

# IHLP5050EZERR22M5A Datasheet

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DiGi Electronics Part Number

IHLP5050EZERR22M5A-DG

Manufacturer

[Vishay Dale](#)

Manufacturer Product Number

IHLP5050EZERR22M5A

Description

FIXED IND 220NH 68.18A 0.76 MOHM

Detailed Description

220 nH Shielded Molded Inductor 68.18 A 0.76mOhm Max Nonstandard

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## Purchase and inquiry

Manufacturer Product Number:

IHLP5050EZERR22M5A

Series:

IHLP-5050EZ-5A

Type:

Molded

Inductance:

220 nH

Current Rating (Amps):

68.18 A

Shielding:

Shielded

Q @ Freq:

-

Ratings:

AEC-Q200

Inductance Frequency - Test:

100 kHz

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.197" (5.00mm)

Manufacturer:

Vishay Dale

Product Status:

Active

Material - Core:

-

Tolerance:

±20%

Current - Saturation (Isat):

69.24A

DC Resistance (DCR):

0.76mOhm Max

Frequency - Self Resonant:

99.9MHz

Operating Temperature:

-55°C ~ 155°C

Features:

-

Package / Case:

Nonstandard

Size / Dimension:

0.530" L x 0.508" W (13.46mm x 12.90mm)

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

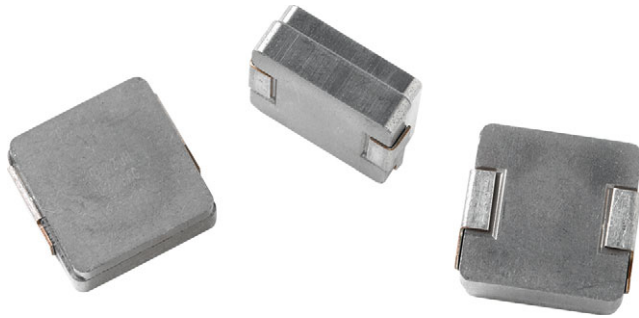
EAR99




[www.vishay.com](http://www.vishay.com)
**IHLP-5050EZ-5A**

Vishay Dale

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



## FEATURES

- High temperature, up to 155 °C
- 13.46 mm x 12.9 mm x 5.0 mm size
- Magnetically shielded
- Ultra low buzz noise due to composite iron alloy construction
- AEC-Q200 qualified
- Material categorization:  
for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

AUTOMOTIVE  
GRADERoHS  
COMPLIANTHALOGEN  
FREEGREEN  
(5-2008)

## LINKS TO ADDITIONAL RESOURCES



Product Page



3D Models



Design Tools

## 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

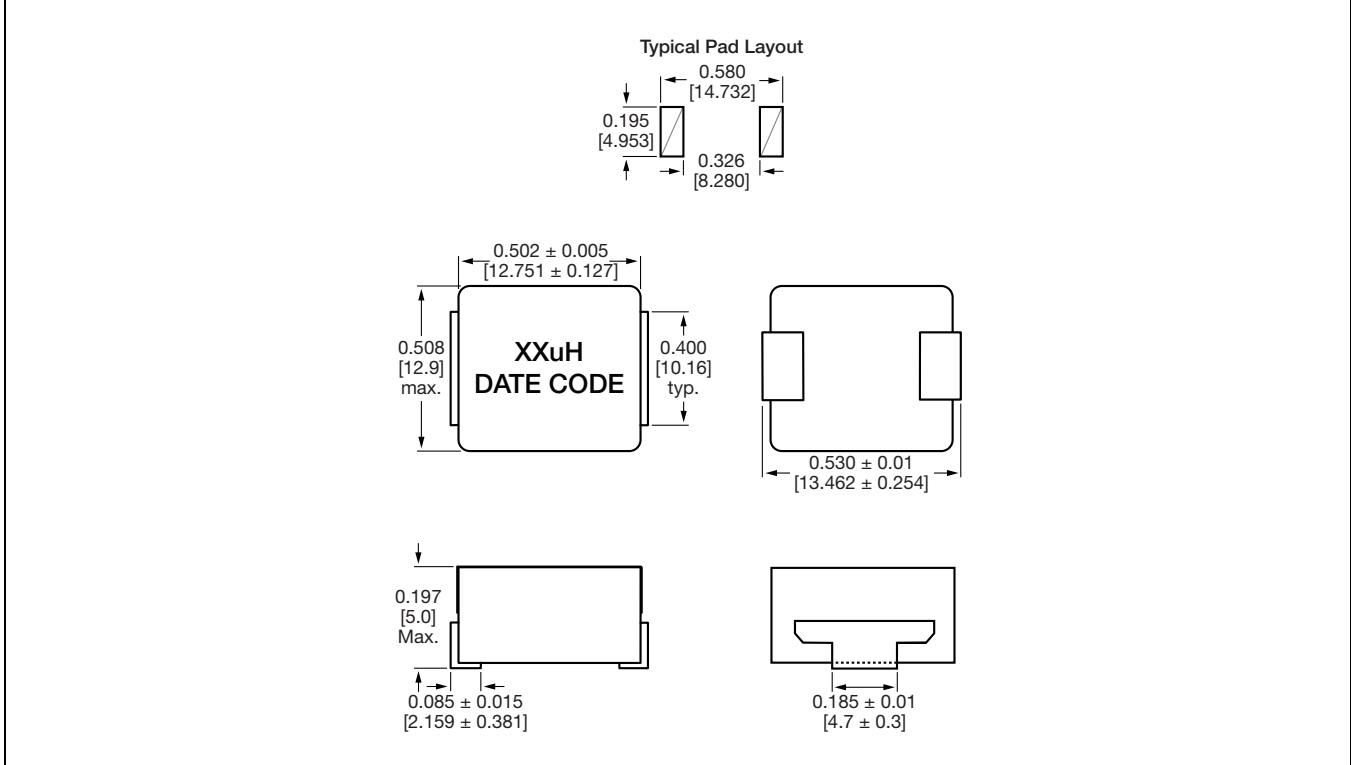
PART NUMBER	L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(2)</sup>	SRF TYP. (MHz)
IHLP5050EZERR22M5A	0.22	0.69	0.76	68.18	69.24	99.9
IHLP5050EZERR33M5A	0.33	0.93	1.02	62.38	45.24	77.5
IHLP5050EZERR47M5A	0.47	1.15	1.23	49.88	33.08	59.6
IHLP5050EZERR68M5A	0.68	1.33	1.41	49.63	30.00	50.5
IHLP5050EZER1R0M5A	1.0	2.00	2.14	36.64	28.00	37.2
IHLP5050EZER1R5M5A	1.5	2.75	2.94	31.27	28.00	30.6
IHLP5050EZER1R8M5A	1.8	3.35	3.58	28.62	26.40	26.4
IHLP5050EZER2R2M5A	2.2	3.50	3.75	22.00	26.10	22.7
IHLP5050EZER3R0M5A	3.0	5.90	6.31	17.90	18.50	20.4
IHLP5050EZER3R3M5A	3.3	7.20	7.70	16.00	18.00	17.8
IHLP5050EZER4R7M5A	4.7	9.40	10.1	15.30	17.80	15.1
IHLP5050EZER5R6M5A	5.6	12.3	13.2	13.96	16.90	14.7
IHLP5050EZER6R8M5A	6.8	15.0	16.1	10.60	12.50	14.4
IHLP5050EZER8R2M5A	8.2	15.5	16.6	12.85	9.83	11.4
IHLP5050EZER100M5A	10	18.8	20.1	9.34	7.50	11.0
IHLP5050EZER150M5A	15	27.8	29.7	7.70	7.50	9.6
IHLP5050EZER220M5A	22	41.9	44.8	6.90	6.30	7.4
IHLP5050EZER470M5A	47	105	112	3.90	4.80	4.2
IHLP5050EZER820M5A	82	188	201	3.00	3.10	2.9

### Notes

- All test data is referenced to 25 °C ambient
  - Operating temperature range -55 °C to +155 °C
  - The part temperature (ambient + temperature 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 L<sub>0</sub> to drop approximately 20 %



**DIMENSIONS** in inches [millimeters]



**DESCRIPTION**

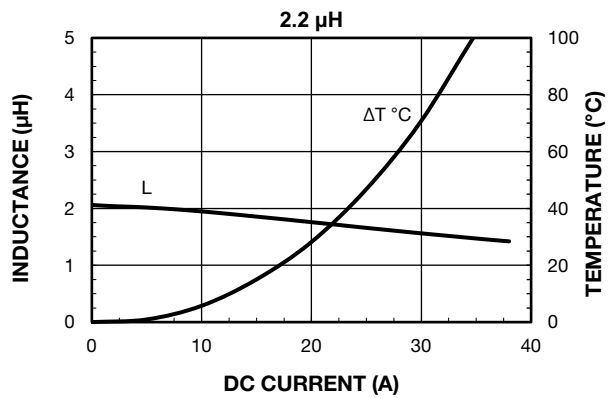
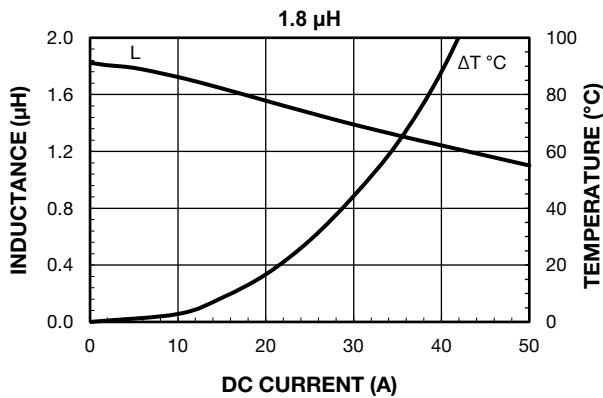
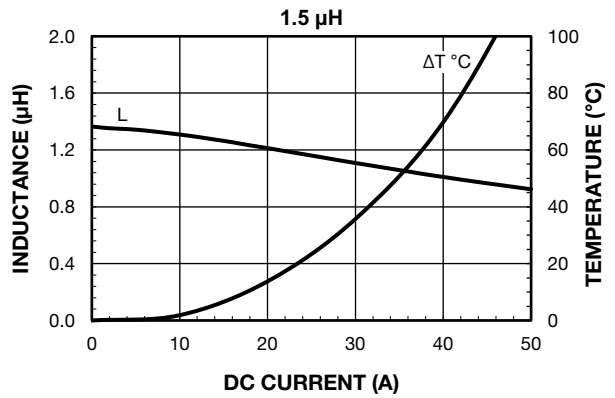
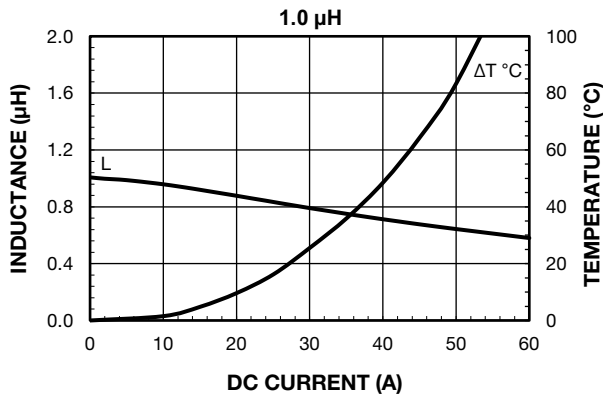
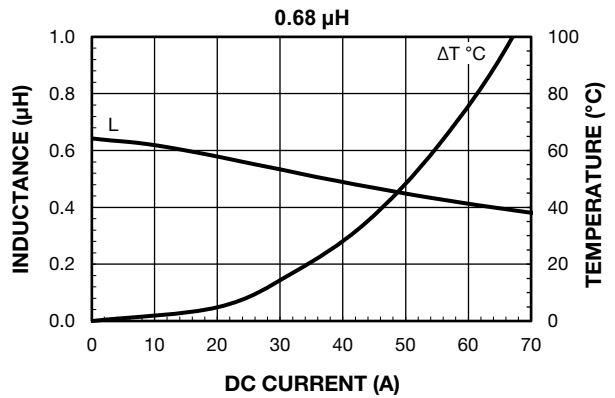
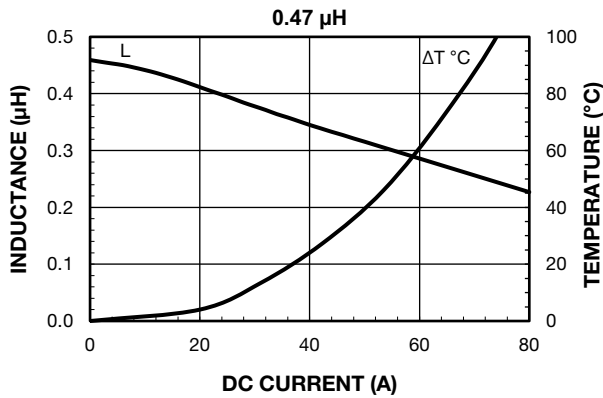
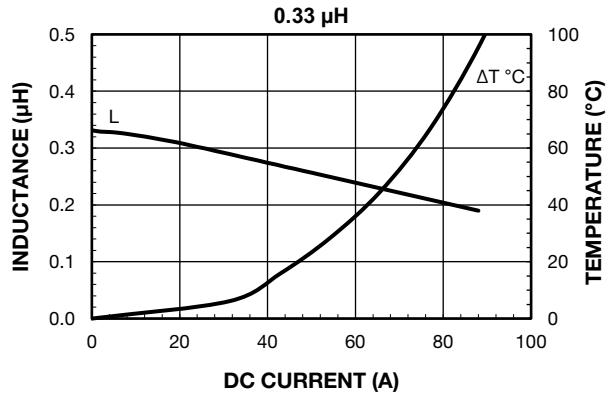
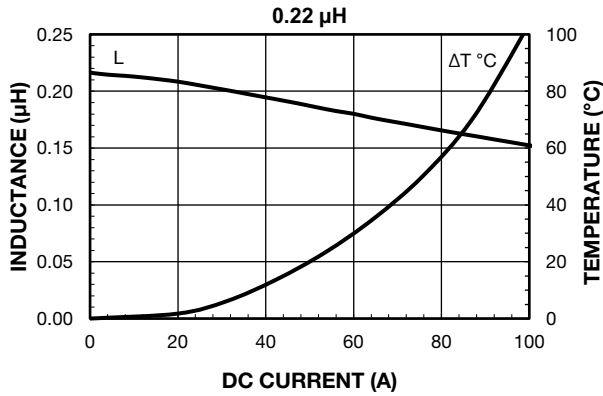
<b>IHLP-5050EZ-5A</b>	<b>4.7 μH</b>	<b>± 20 %</b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

**GLOBAL PART NUMBER**

<b>I H L P</b>	<b>5 0 5 0 E Z</b>	<b>E R</b>	<b>4 R 7</b>	<b>M</b>	<b>5 A</b>
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		<b>ER =</b> tape and reel	<b>2R2 = 2.2 μH</b>	<b>M = ± 20 %</b> <b>N = ± 30 %</b>	

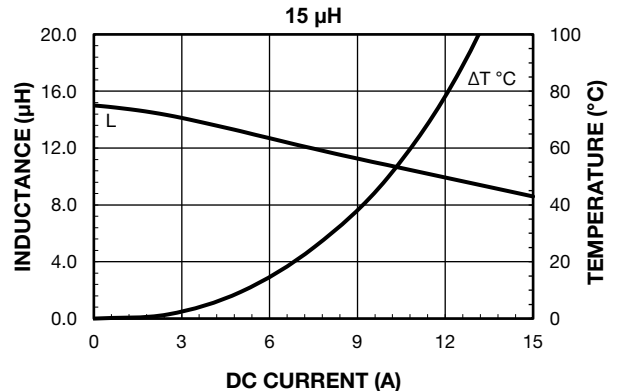
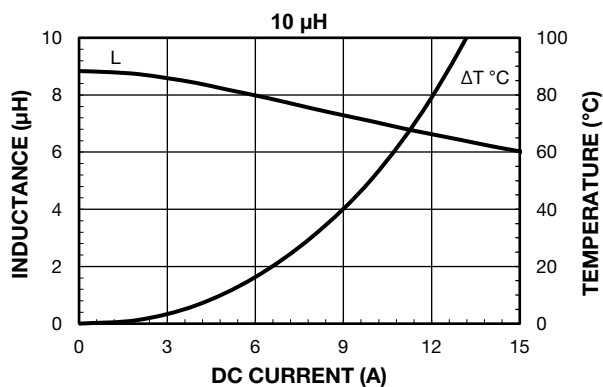
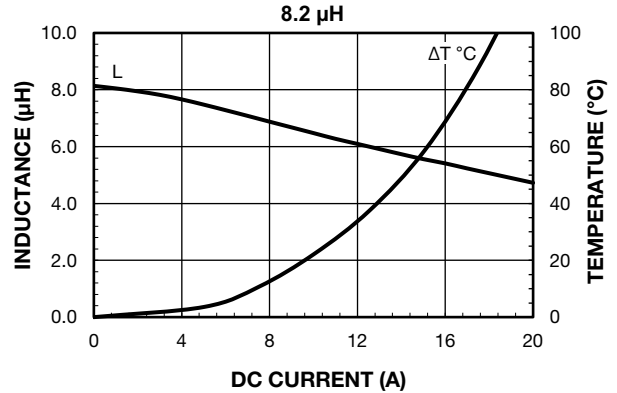
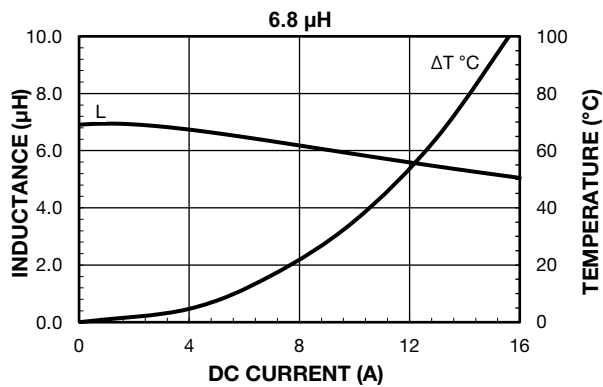
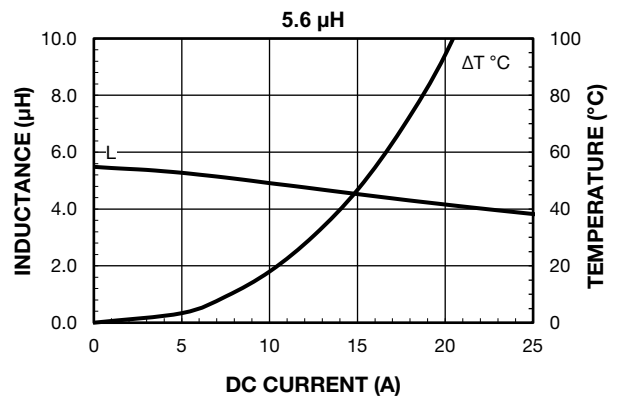
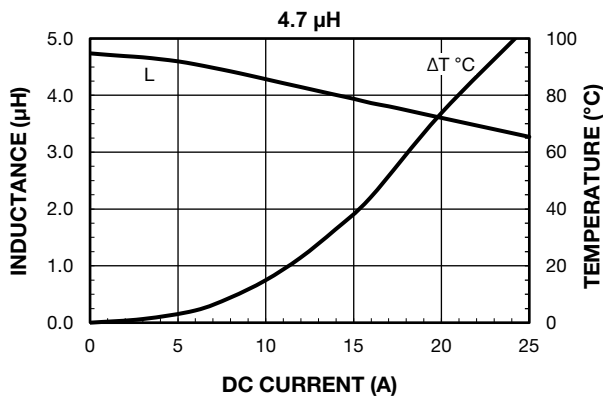
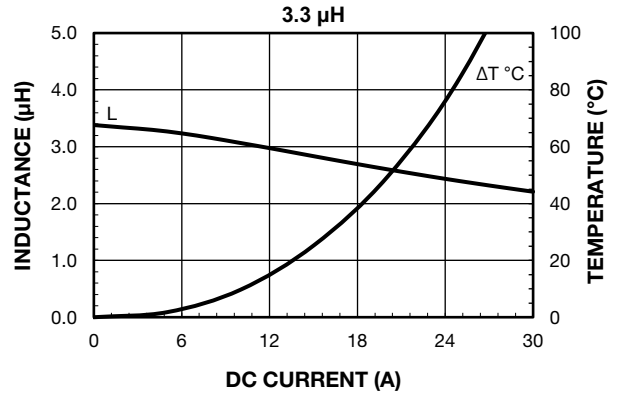
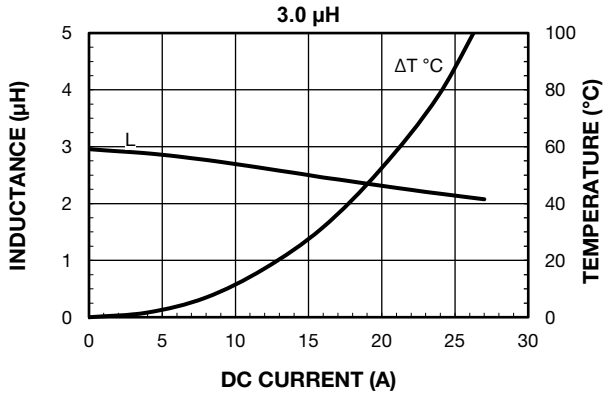


**PERFORMANCE GRAPHS**



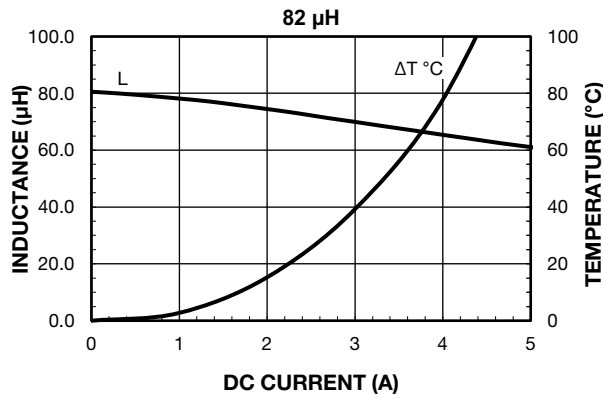
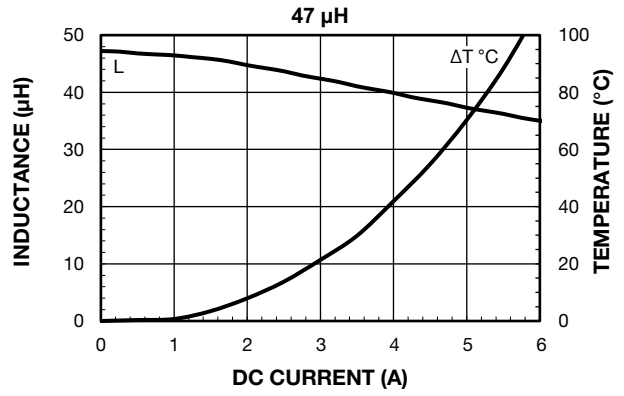
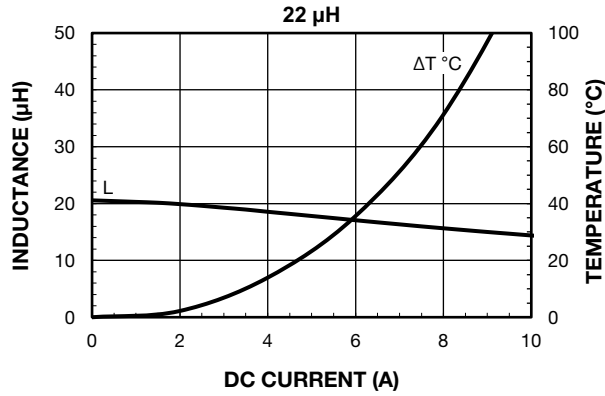


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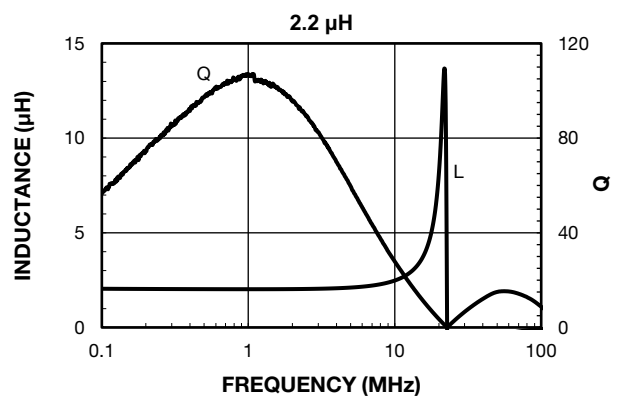
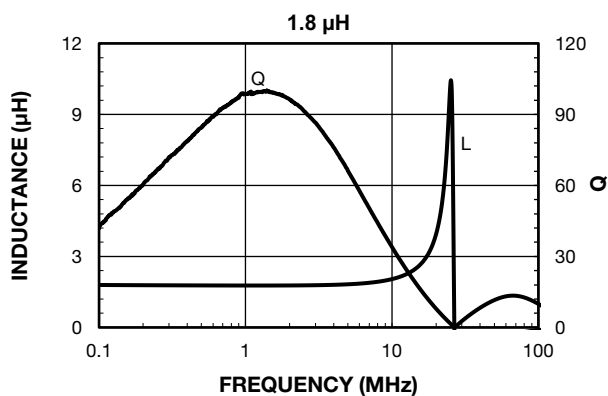
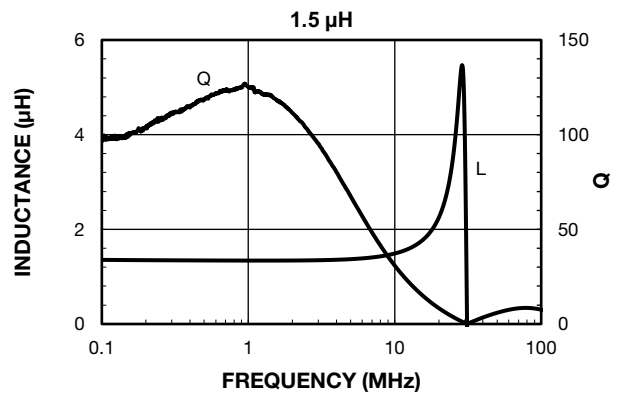
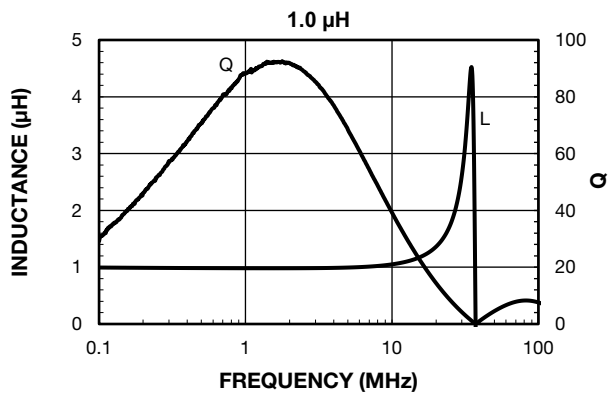
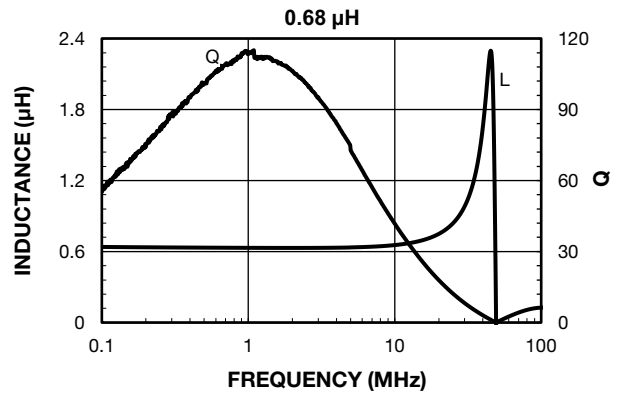
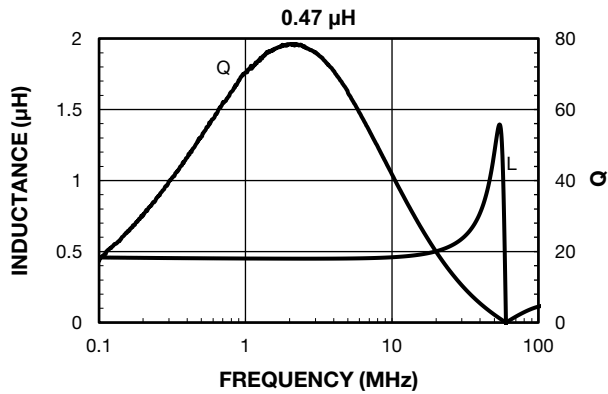
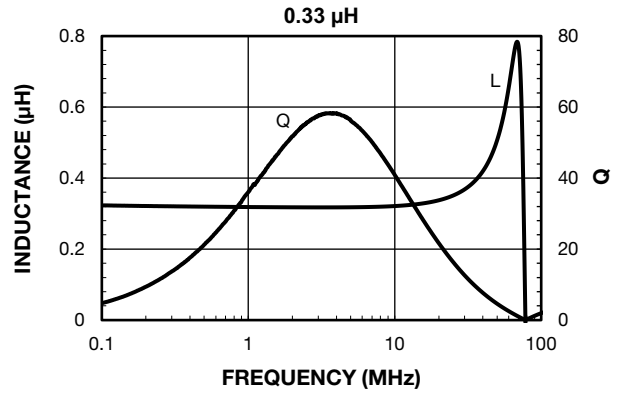
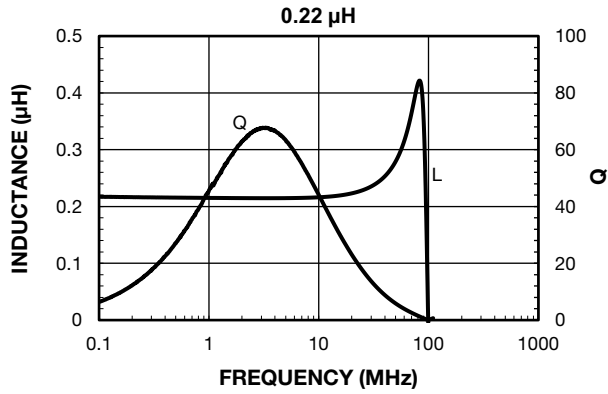


**PERFORMANCE GRAPHS**





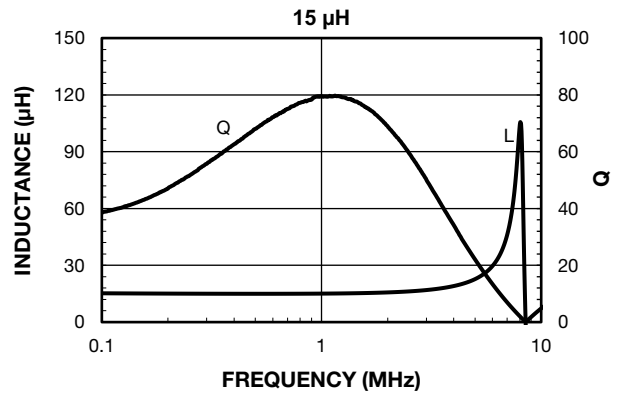
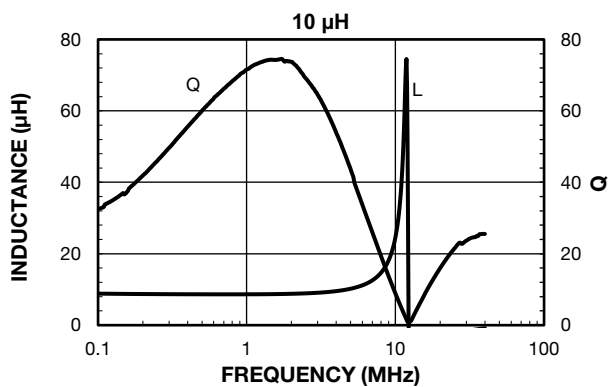
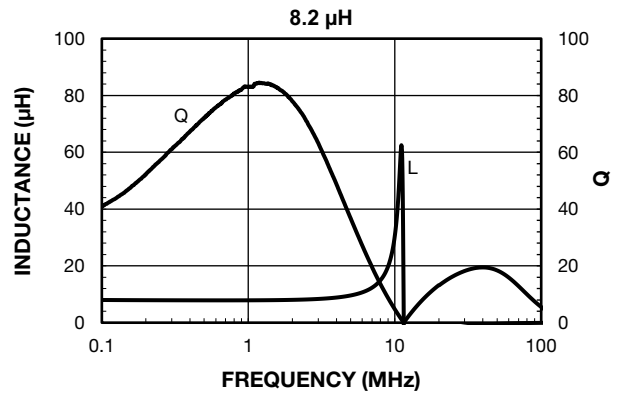
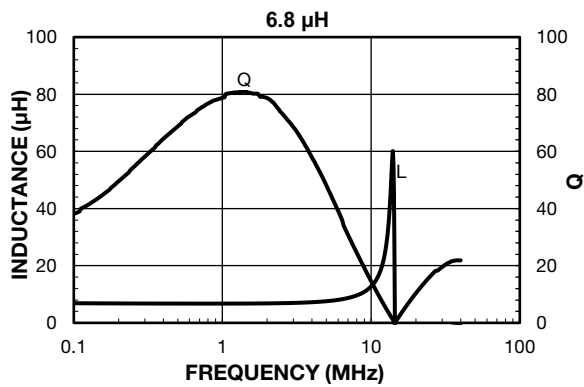
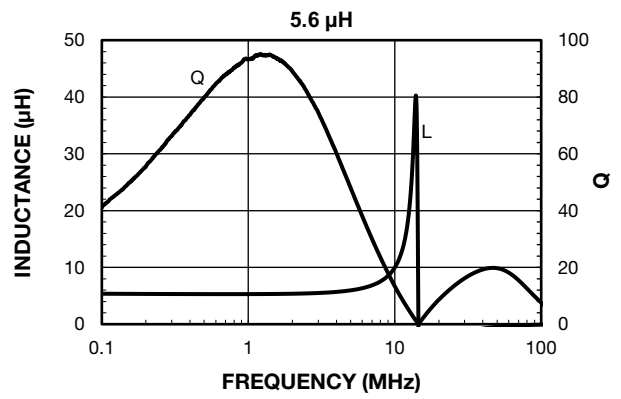
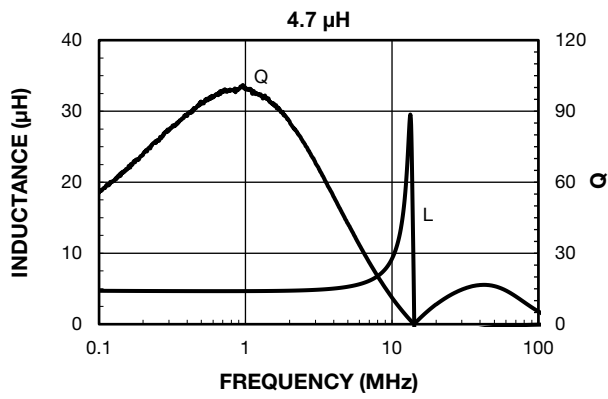
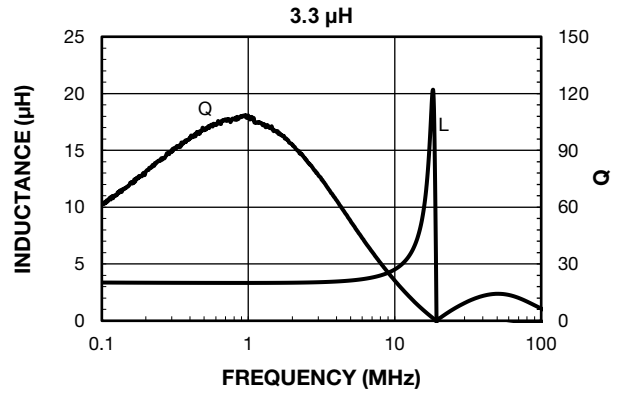
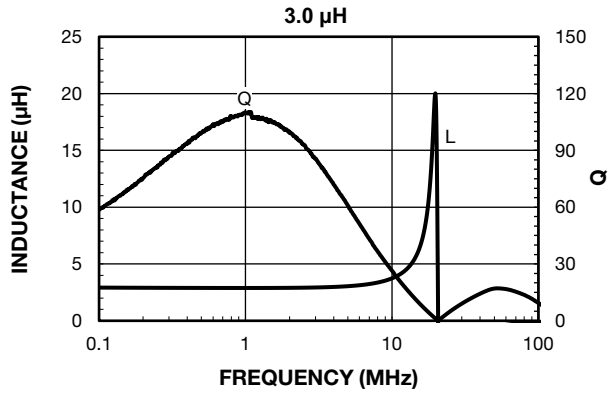
**PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY**





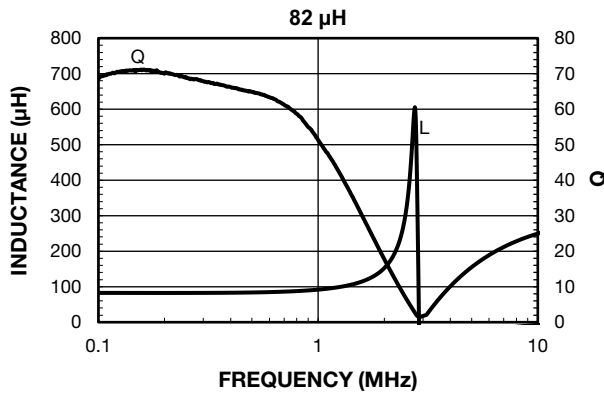
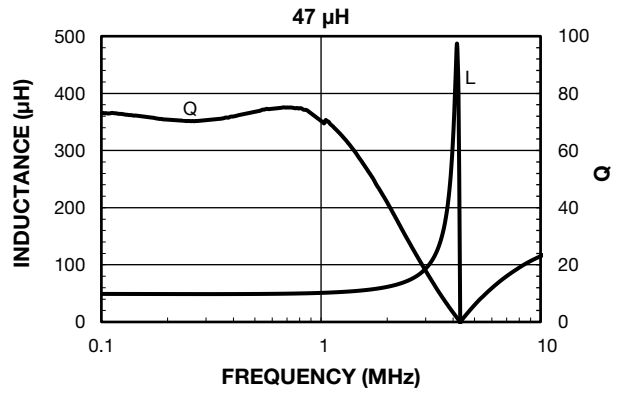
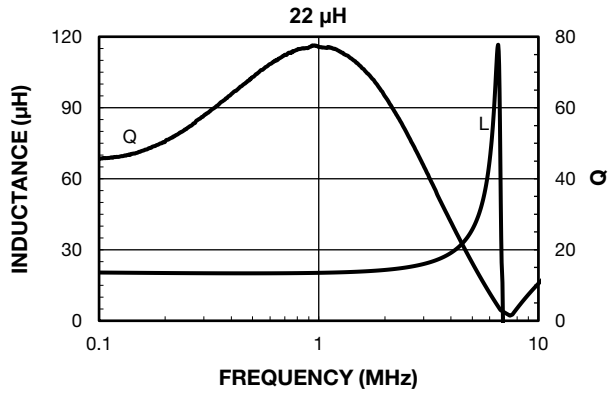


**PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY**





**PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY**





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