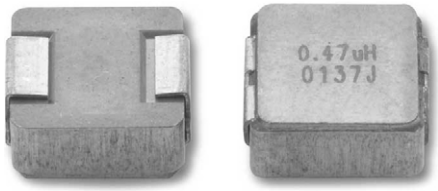
# IHLP® Commercial Inductors, High Saturation Series, 10 % DCR Tolerance




## LINKS TO ADDITIONAL RESOURCES

3D Models

Design Tools

## FEATURES

- Shielded construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- 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

Pb-free

RoHS COMPLIANT

## APPLICATIONS

- Tolerance DCR for current sense applications
- Improved current balance in phased power supplies
- Improved thermal management
- PDA / notebook / desktop / server and battery powered devices
- High current, low profile POL converters
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

## STANDARD ELECTRICAL SPECIFICATIONS

| $L_0$ INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH) | DCR ± 10 % AT 25 °C (mΩ) | HEAT RATING CURRENT DC TYP. (A) (1) | SATURATION CURRENT DC TYP. (A) (2) | SRF TYP. (MHz) |
|---|---|---|---|---|
| 0.10 | 1.35 | 32.5 | 60 | 400 |
| 0.20 | 2.34 | 24 | 41 | 150 |
| 0.33 | 3.20 | 20 | 30 | 100 |
| 0.47 | 3.86 | 17.5 | 26 | 75 |
| 0.68 | 5.20 | 15.5 | 25 | 62 |
| 0.82 | 7.41 | 13 | 24 | 60 |
| 1.0 | 8.00 | 11 | 22 | 55 |
| 1.5 | 14.50 | 9 | 18 | 40 |
| 2.2 | 17.73 | 8 | 14 | 38 |
| 3.3 | 28.21 | 6 | 13.5 | 30 |
| 4.7 | 37.11 | 5.5 | 10 | 25 |
| 8.2 | 61.47 | 4 | 7.5 | 17 |
| 10 | 88.74 | 3 | 7.0 | 16 |

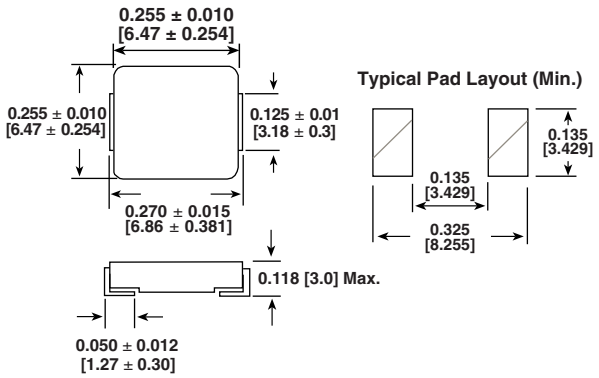
**Notes**

- 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 $L_0$ to drop approximately 20 %

## DIMENSIONS in inches [millimeters]






For technical questions, contact: magnetics@vishay.com

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## DESCRIPTION

| IHLP-2525CZ-06 | 1.0 µH | ± 20 % | EK | e3 |
|---|---|---|---|---|
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

## GLOBAL PART NUMBER

| I H L P | 2 5 2 5 C Z | E K | 1 R 0 | M | 0 6 |
|---|---|---|---|---|---|
| PRODUCT FAMILY | SIZE | PACKAGE CODE | IMPEDANCE VALUE | INDUCTANCE TOLERANCE | SERIES |
| | | **EK** = tape and reel | **1R0** = 1.0 µH | **M** = ± 20 % | |

## PACKAGE CODE OPTIONS

**EK** = tape and reel packaging (2500 pcs on 13-inch reel)

**ER** = tape and reel packaging (2000 pcs on 13-inch reel)

**Note**

- For additional packaging details see "Packaging Methods"

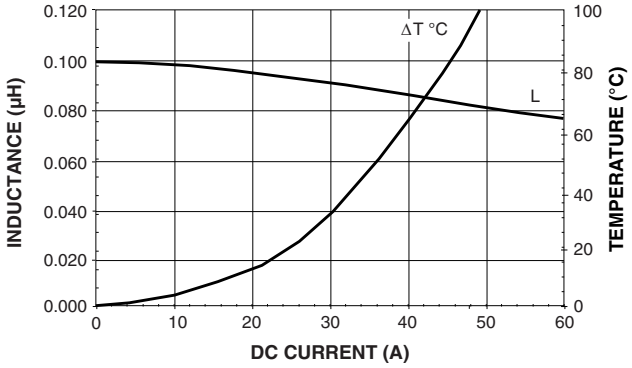


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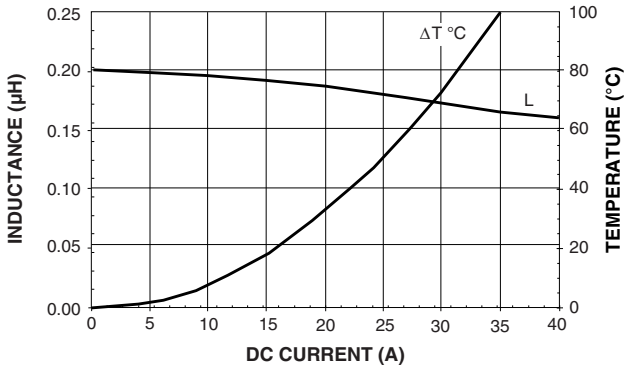
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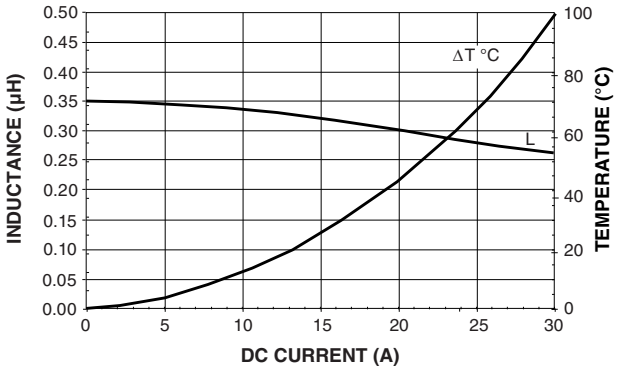
0.10 µH



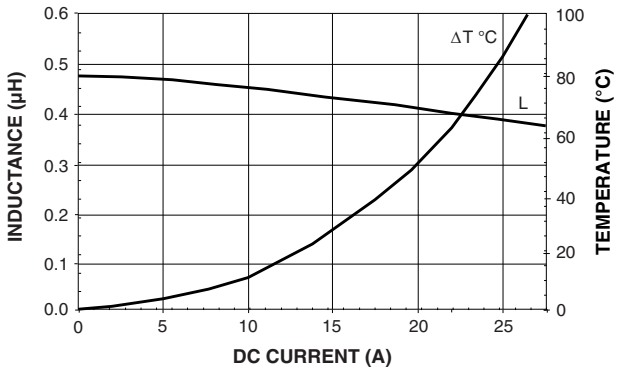

0.20 µH



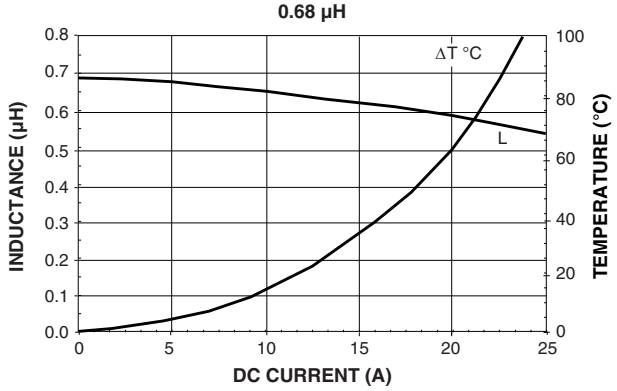

0.33 µH



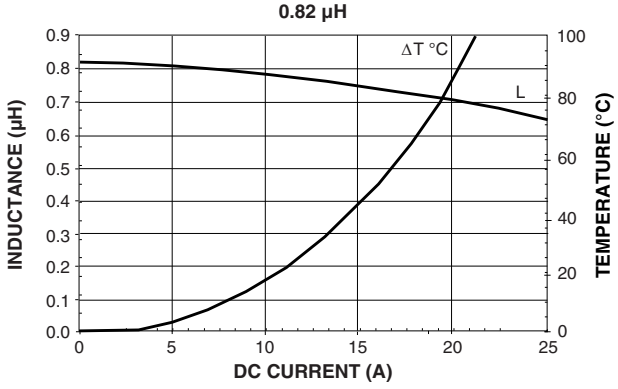

0.47 µH



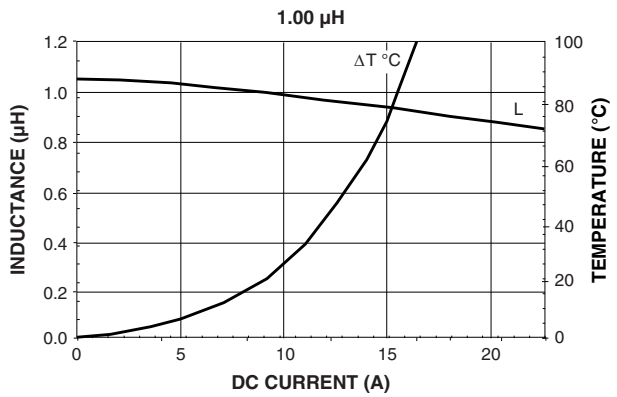

0.68 µH



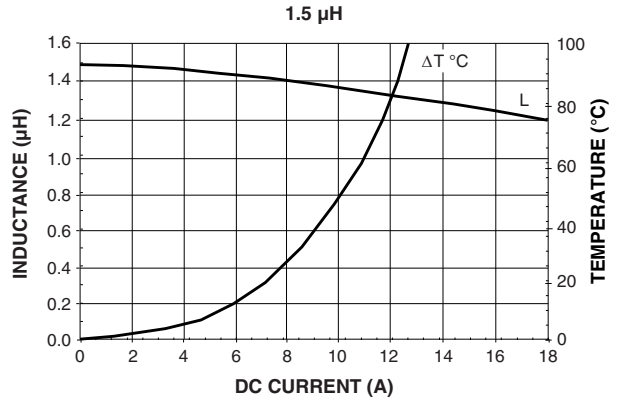

0.82 µH




1.00 µH




1.5 µH

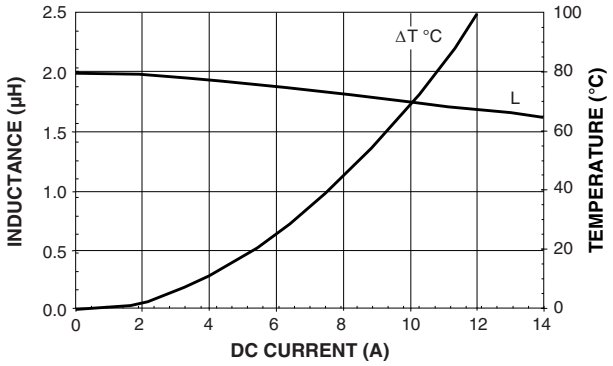




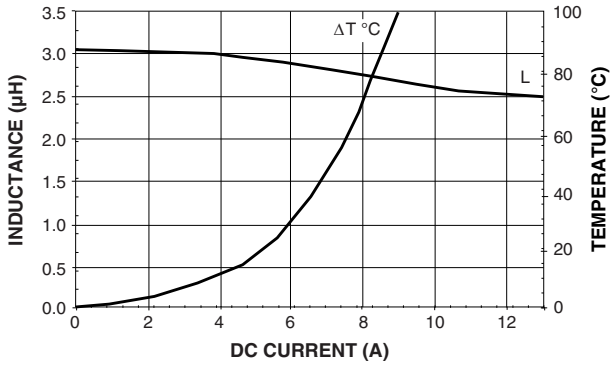
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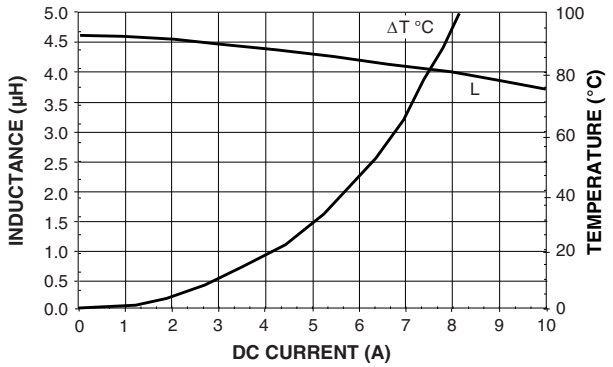
2.2 µH



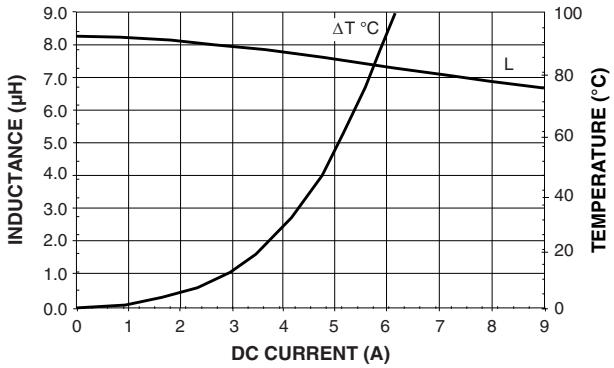

3.3 µH



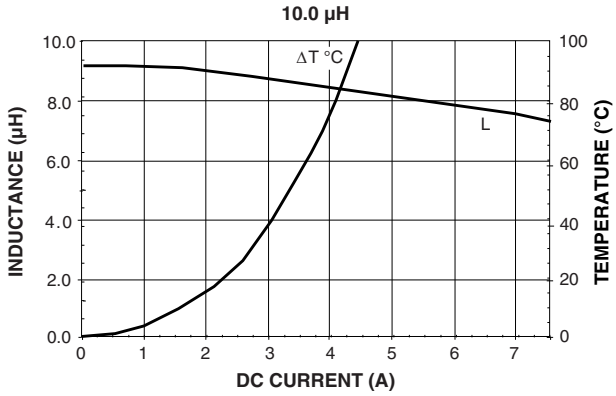

4.7 µH




8.2 µH




10.0 µH

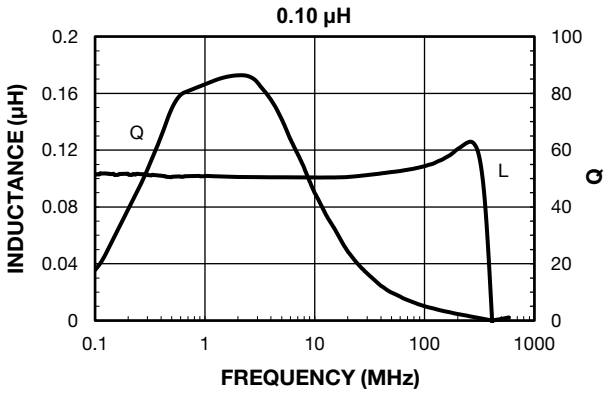


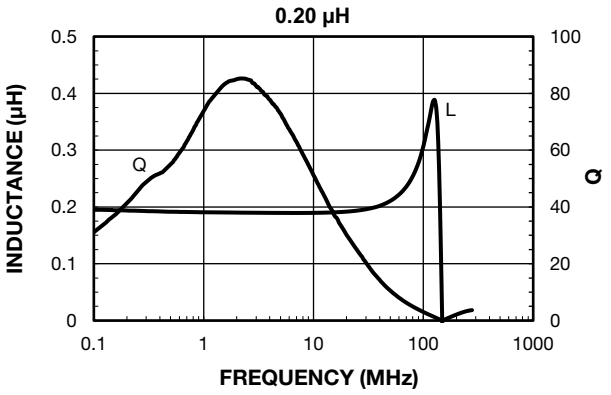


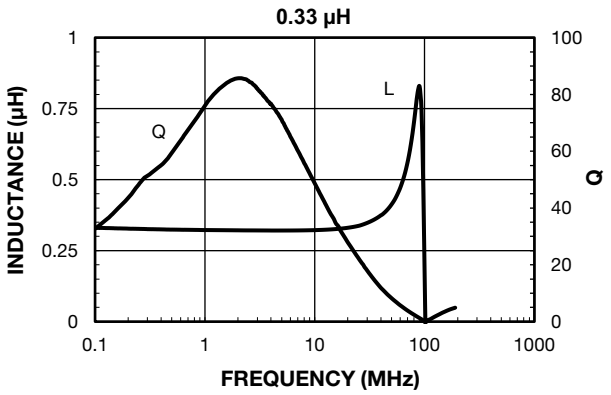

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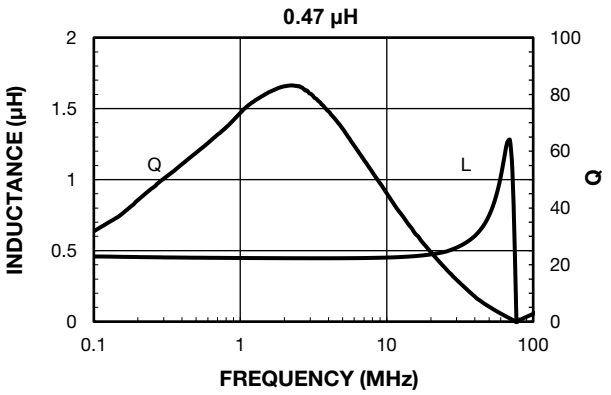
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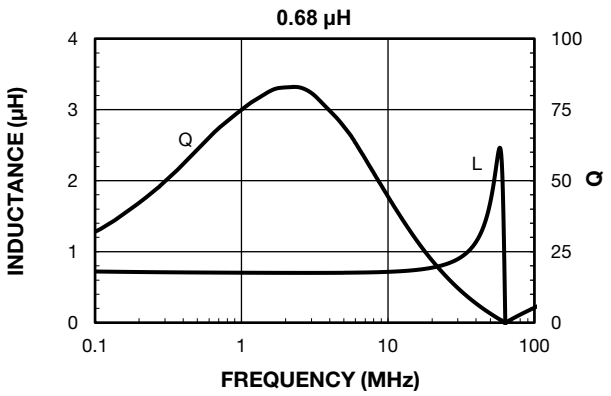
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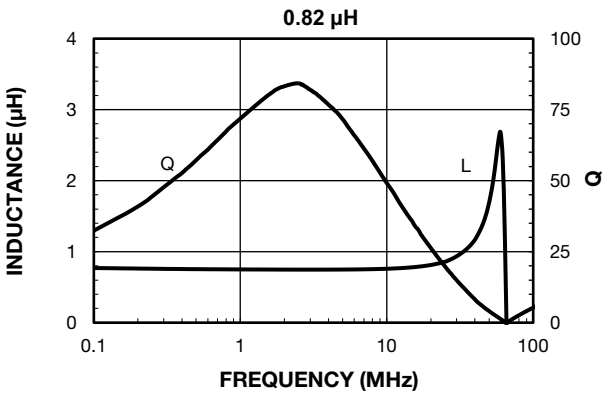


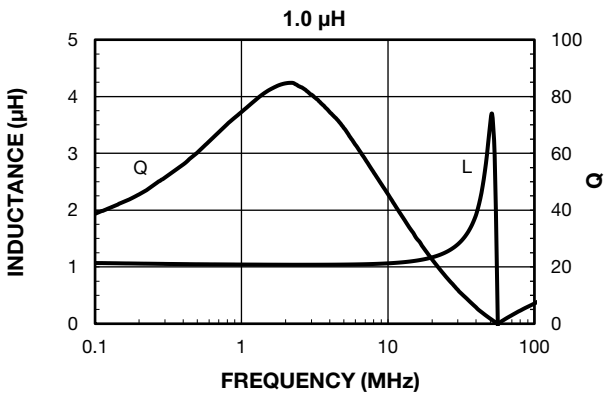



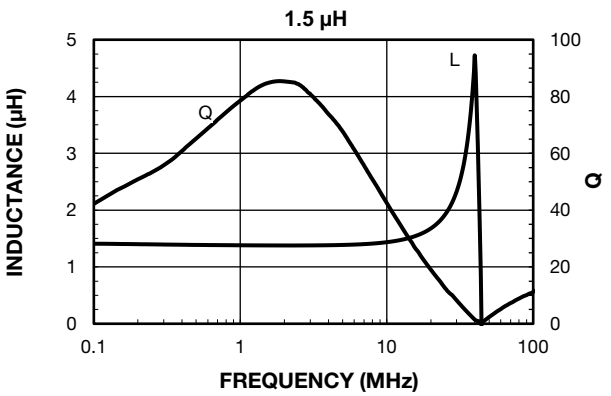



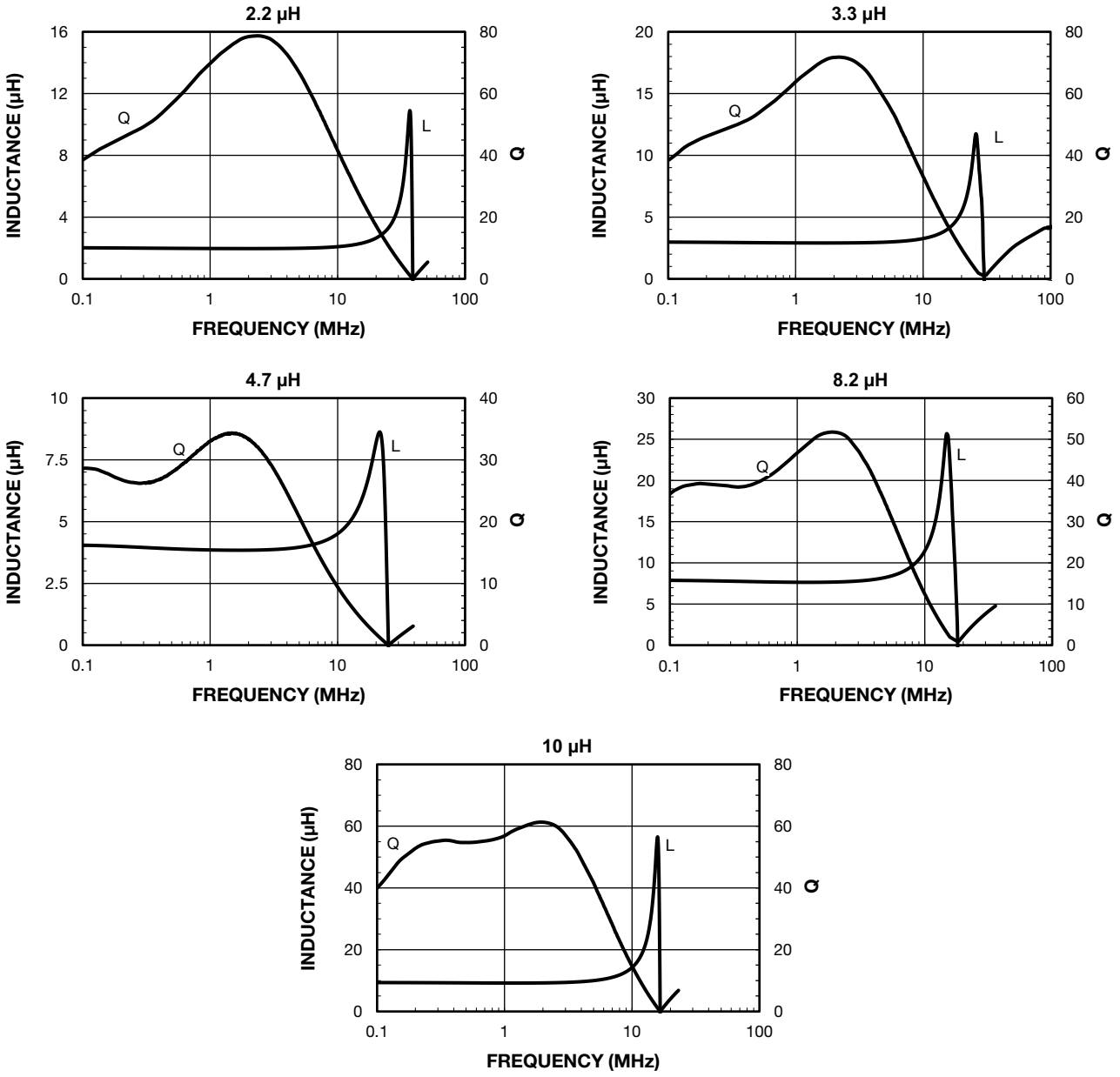





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