IHLP® Automotive Inductors, Low DCR Series



LINKS TO ADDITIONAL RESOURCES

3D Models

Design Tools

FEATURES

- Shielded construction
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE GRADE

Pb-free

RoHS COMPLIANT

HALOGEN FREE

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_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)
IHLP6767GZEKR33M1A	0.33	0.67	0.73	75.5	55	78
IHLP6767GZEKR47M1A	0.47	0.78	0.87	72	57	60
IHLP6767GZEKR56M1A	0.56	0.83	0.91	61	66	40
IHLP6767GZEKR82M1A	0.82	0.98	1.08	56.5	45	36
IHLP6767GZEK1R0M1A	1.0	1.21	1.27	55.5	32	34
IHLP6767GZEK1R5M1A	1.5	1.54	1.62	48	31	26
IHLP6767GZEK2R2M1A	2.2	1.85	1.98	43.5	28	19
IHLP6767GZEK3R3M1A	3.3	2.79	2.93	35	27	16
IHLP6767GZEK4R7M1A	4.7	3.98	4.18	30	21	10.7
IHLP6767GZEK5R6M1A	5.6	4.23	4.44	28	21	11.8
IHLP6767GZEK6R8M1A	6.8	5.86	6.15	22.5	18.5	10.0
IHLP6767GZEK8R2M1A	8.2	7.71	8.10	21	18	10.0
IHLP6767GZEK100M1A	10.0	8.89	9.33	19	17	8.0
IHLP6767GZEK150M1A	15.0	13.7	14.4	14	12	7.5
IHLP6767GZEK220M1A	22.0	20.0	21.0	12	9.5	4.3
IHLP6767GZEK330M1A	33.0	35.1	37.0	10.7	9	4.8
IHLP6767GZEK470M1A	47.0	40.7	42.7	8.7	8.6	4.1
IHLP6767GZEK560M1A	56.0	55	57.8	7.2	4.2	2.9
IHLP6767GZEK680M1A	68.0	72.1	75.7	6.1	4.5	3.0
IHLP6767GZEK820M1A	82.0	87.3	91.7	5.5	4.5	2.6
IHLP6767GZEK101M1A	100.0	105	110	5.0	4.0	2.1

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) = 50 V

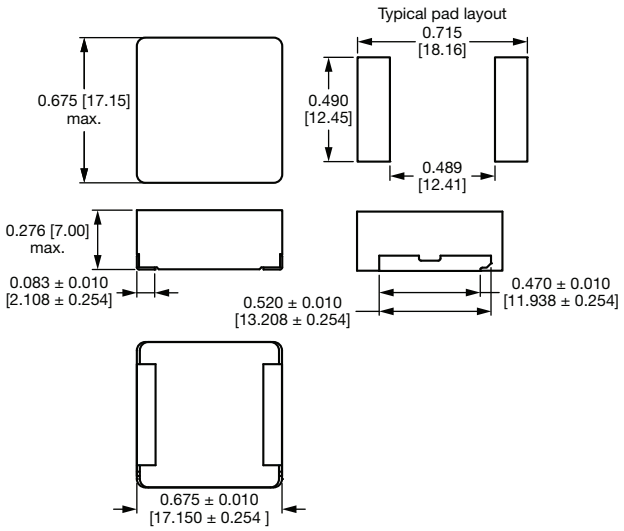
(1) DC current (A) that will cause an approximate ΔT of 40 °C

(2) DC current (A) that will cause L_0 to drop approximately 20 %

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DIMENSIONS in inches [millimeters]



DESCRIPTION

IHLP-6767GZ-1A	4.7 µH	± 20 %	EK	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	4 R 7	M	1 A
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EK = tape and reel	**4R7** = 4.7 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)

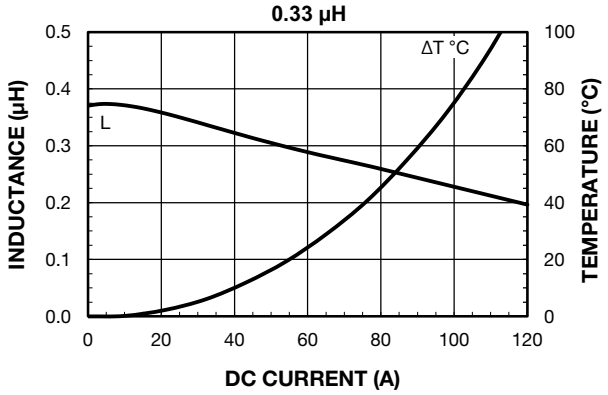
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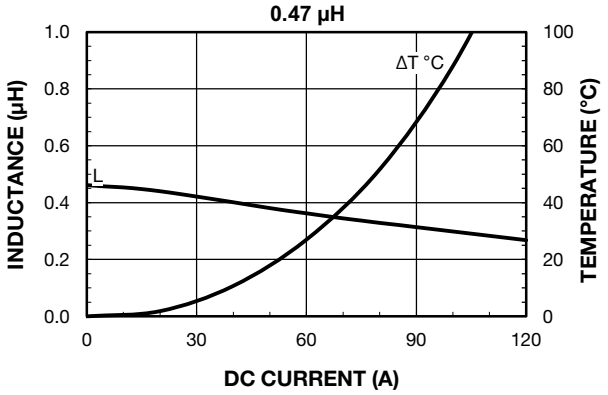
- For additional packaging details see "Packaging Methods"

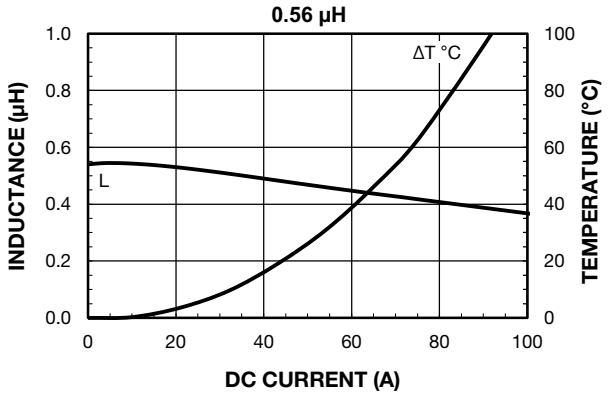
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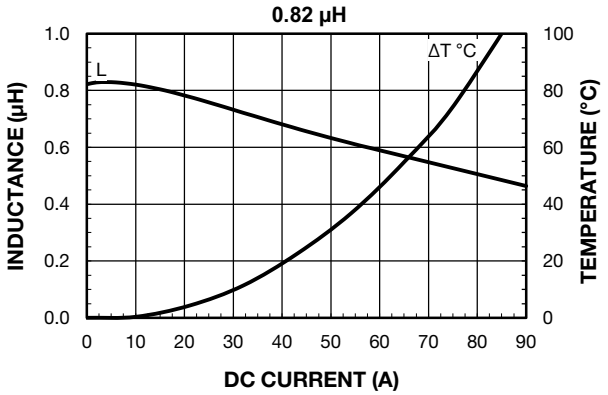
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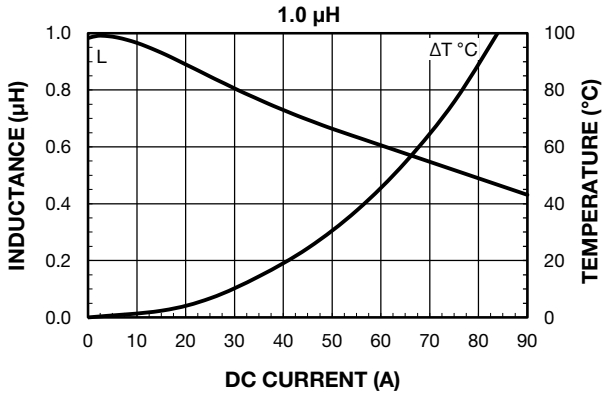
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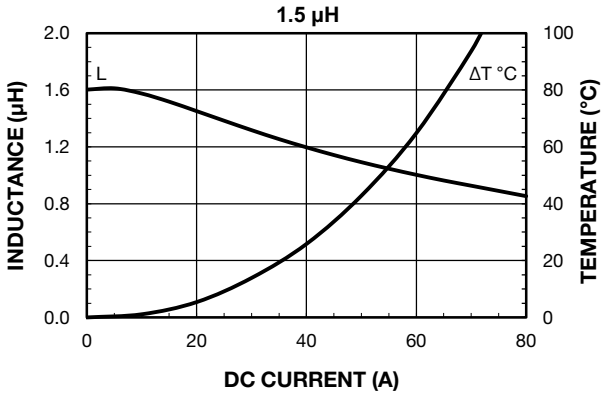


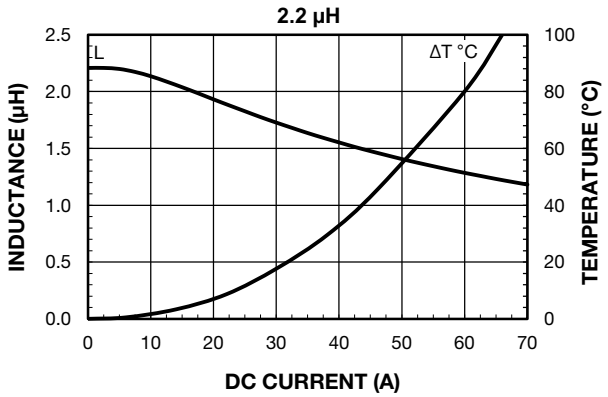


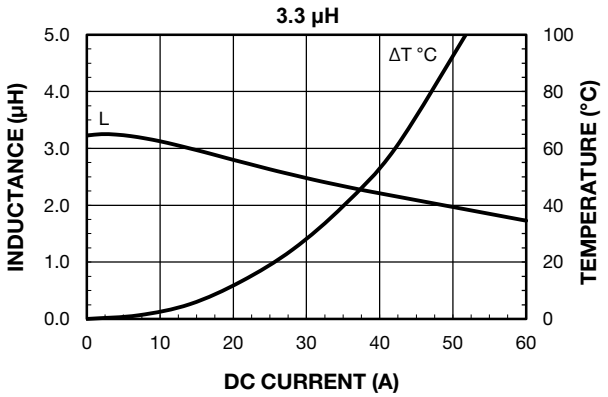






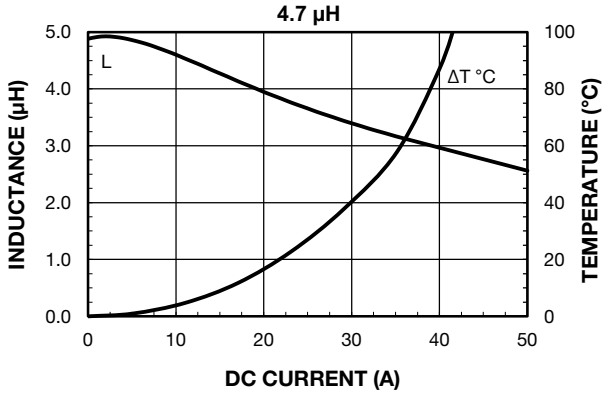


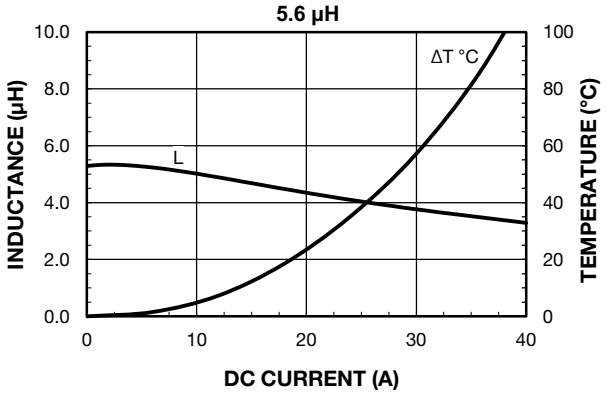


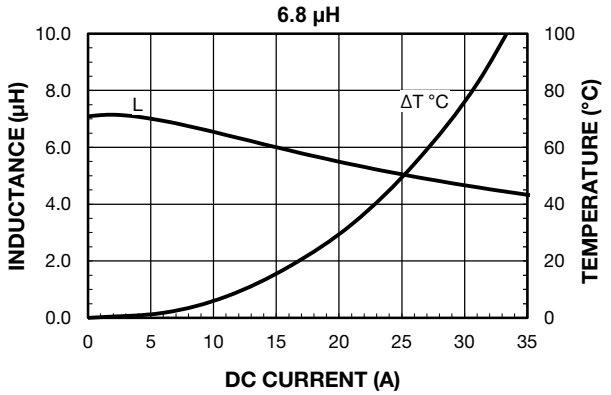


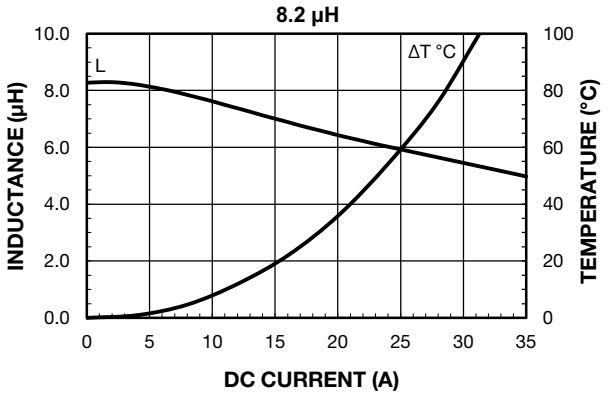
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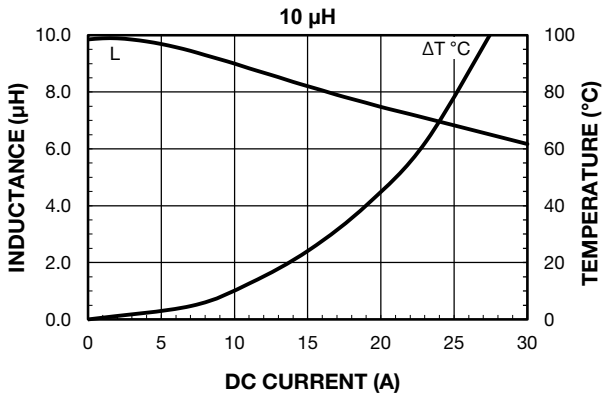
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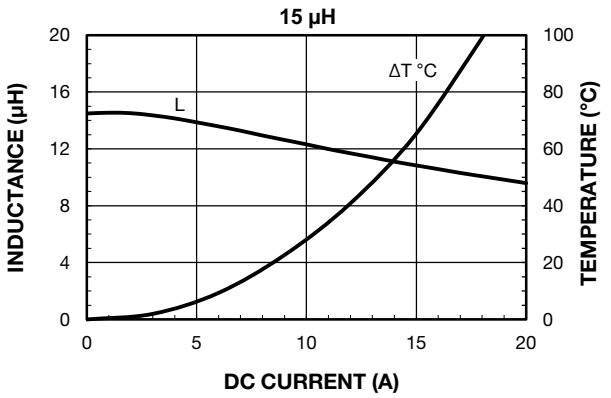


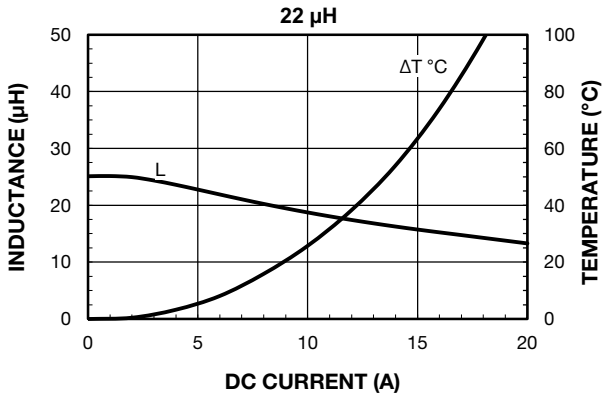


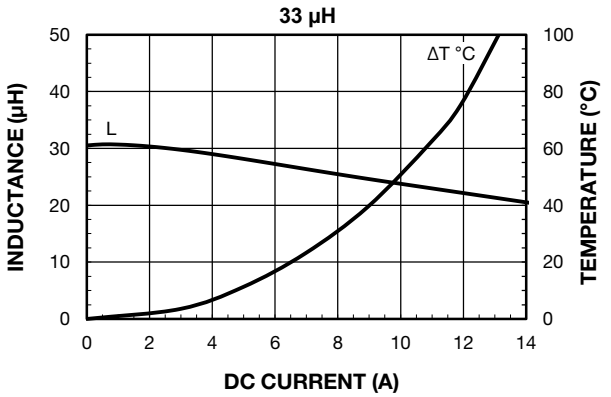






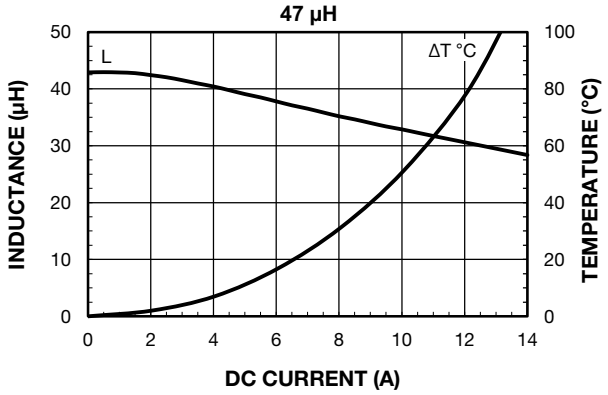


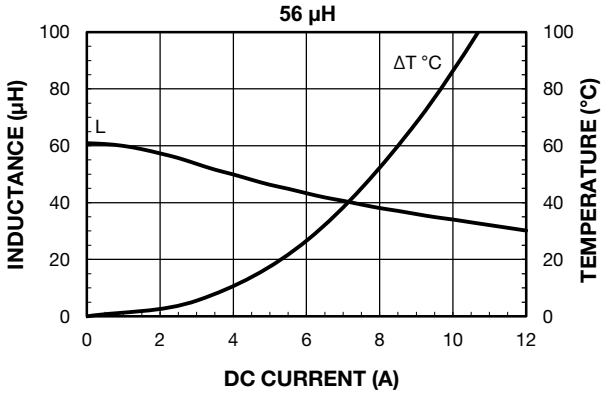


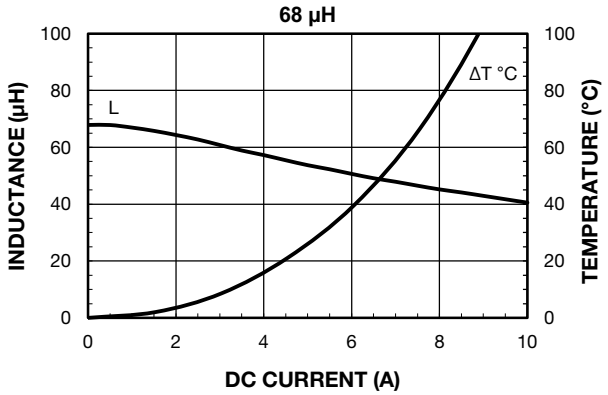


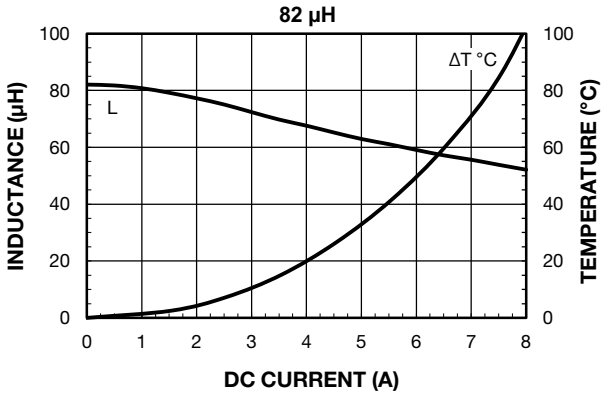
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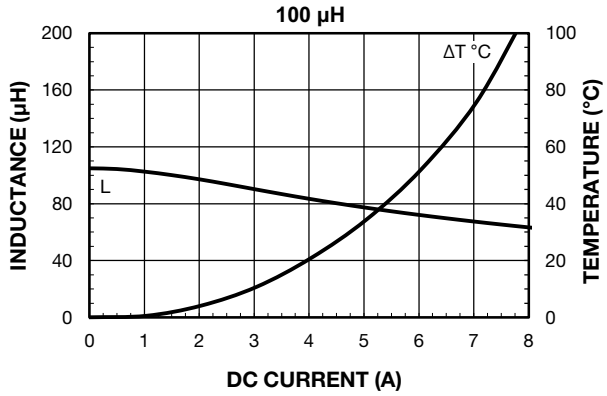
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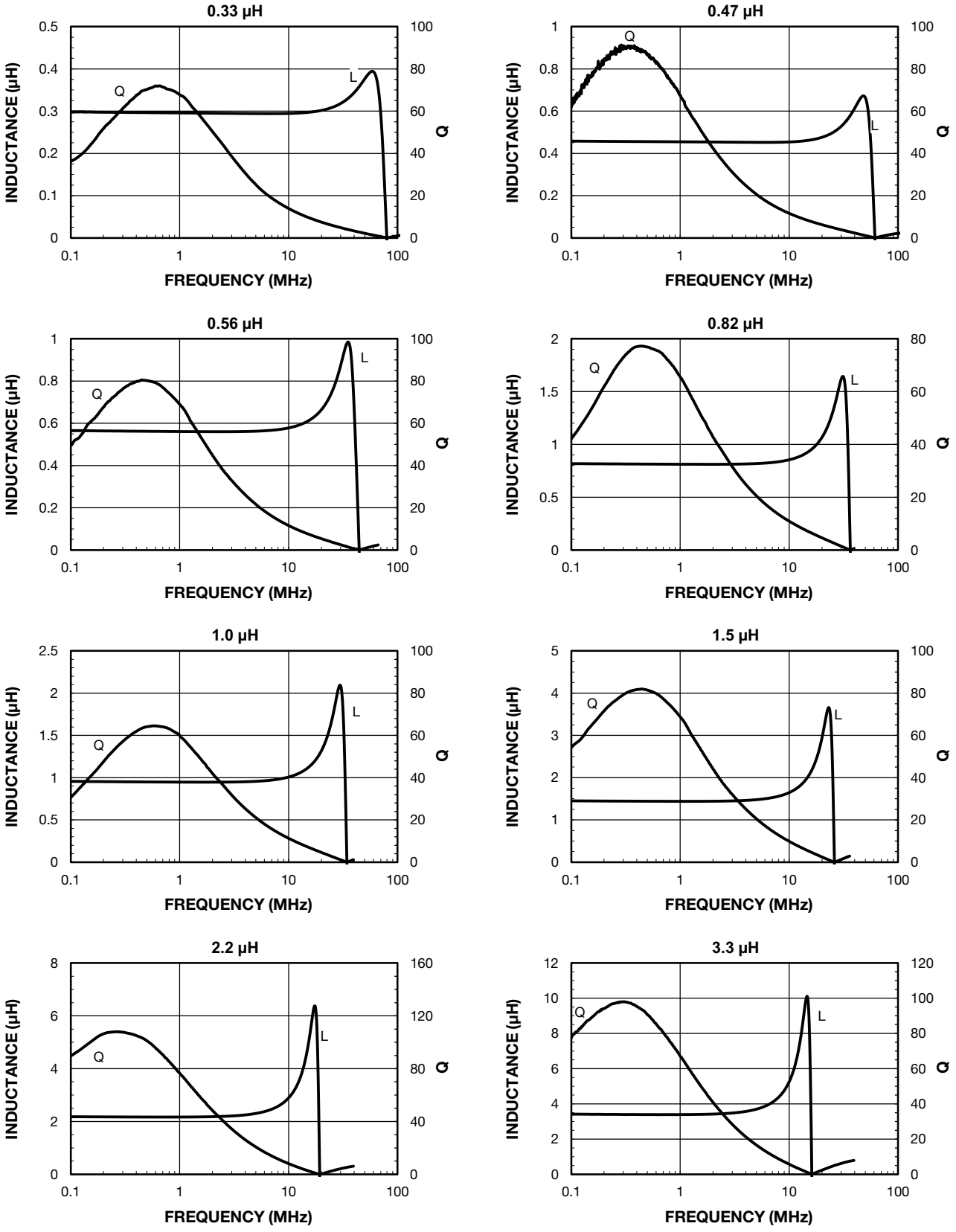




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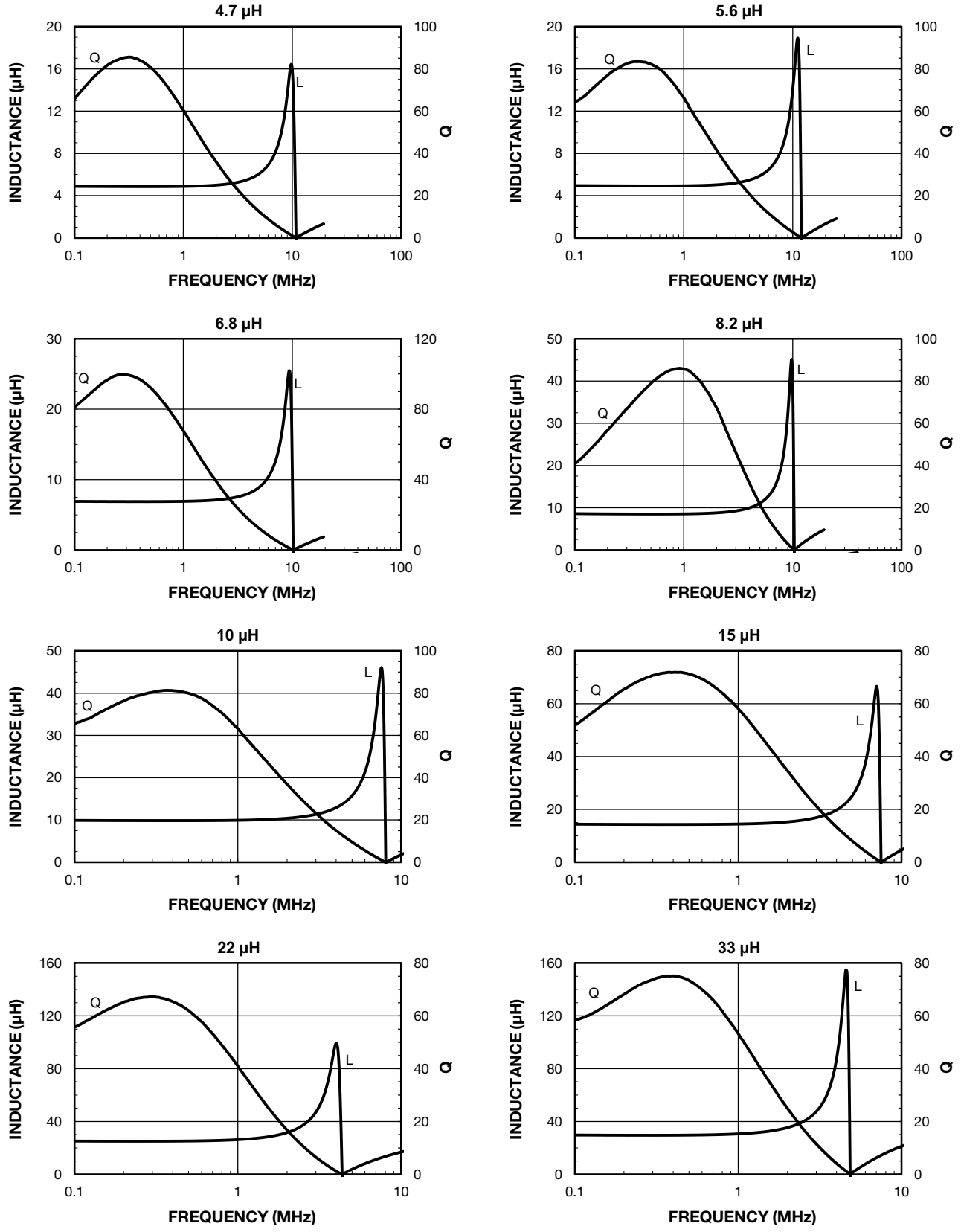
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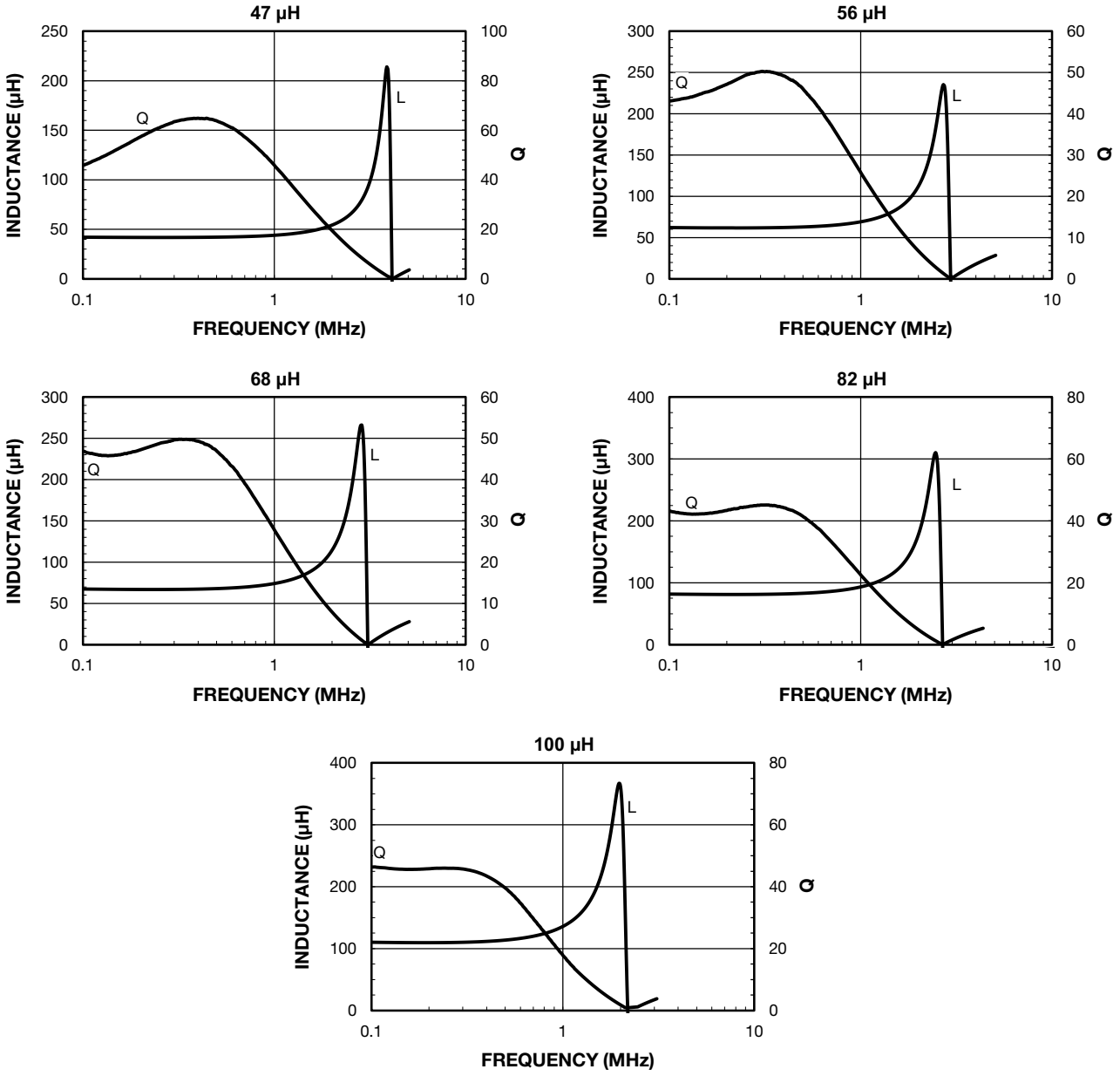
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