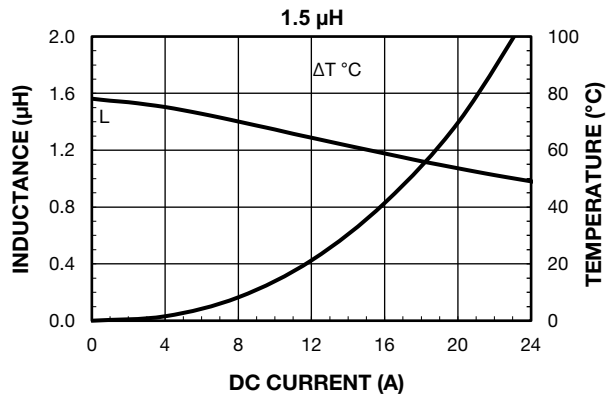
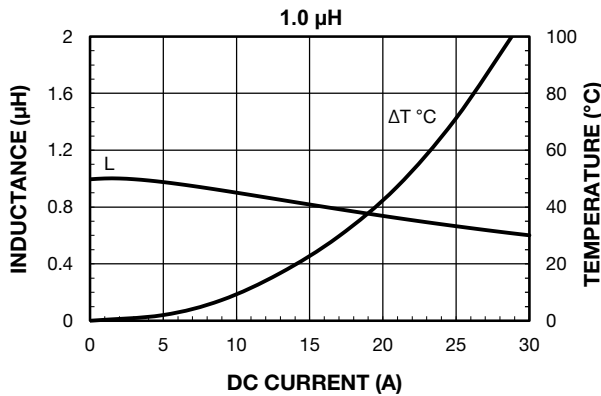
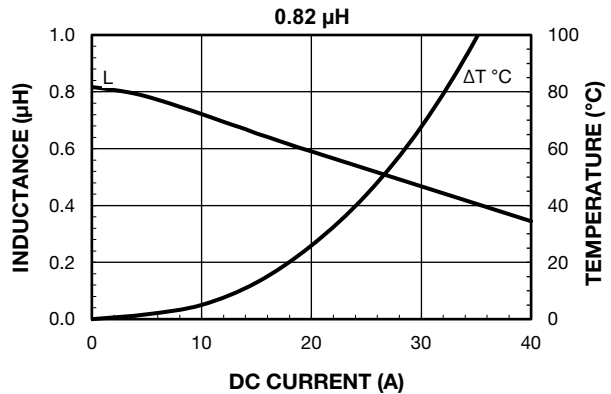
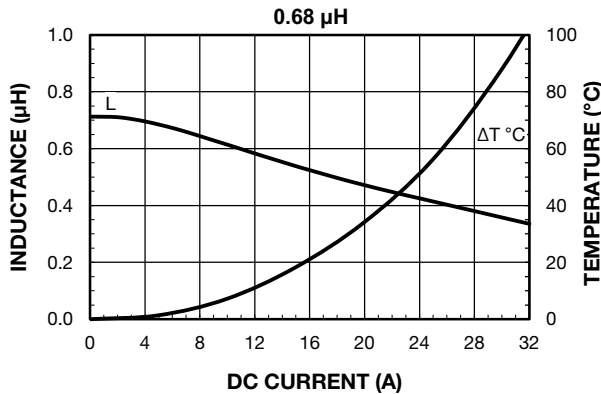
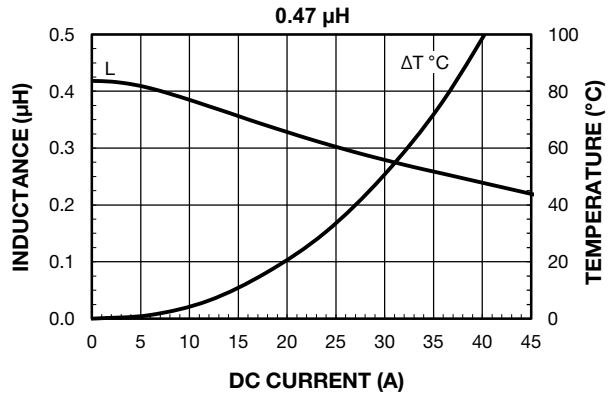
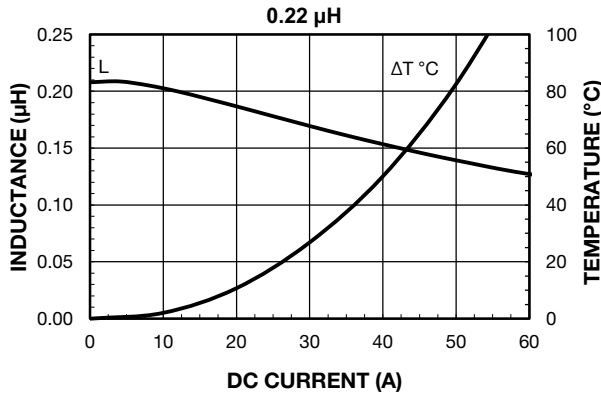
| PACKAGE CODE OPTIONS |
|---|
| EK = tape and reel packaging (1250 pcs on 13-inch reel) |
| ER = tape and reel packaging (500 pcs on 13-inch reel) |

Note

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

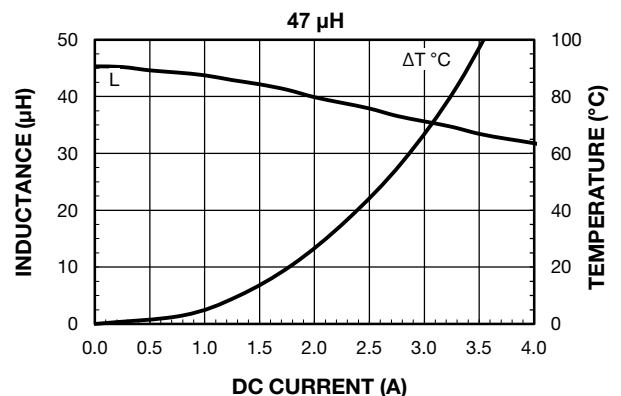
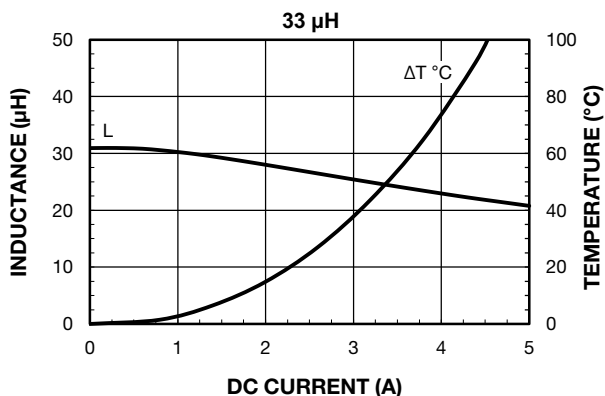
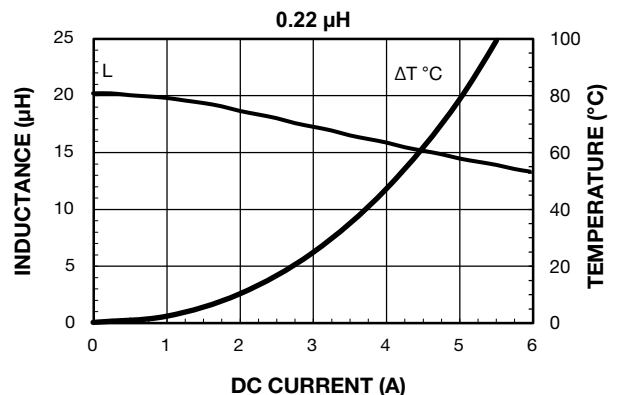
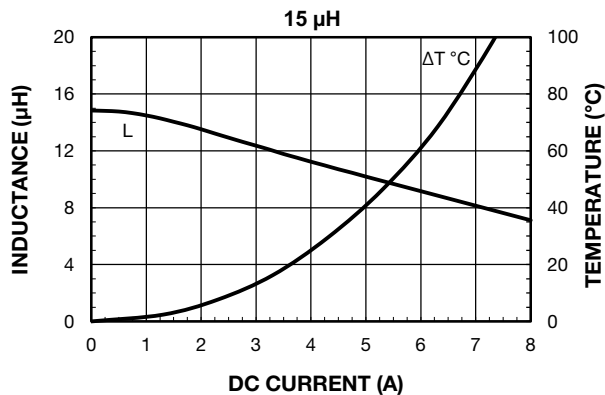
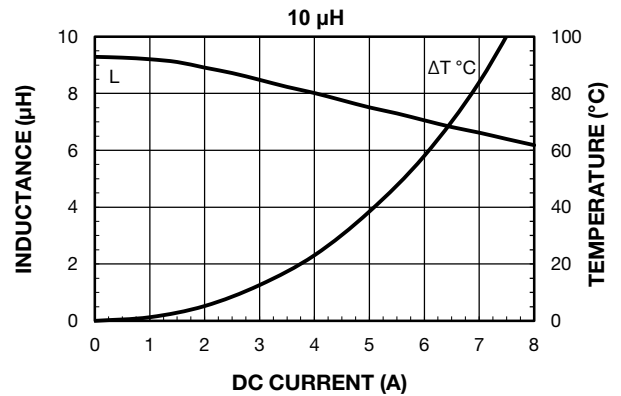
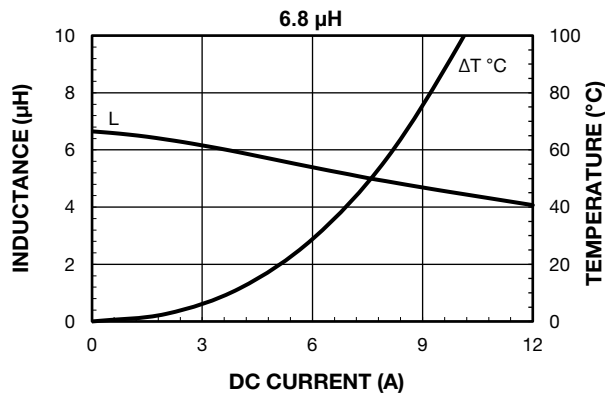
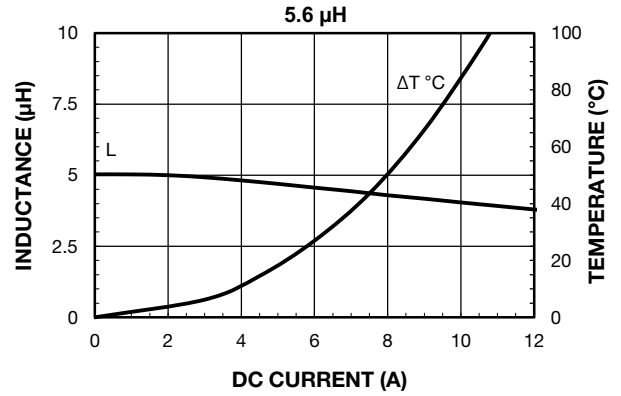
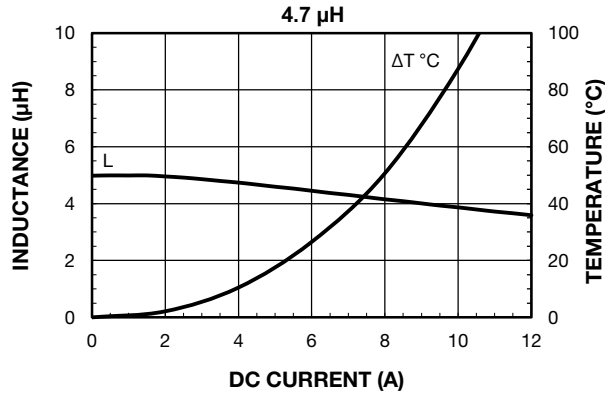


PERFORMANCE GRAPHS



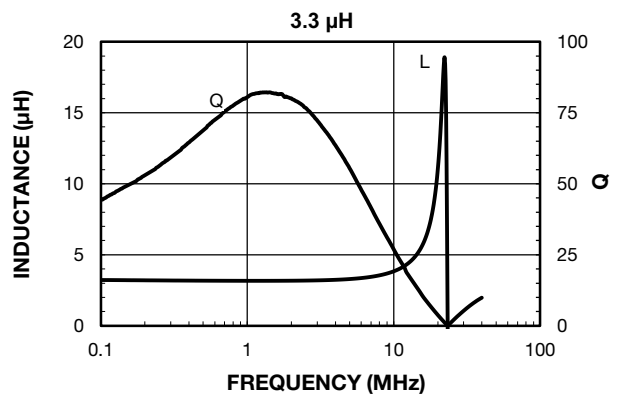
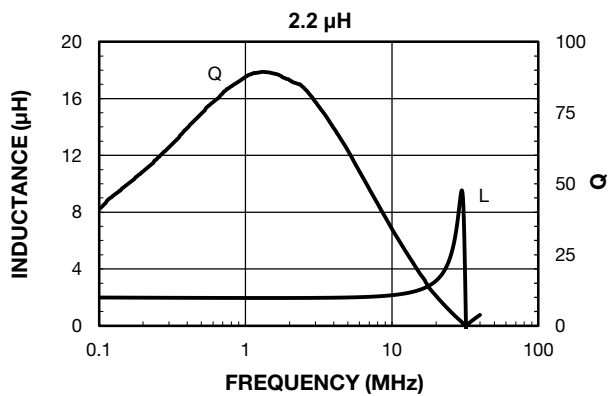
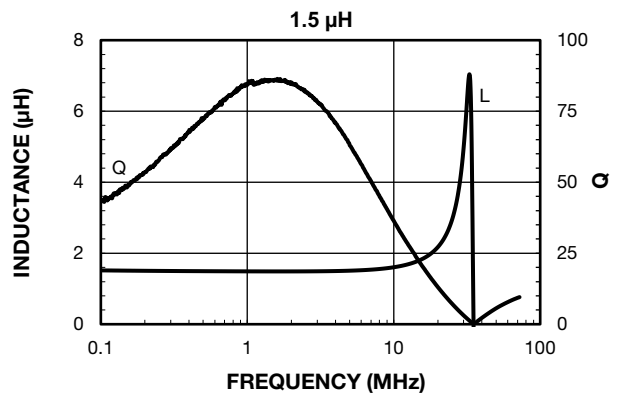
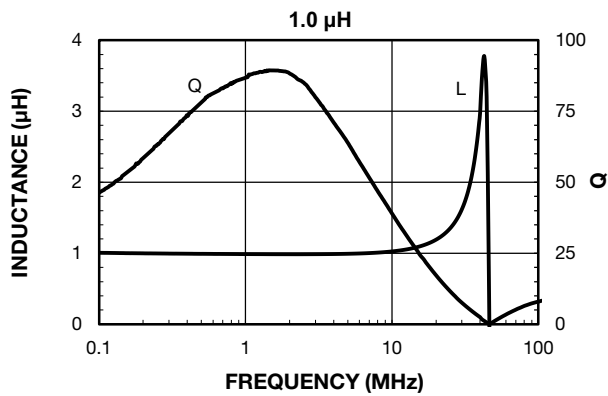
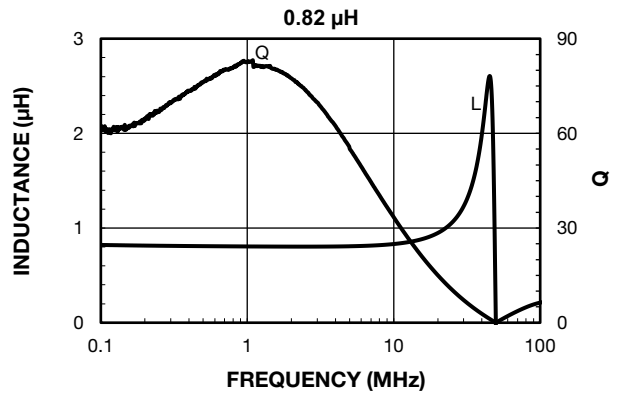
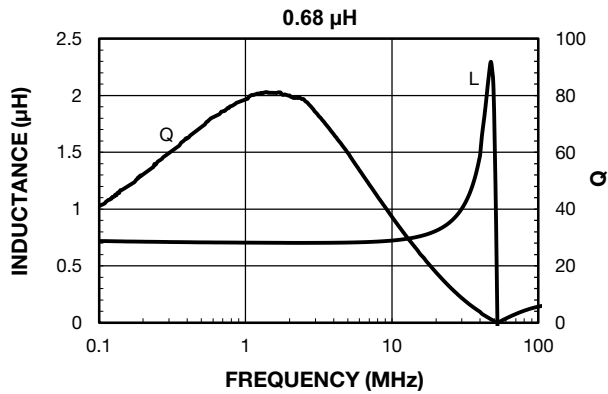
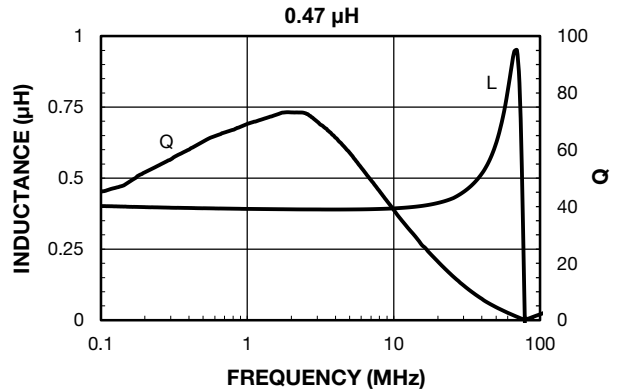
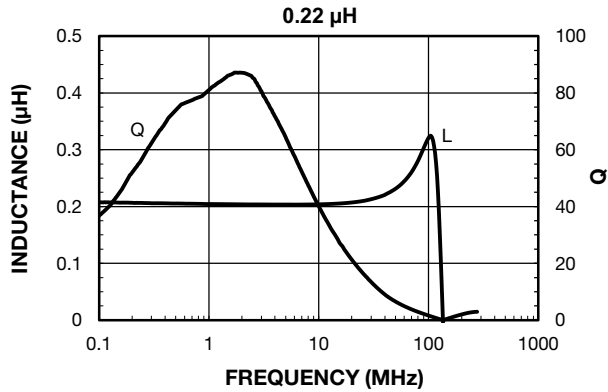


PERFORMANCE GRAPHS



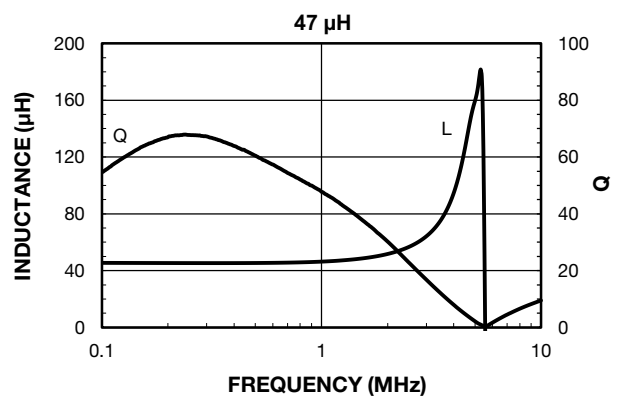
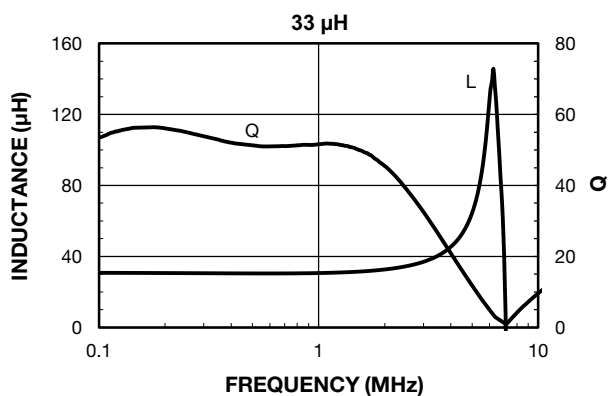
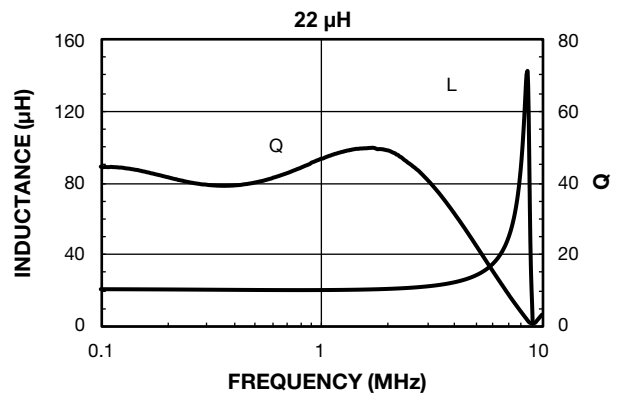
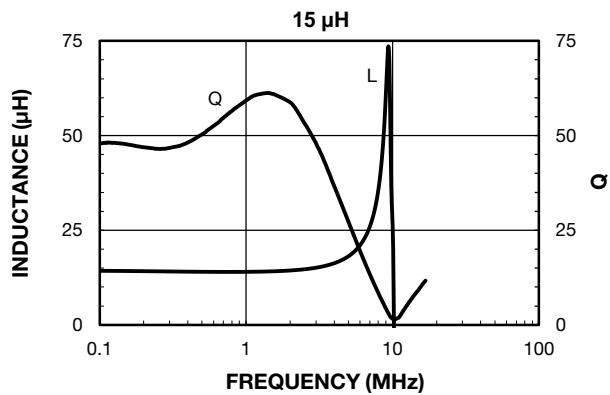
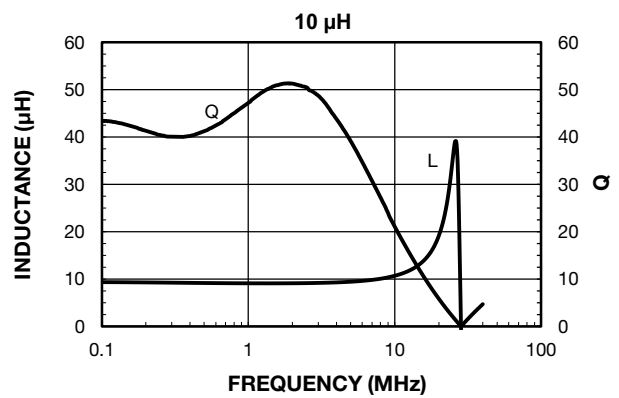
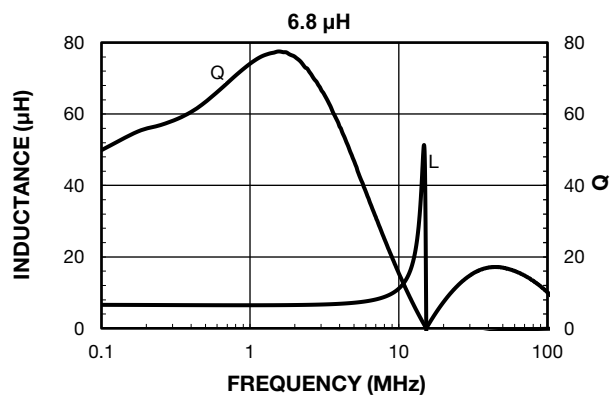
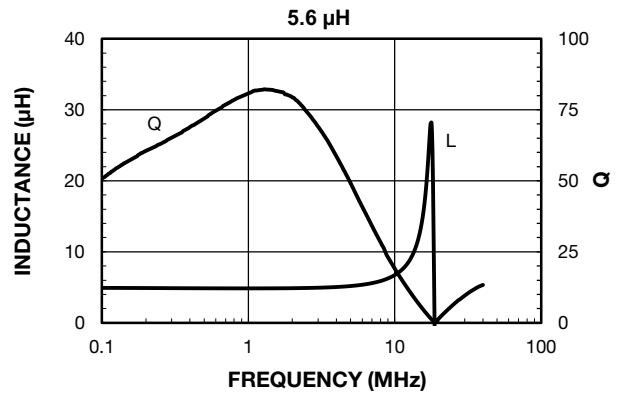
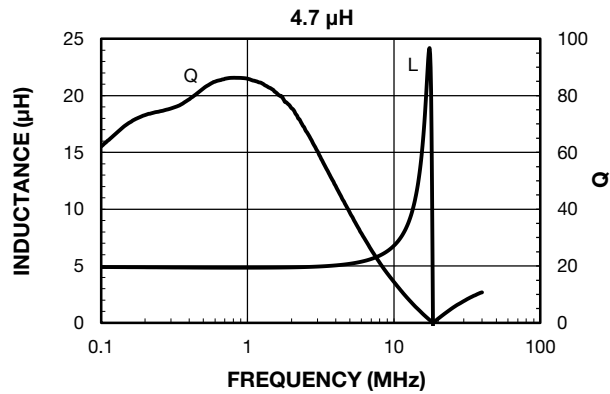


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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