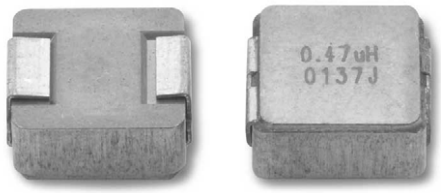
IHLP® Inductors, High Saturation Series



FEATURES

- Low profile inductor with excellent saturation for maximum ripple regulation and transient current control
- 5.18 mm x 5.18 mm x 2.0 mm SMD package
- Magnetically shielded construction
- Handles high transient current spikes without saturation
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE GREEN (5-2008)

LINKS TO ADDITIONAL RESOURCES

Product Page | 3D Models | Calculators

APPLICATIONS

- DC/DC converters
- Power line noise suppression and filtering
- SSD modules, USB chargers

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)
IHLP2020BZERR10M01	0.10	3.6	3.9	17.0	45.0	239
IHLP2020BZERR22M01	0.22	4.9	5.2	15.0	22.0	145
IHLP2020BZERR33M01	0.33	7.6	8.2	12.0	25.0	125
IHLP2020BZERR47M01	0.47	8.9	9.4	11.5	21.0	98
IHLP2020BZERR68M01	0.68	11.2	12.4	10.0	15.0	77
IHLP2020BZER1R0M01	1.0	18.9	20.0	7.0	16.0	62
IHLP2020BZER2R2M01	2.2	45.6	50.1	4.2	9.5	39
IHLP2020BZER3R3M01	3.3	79.2	85.5	3.3	8.5	30
IHLP2020BZER4R7M01	4.7	108.0	116.6	2.8	5.0	28
IHLP2020BZER5R6M01	5.6	113.0	122.0	2.5	4.5	24
IHLP2020BZER6R8M01	6.8	139.0	150.0	2.4	4.3	21
IHLP2020BZER100M01	10	184.0	199.0	2.3	4.0	20

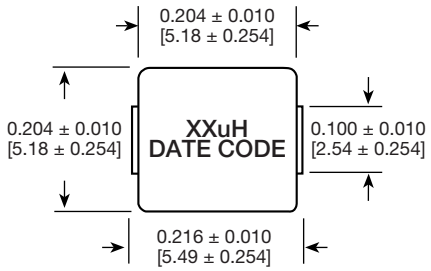
Notes

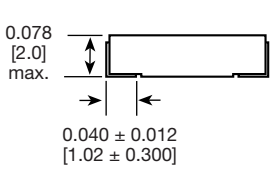
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +125 °C
- The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provisions 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

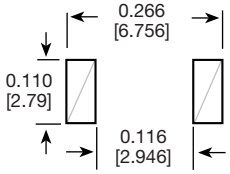
(2) DC current (A) that will cause L_0 to drop approximately 20 %

DIMENSIONS in inches [millimeters]





Typical pad layout (min.)



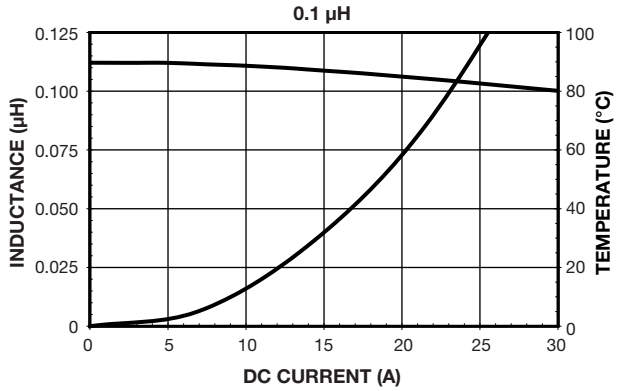
DESCRIPTION

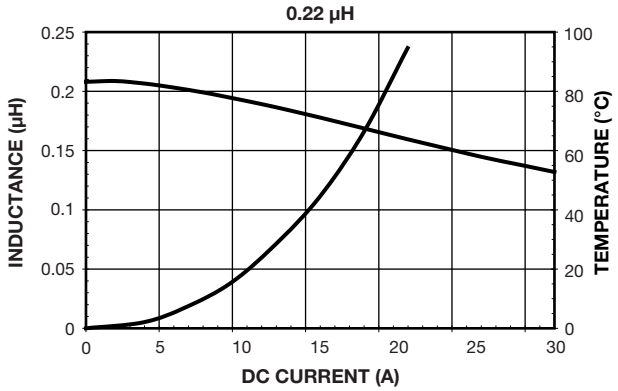
IHLP-2020BZ-01	3.3 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

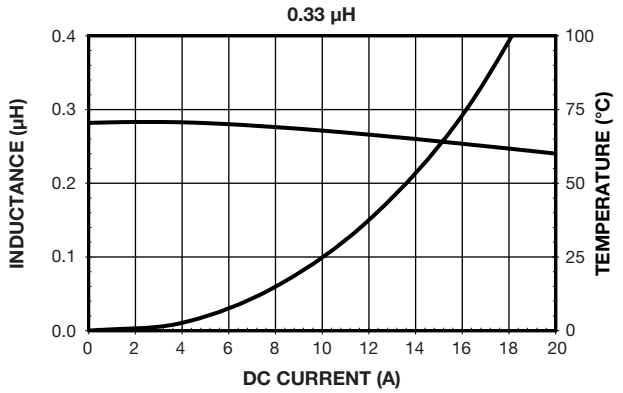
GLOBAL PART NUMBER

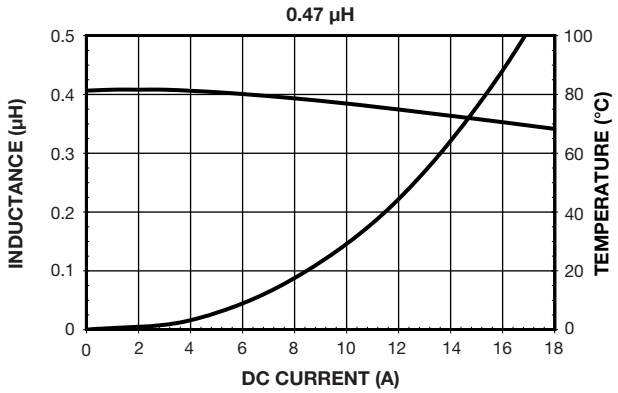
I H L P	2 0 2 0 B Z	E R	3 R 3	M	0 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	TOLERANCE	SERIES
		ER = tape and reel	**3R3** = 3.3 Ω	**M** = 20 %	

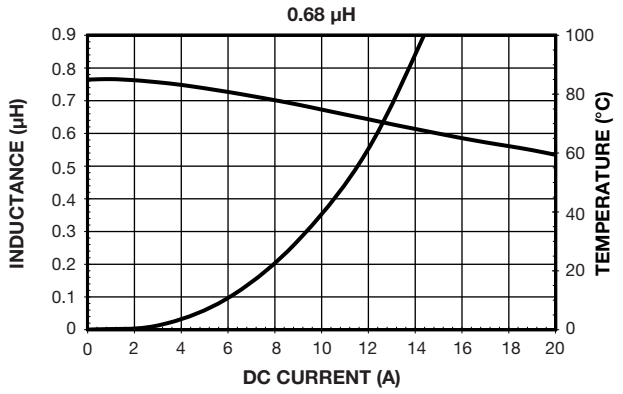
PERFORMANCE GRAPHS

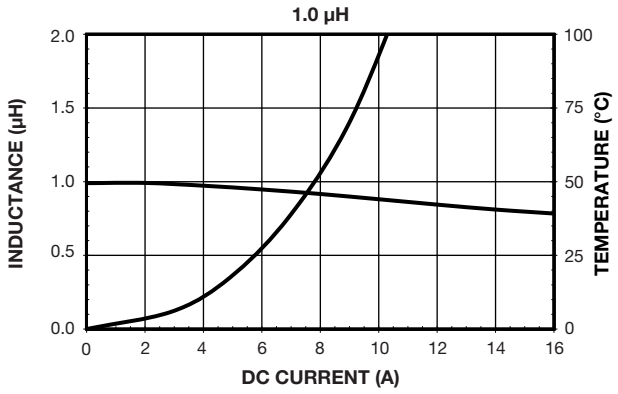


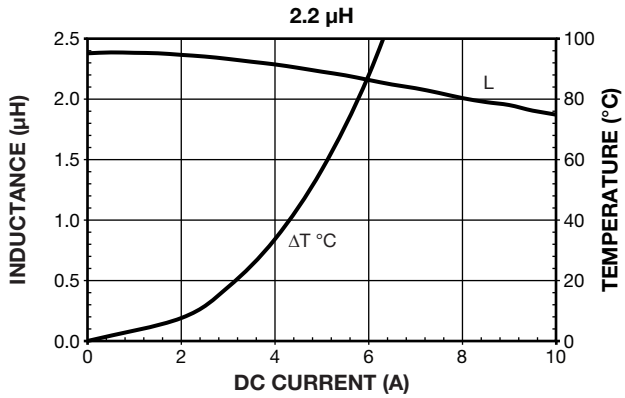


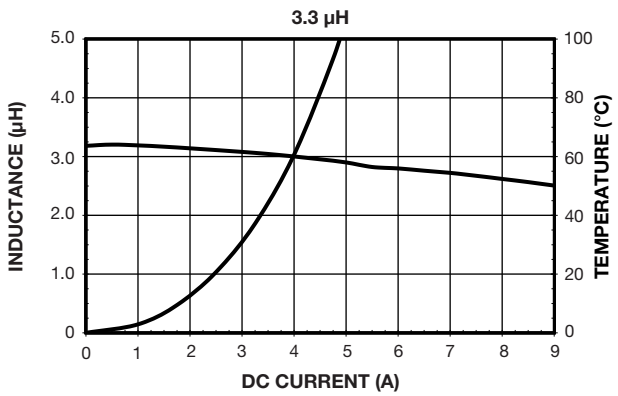












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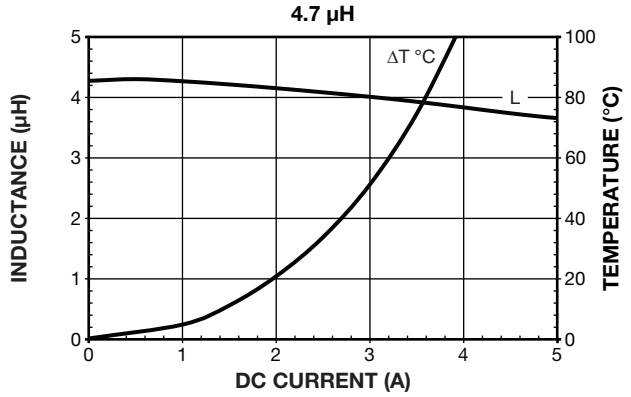
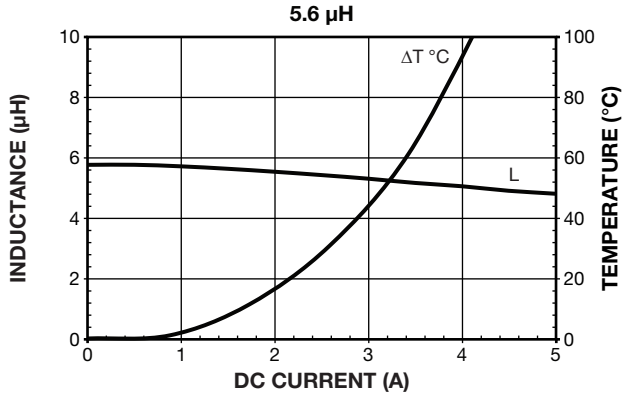
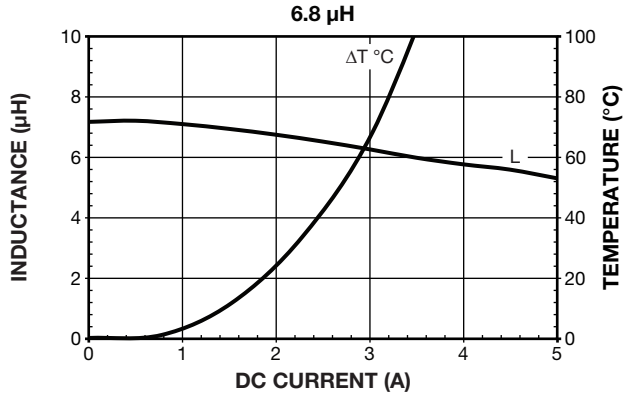
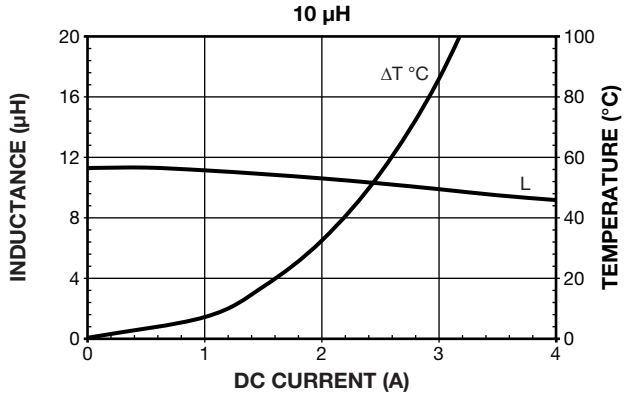
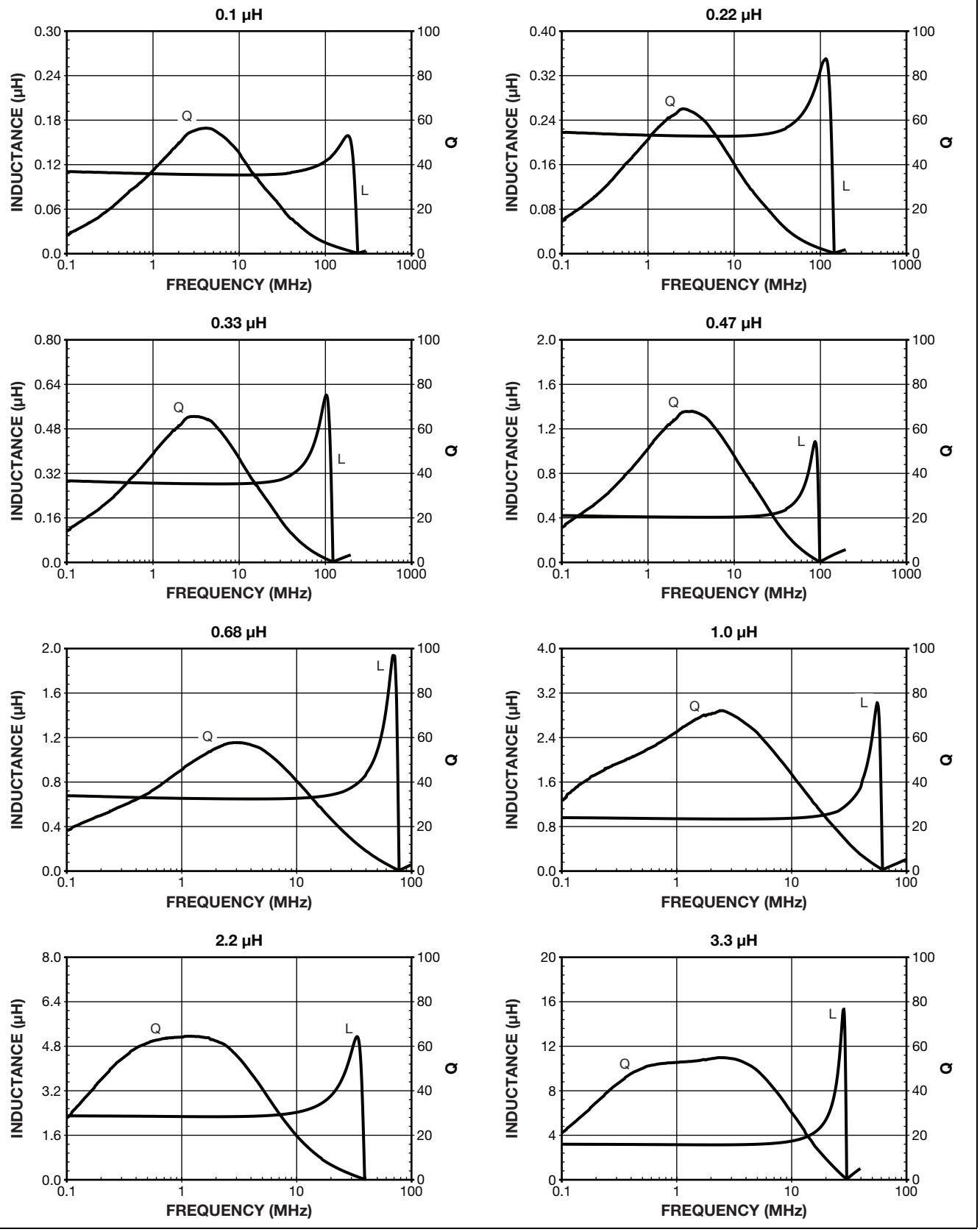








PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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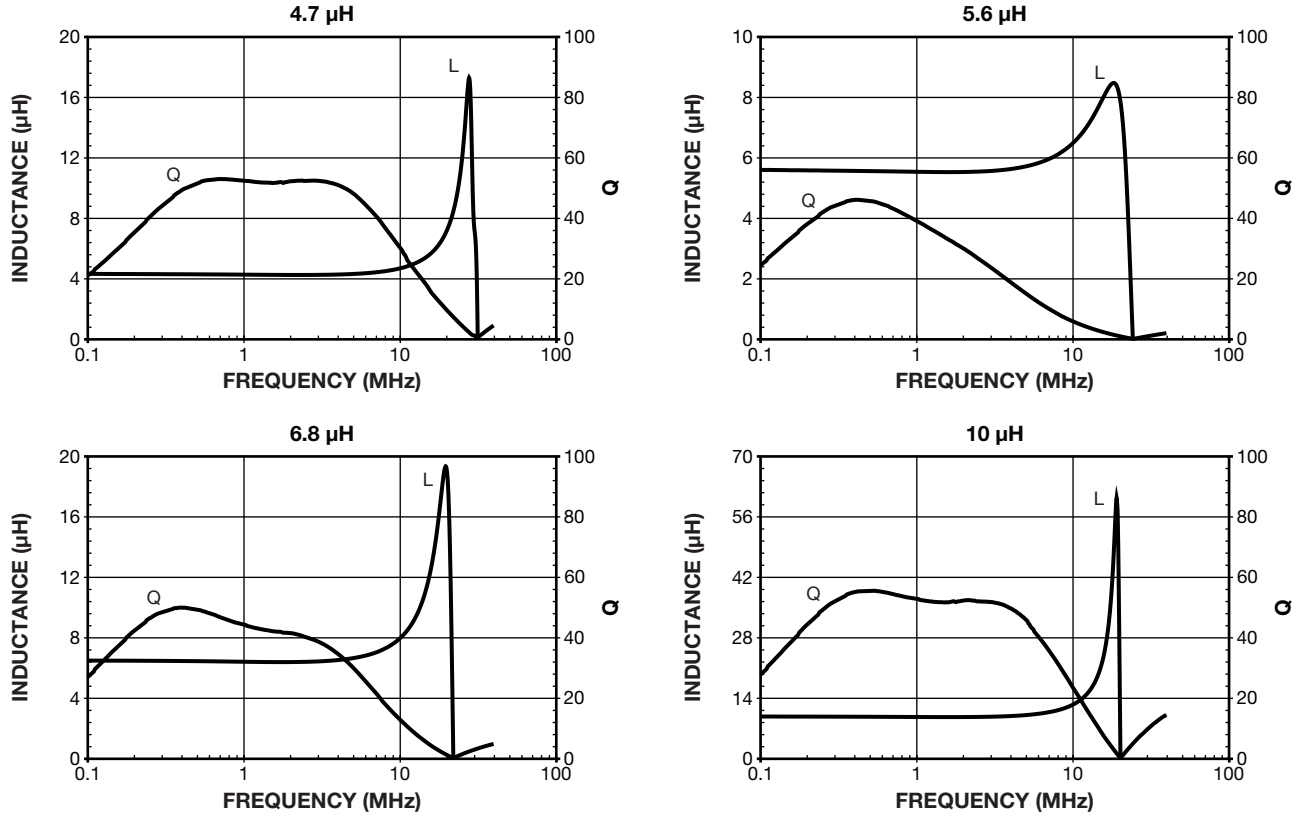

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