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



LINKS TO ADDITIONAL RESOURCES

3D Models

Design Tools

FEATURES

- High temperature, up to 155 °C
- Magnetically shielded construction
- Excellent DC/DC energy storage up to 2 MHz
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- AEC-Q200 qualified
- Packaging information: SMD packaging
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE GRADE

Pb-free

RoHS COMPLIANT

HALOGEN FREE GREEN (5-2008)

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
- Filter applications

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]	
IHLP6767GZE_R47M5A	0.47	0.89	0.95	65	76	110	52.3
IHLP6767GZE_1R0M5A	1	1.36	1.46	53	42	60	35.5
IHLP6767GZE_1R5M5A	1.5	1.72	1.85	40.5	40	55	24
IHLP6767GZE_2R2M5A	2.2	2.25	2.41	38.5	38	41	19.8
IHLP6767GZE_3R3M5A	3.3	3.06	3.27	32.2	32	40	16.5
IHLP6767GZE_4R7M5A	4.7	4.89	5.23	24	26	35	14
IHLP6767GZE_5R6M5A	5.6	5.86	6.30	23	23	33	11.5
IHLP6767GZE_6R8M5A	6.8	7.5	8.06	21	22	32	10.4
IHLP6767GZE_8R2M5A	8.2	8.6	9.23	17.5	14.5	19	9.4
IHLP6767GZE_100M5A	10	10.2	10.91	16	13	18.5	7.7
IHLP6767GZE_150M5A	15	15.85	16.96	12.5	13	16	8.55
IHLP6767GZE_220M5A	22	21.28	22.27	11.7	11	15	5.97
IHLP6767GZE_330M5A	33	36.2	38.9	8.8	9.4	13.7	4.43
IHLP6767GZE_470M5A	47	52.7	56.4	7.25	7	10.1	3.72

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 L_0 to drop approximately 20 %

(3) DC current (A) that will cause L_0 to drop approximately 30 %

For technical questions, contact: magnetics@vishay.com

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DESCRIPTION

IHLP-6767GZ-5A	2.2 µH	± 20 %	TAPE AND REEL	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I H L P	6 7 6 7 G Z	E K	2 R 2	M	5 A
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EK = tape and reel	**2R2** = 2.2 µH	**M** = ± 20 % **N** = ± 30 %	

PACKAGE CODE OPTIONS

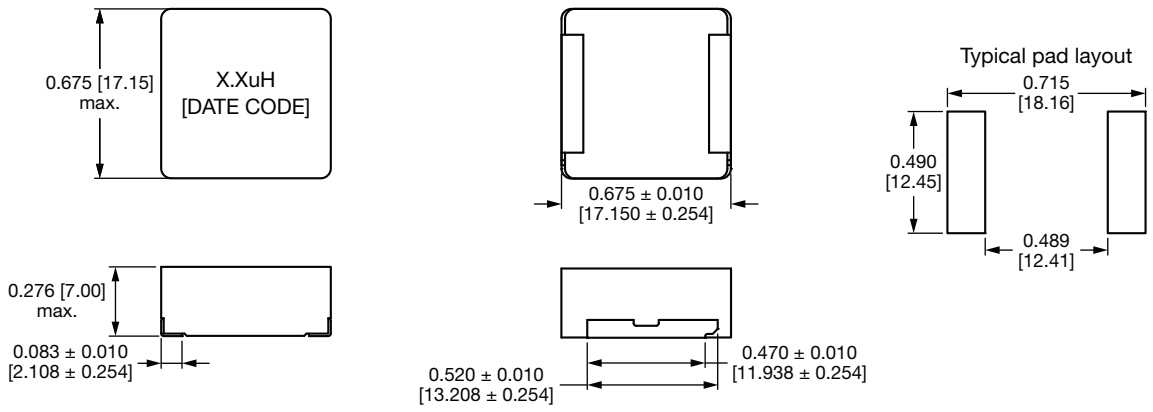
EK = tape and reel packaging (250 pcs on 13-inch reel)

ER = tape and reel packaging (200 pcs on 13-inch reel)

Note

- For additional packaging details see "Packaging Methods"

DIMENSIONS in inches [millimeters]

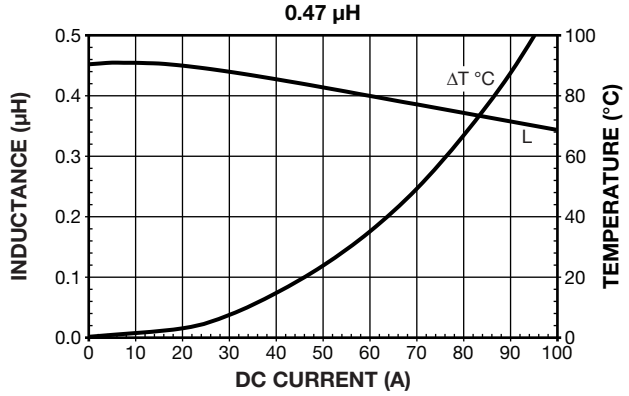


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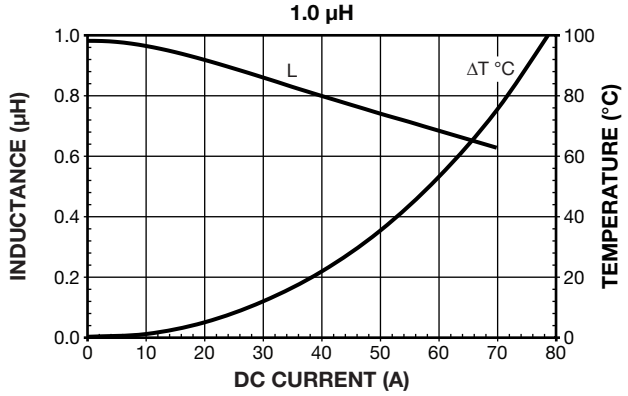
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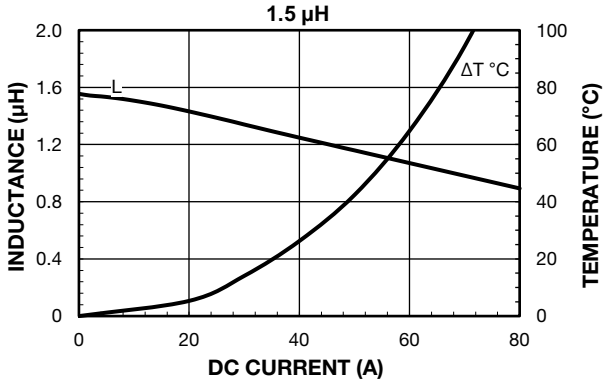
0.47 µH



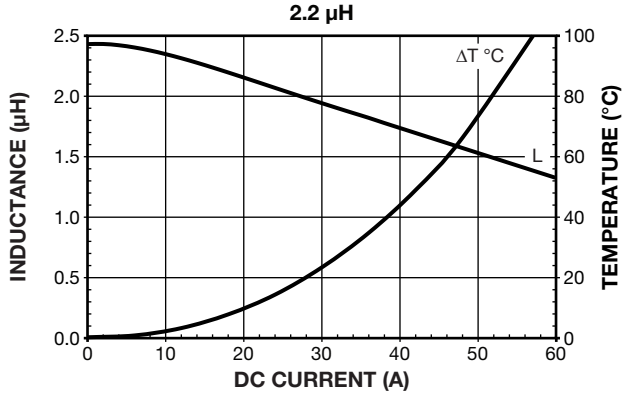
1.0 µH



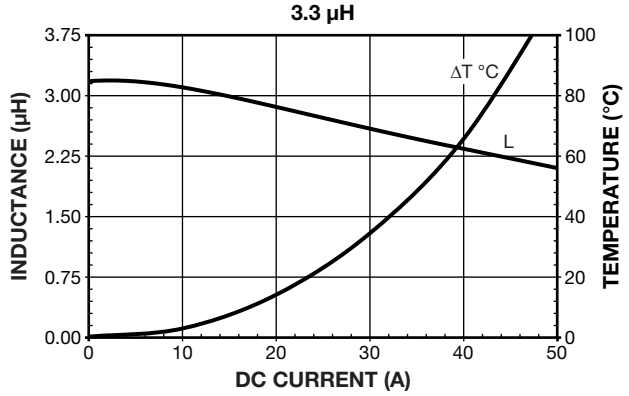
1.5 µH



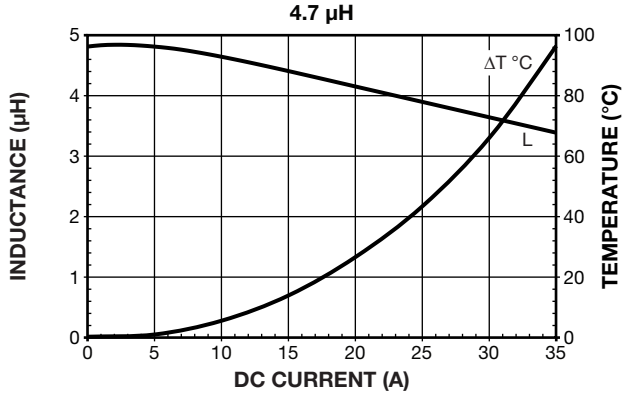
2.2 µH



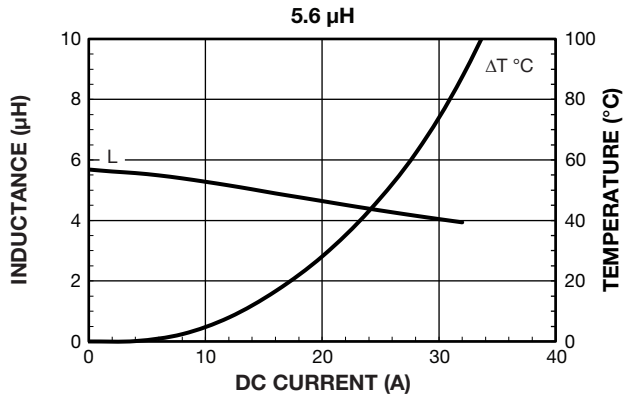
3.3 µH



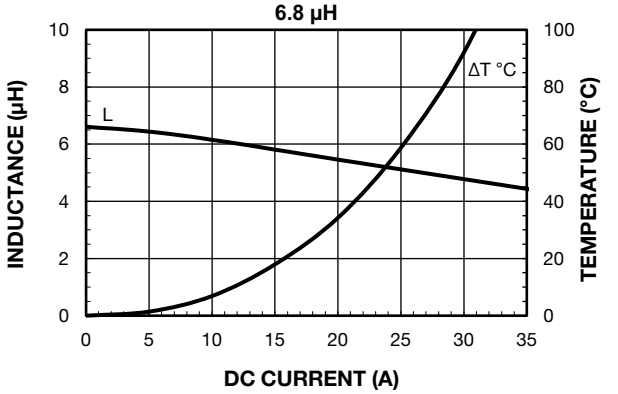
4.7 µH



5.6 µH



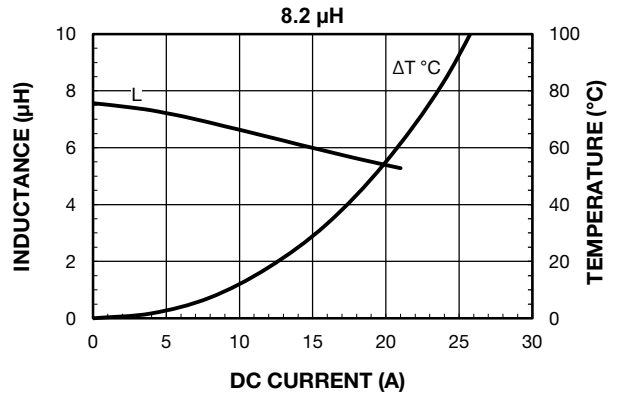
6.8 µH

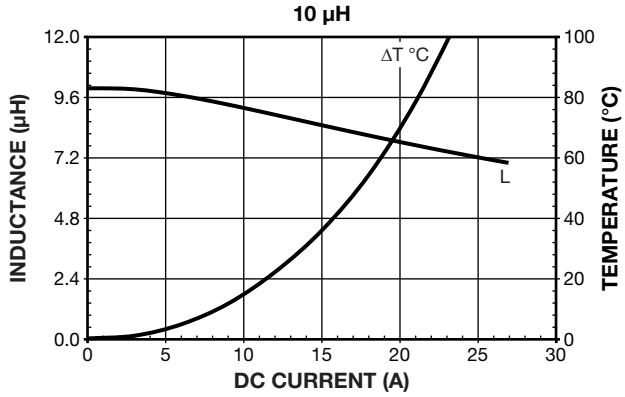


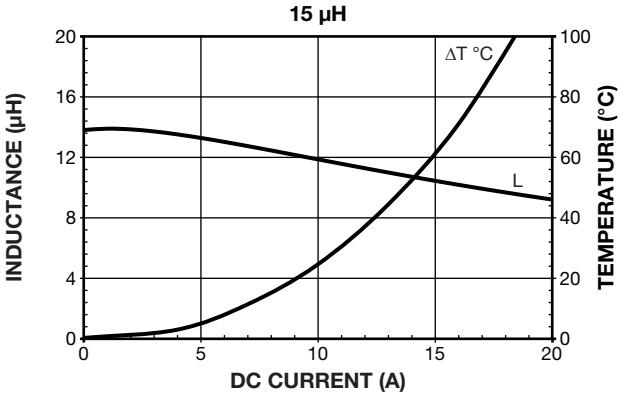
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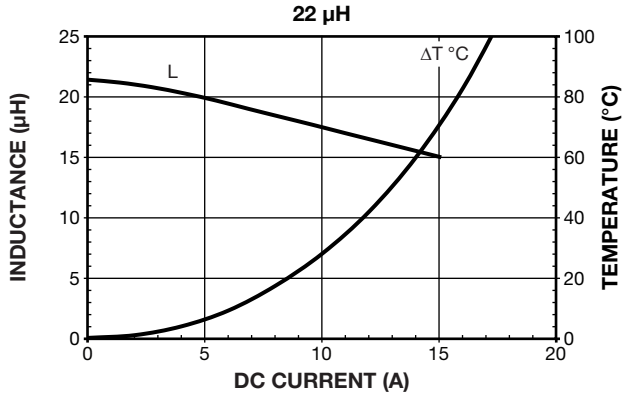
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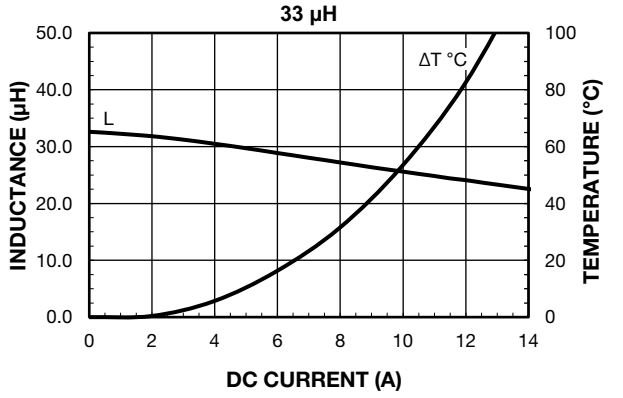
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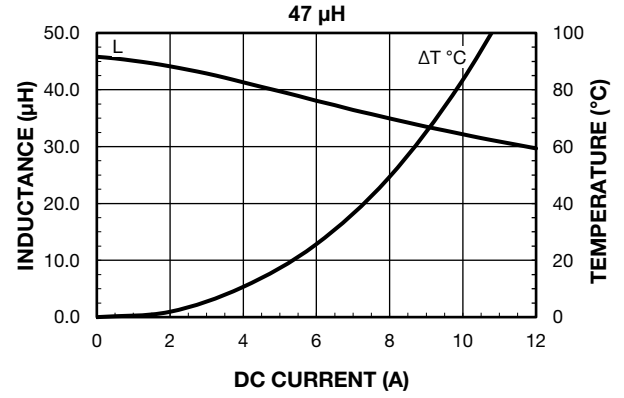








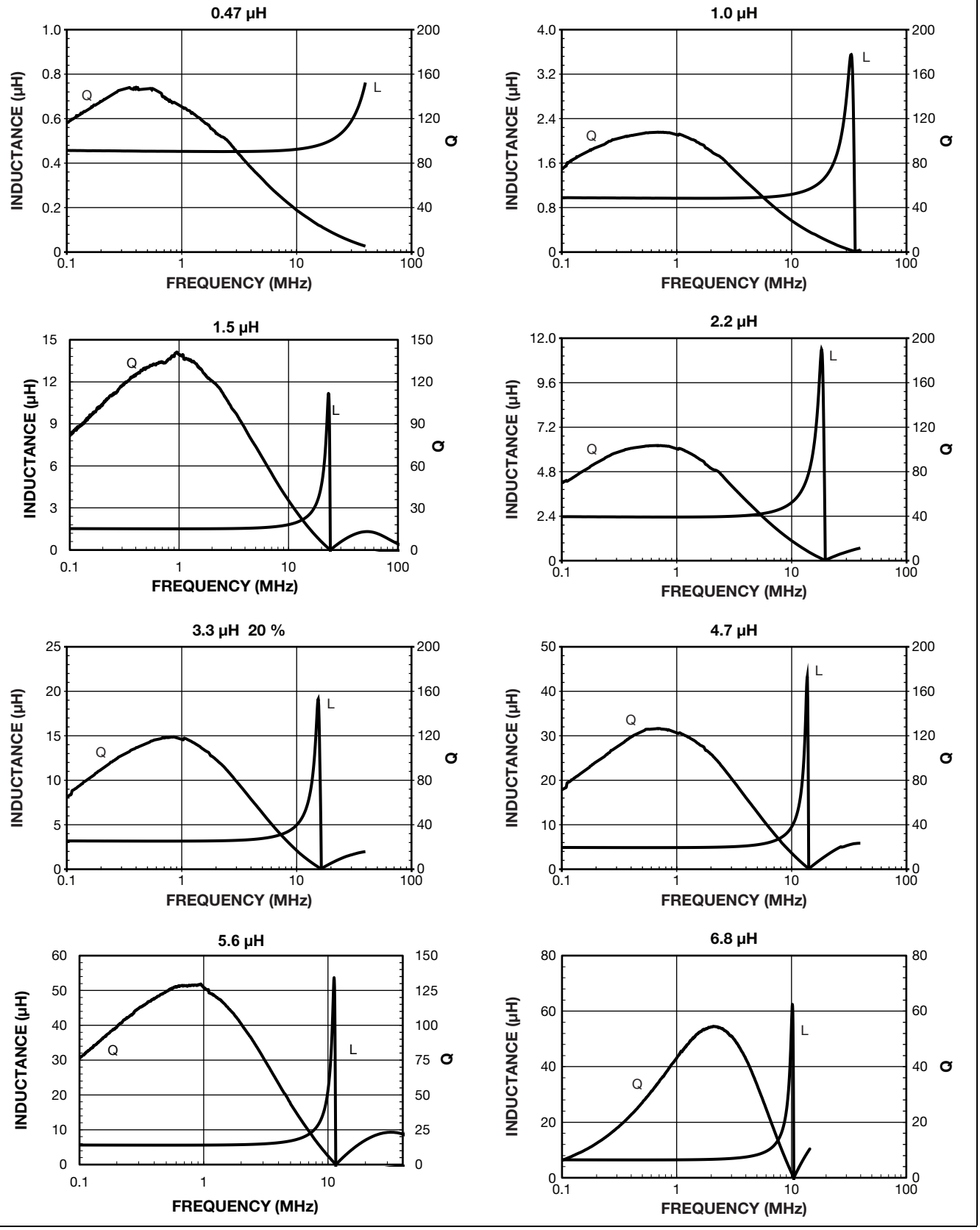




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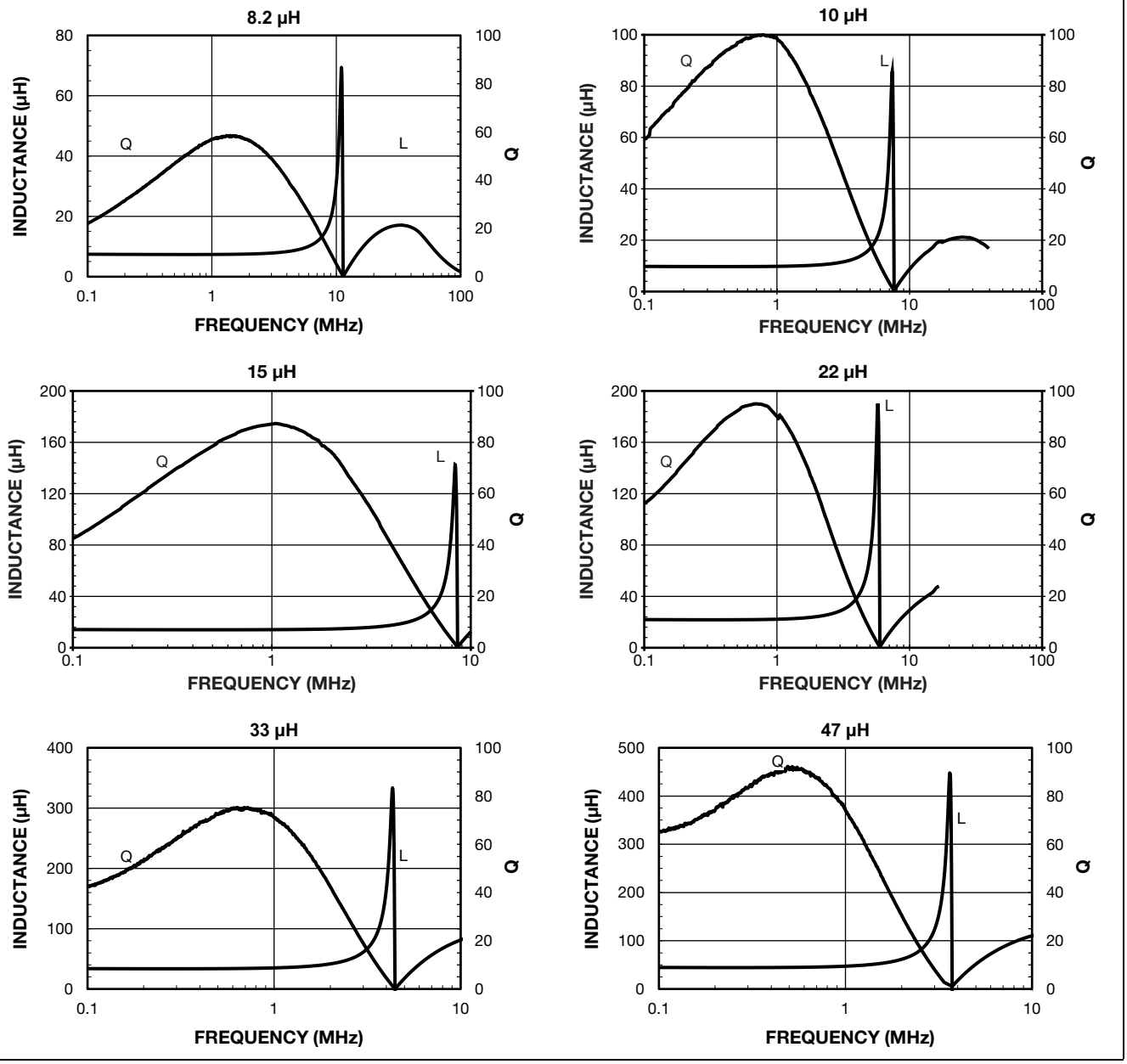
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