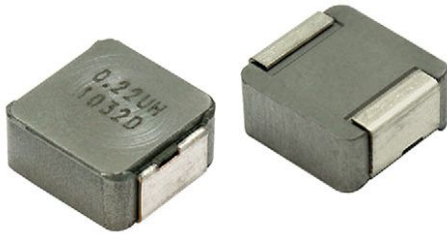


Low Profile, High Current IHLP® Inductors



Manufactured under one or more of the following:
US Patents; 6,198,375/6,204,744/6,449,829/6,460,244.
 Several foreign patents, and other patents pending.

DESIGN SUPPORT TOOLS click logo to get started



| 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 | 1.68 | 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 |
| 1.0 | 4.58 | 4.90 | 19.0 | 16.2 | 45 |
| 2.2 | 11.70 | 12.50 | 11.5 | 14.0 | 32 |
| 3.3 | 15.40 | 16.48 | 11.3 | 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 +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 ΔT of 40 °C
- ⁽²⁾ DC current (A) that will cause L₀ to drop approximately 20 %

FEATURES

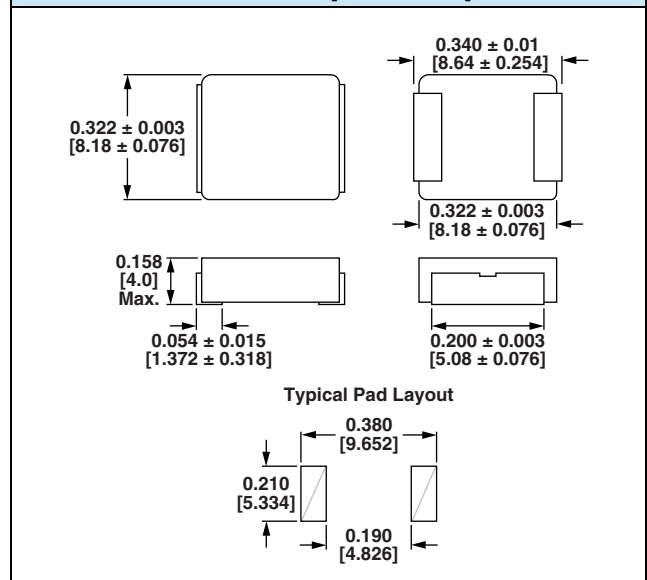
- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- Operating temperature up to 155 °C
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



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 blowers
 - HID lighting
- LED drivers

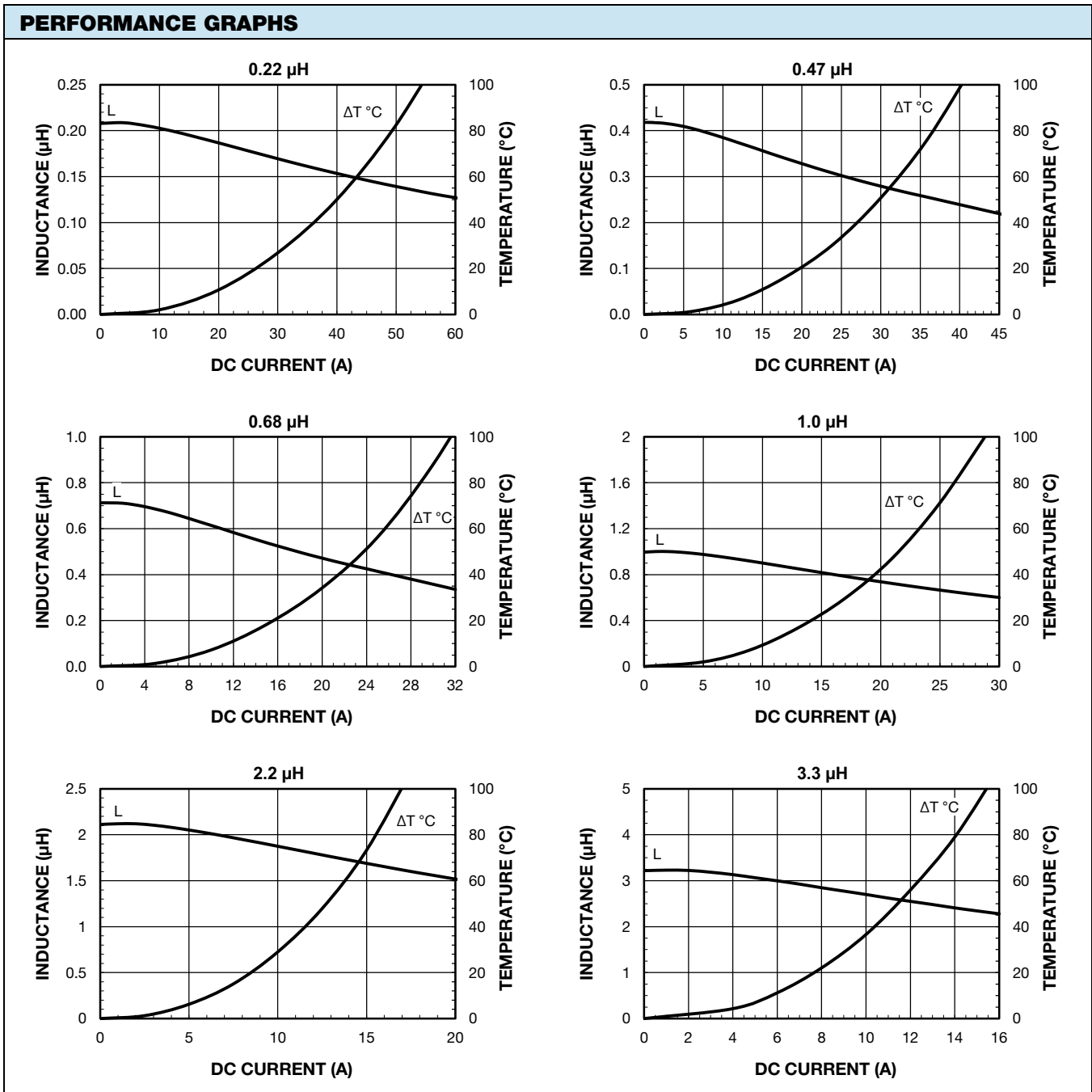
DIMENSIONS in inches [millimeters]





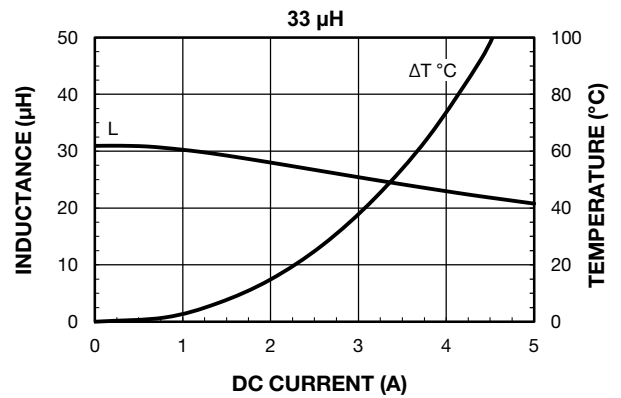
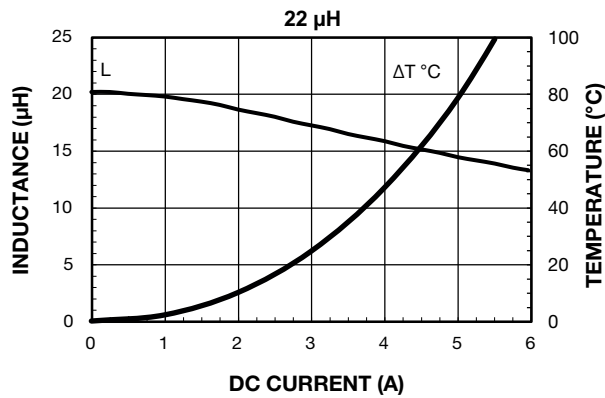
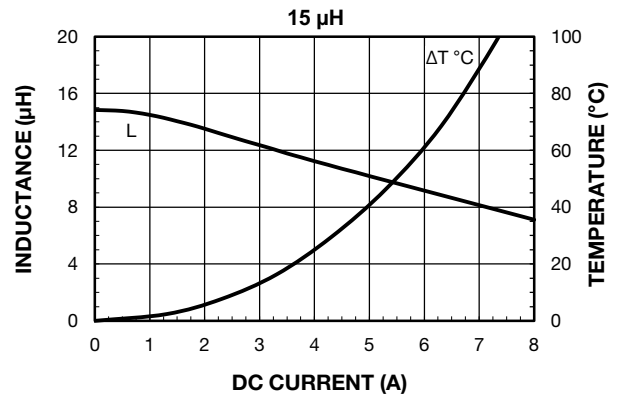
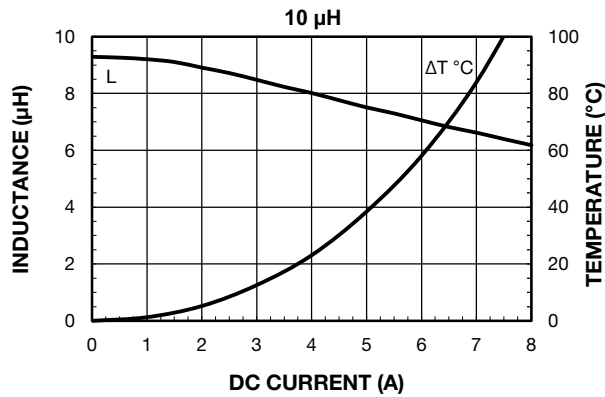
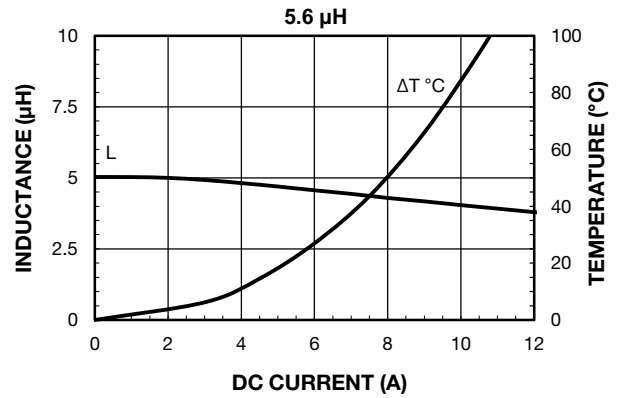
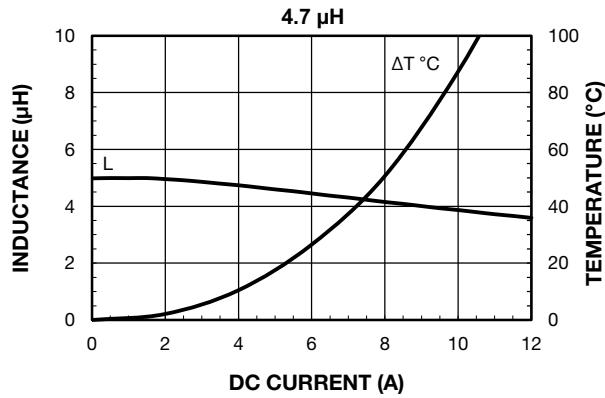
| DESCRIPTION | | | | | |
|----------------|------------------|----------------------|--------------|--------------------------------|--|
| IHLP-3232DZ-5A | 10 μ H | $\pm 20\%$ | ER | e3 | |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD | |

| GLOBAL PART NUMBER | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|---|---|---|--------------|---|------------------|---|---|------|--------|---|---|---|
| I | H | L | P | 3 | 2 | 3 | 2 | D | Z | E | R | 1 | 0 | 0 | M | 5 | A |
| MODEL | | | | SIZE | | | | PACKAGE CODE | | INDUCTANCE VALUE | | | TOL. | SERIES | | | |



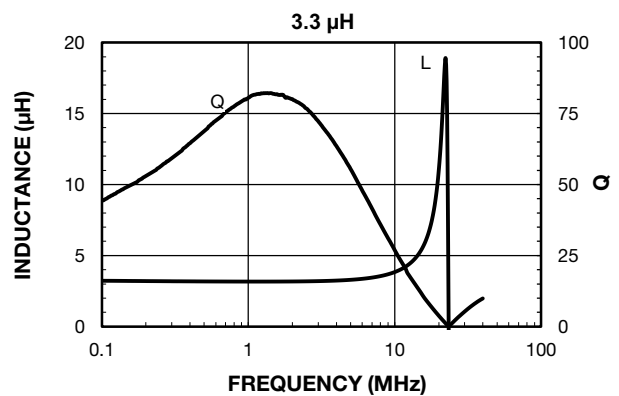
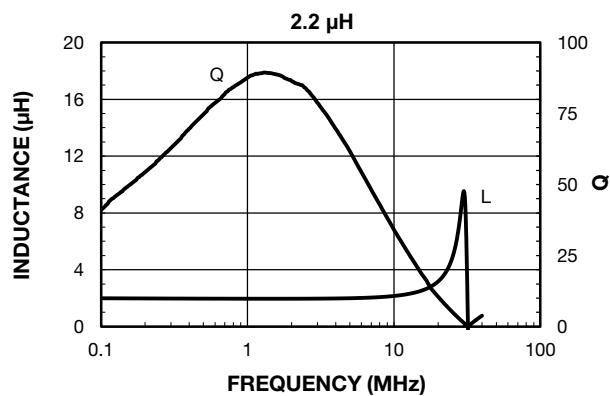
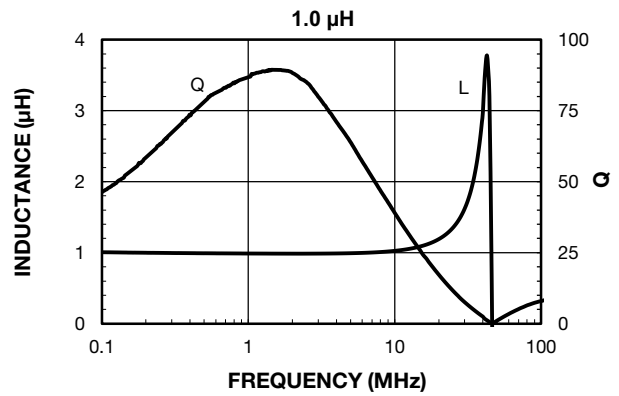
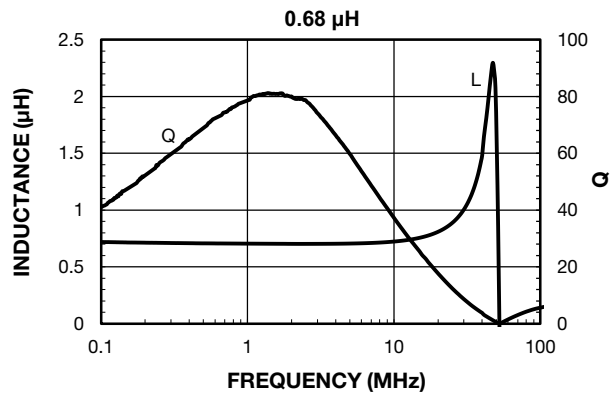
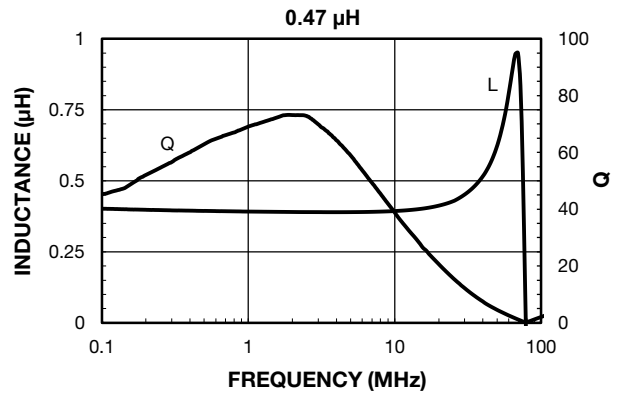
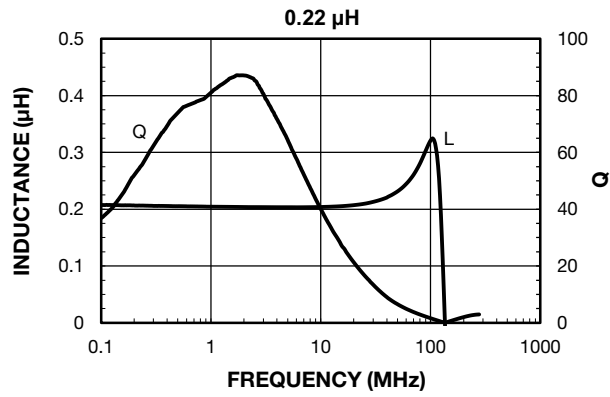


PERFORMANCE GRAPHS



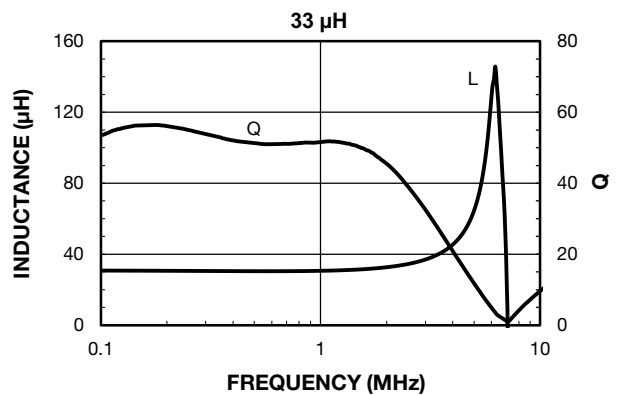
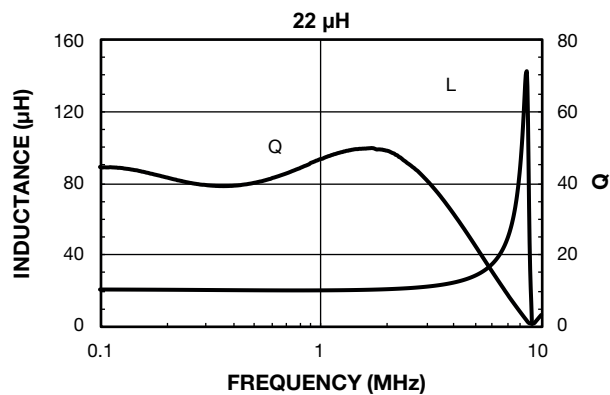
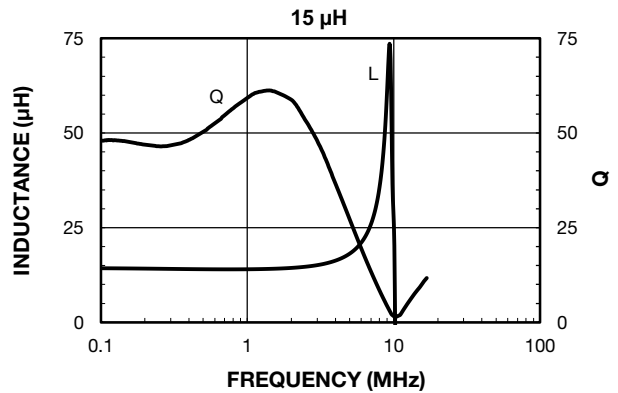
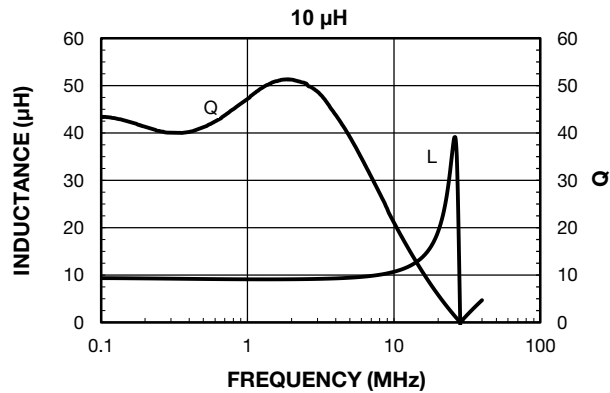
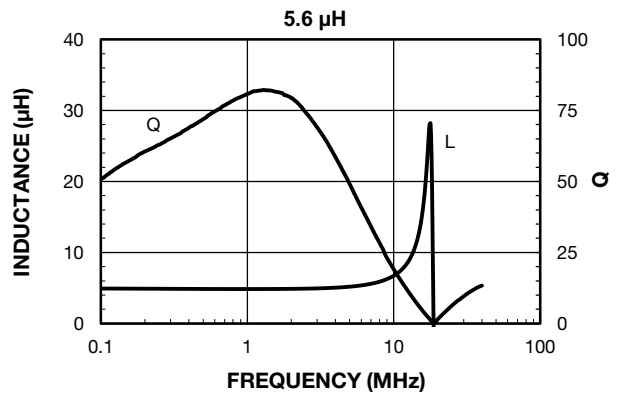
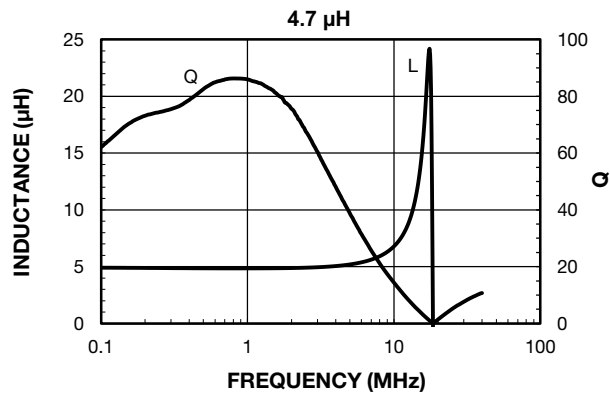


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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