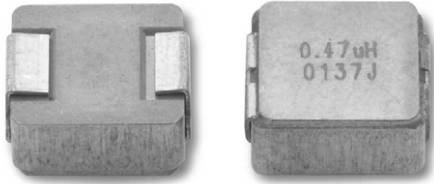




**THE DATASHEET OF  
IHLP2020BZERR68M01**



## 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](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

### LINKS TO ADDITIONAL RESOURCES


[Product Page](#)
[3D Models](#)
[Calculators](#)

### APPLICATIONS

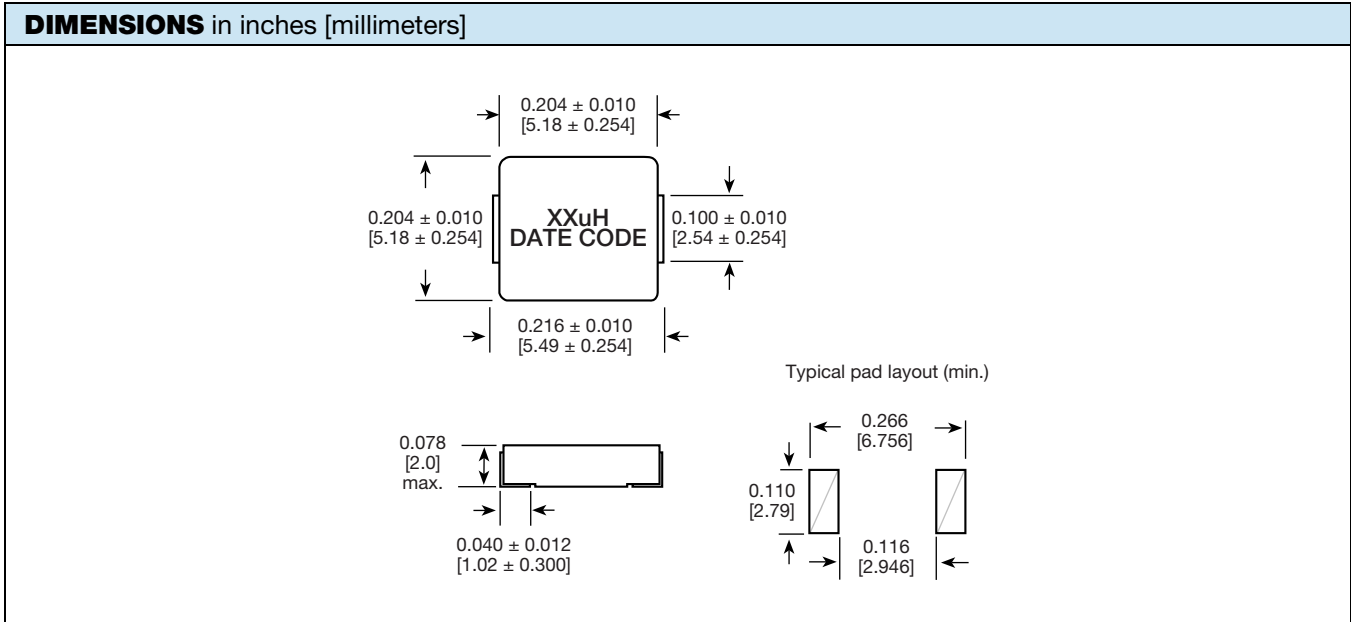
- DC/DC converters
- Power line noise suppression and filtering
- SSD modules, USB chargers

### STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L <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)
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
- <sup>(1)</sup> DC current (A) that will cause an approximate ΔT of 40 °C  
<sup>(2)</sup> DC current (A) that will cause L<sub>0</sub> to drop approximately 20 %

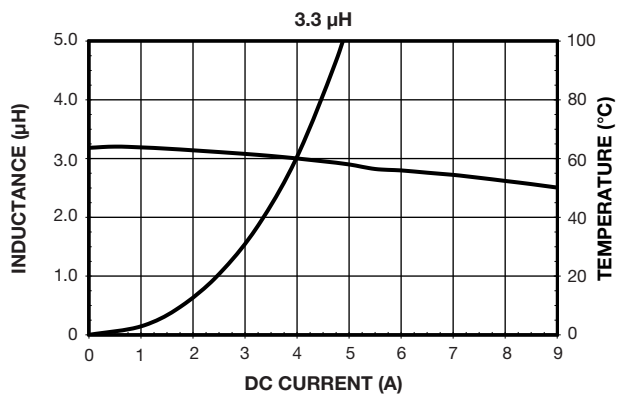
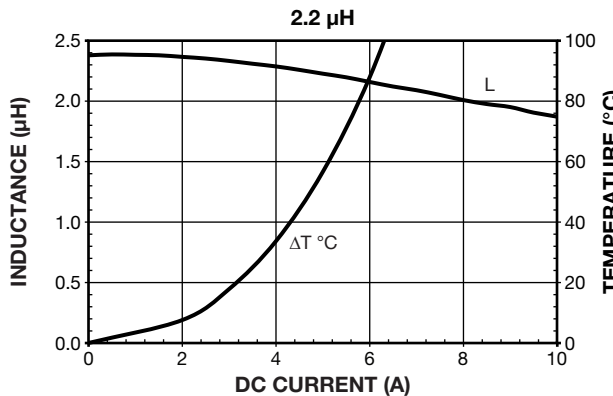
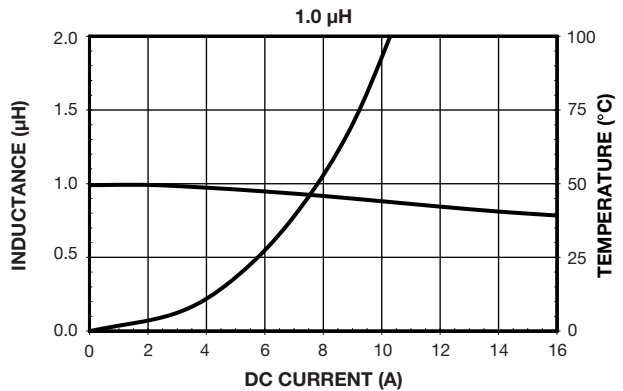
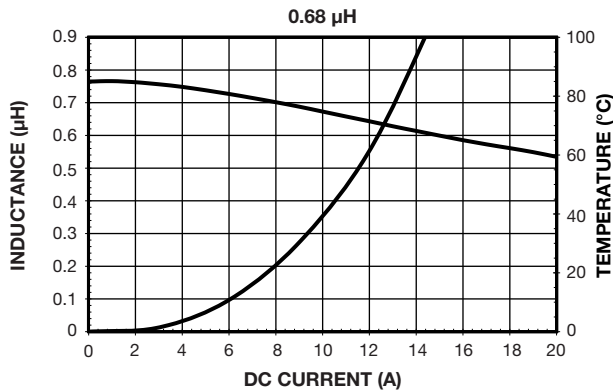
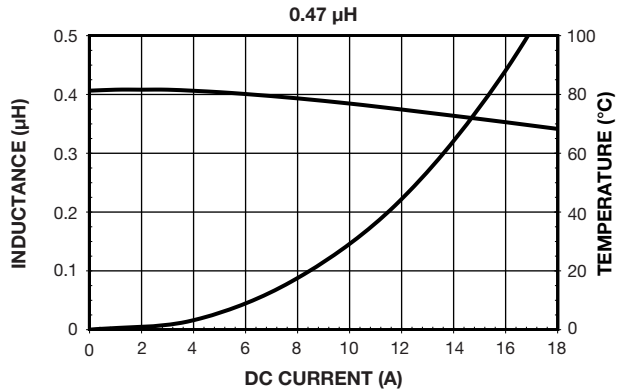
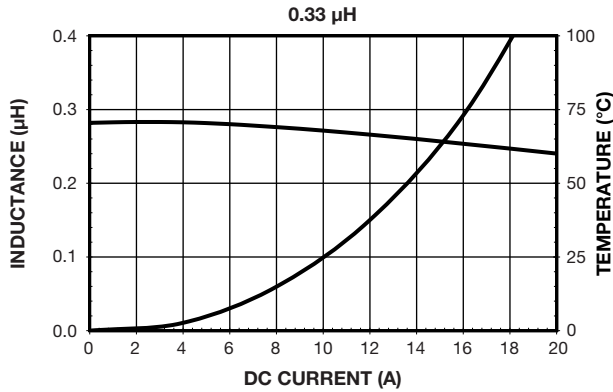
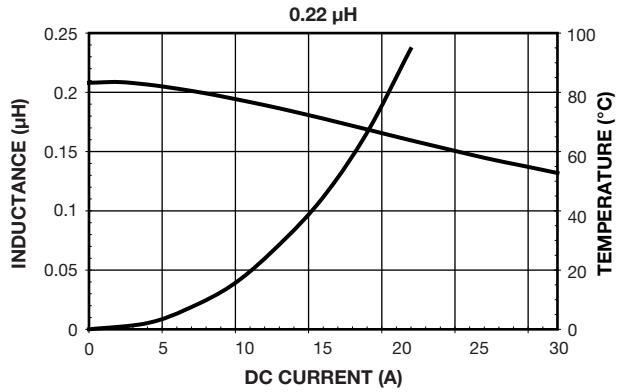
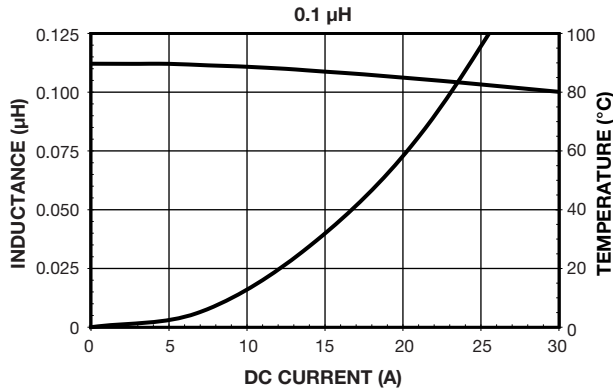


DESCRIPTION					
IHLP-2020BZ-01	3.3 $\mu$ H	$\pm 20$ %	ER	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD	

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 $\Omega$	M = 20 %	

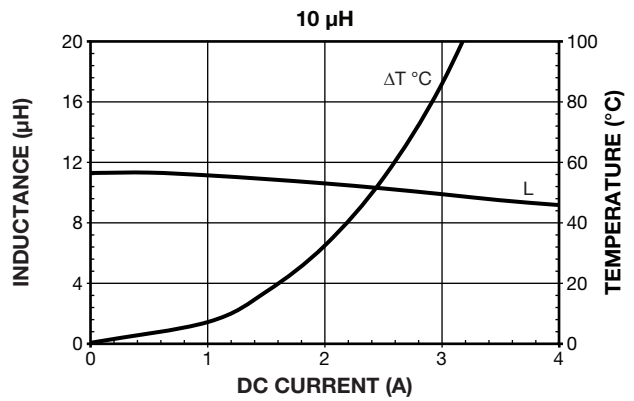
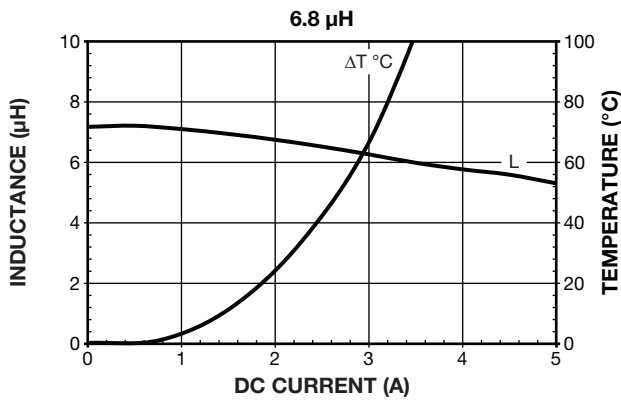
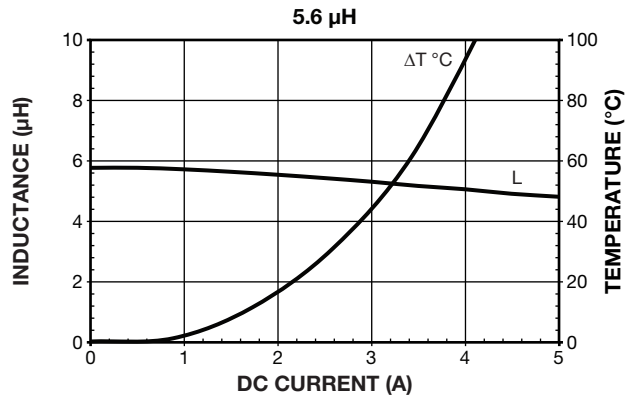
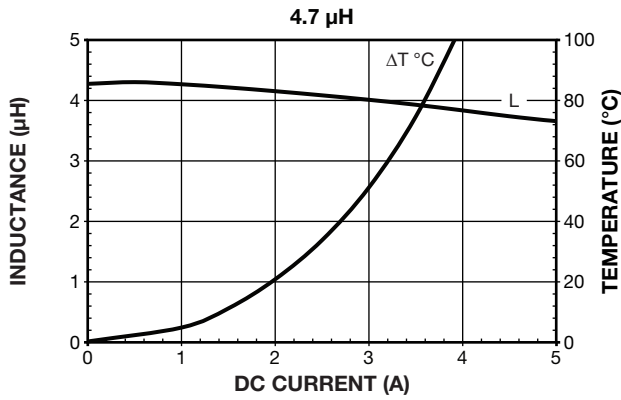


PERFORMANCE GRAPHS



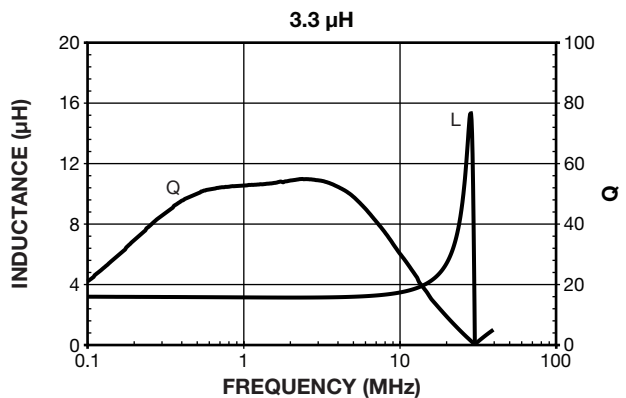
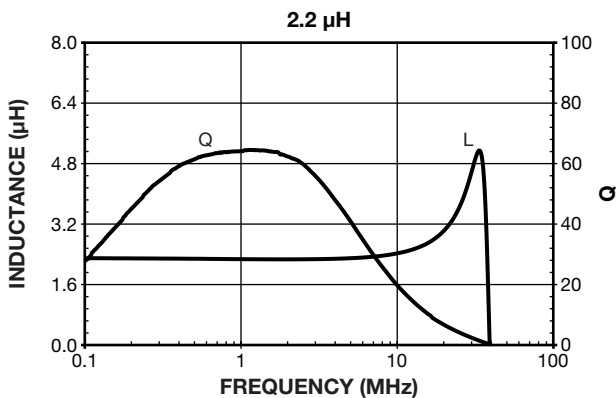
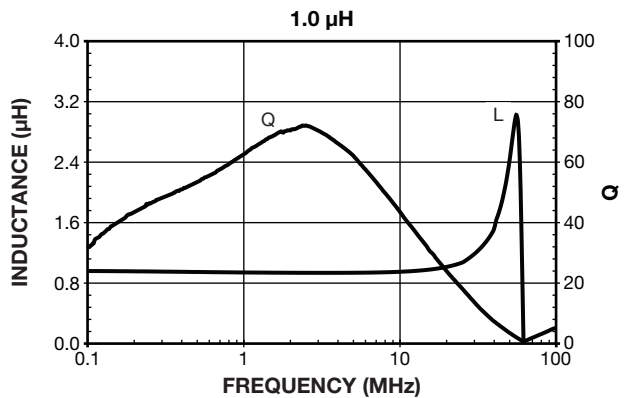
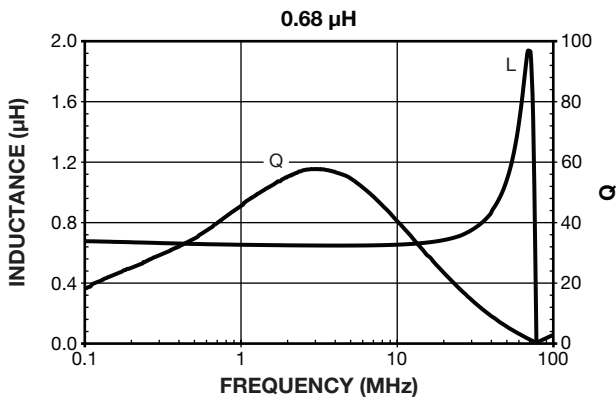
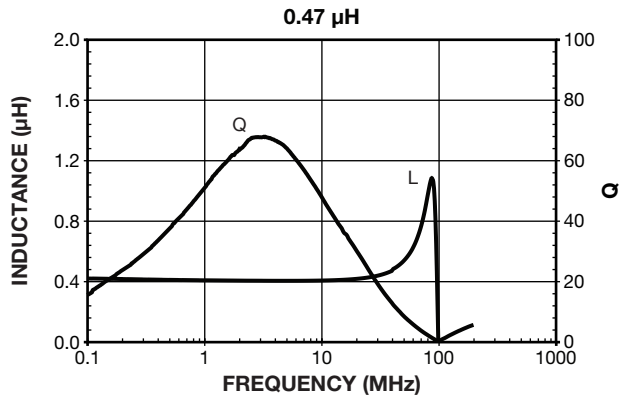
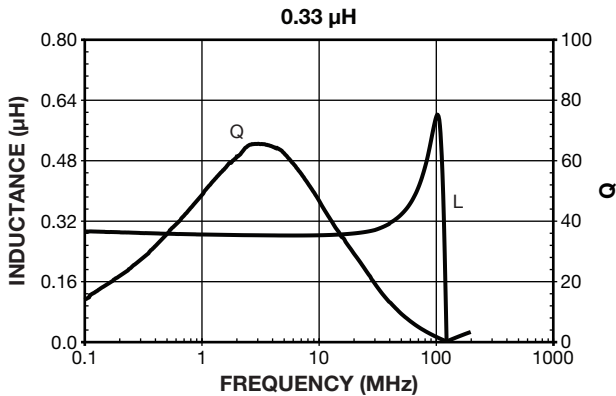
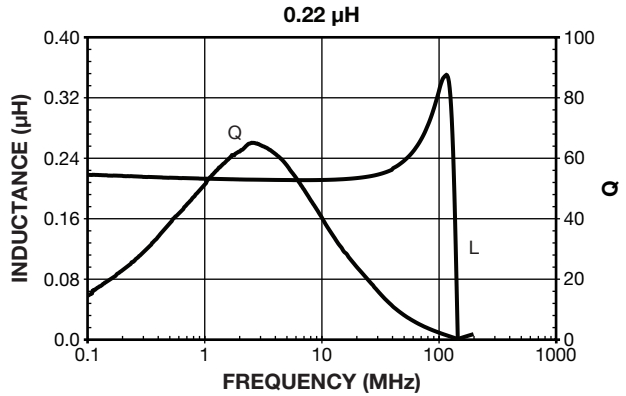
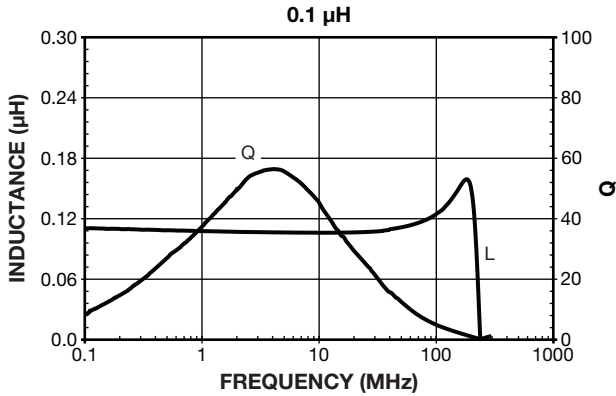


PERFORMANCE GRAPHS



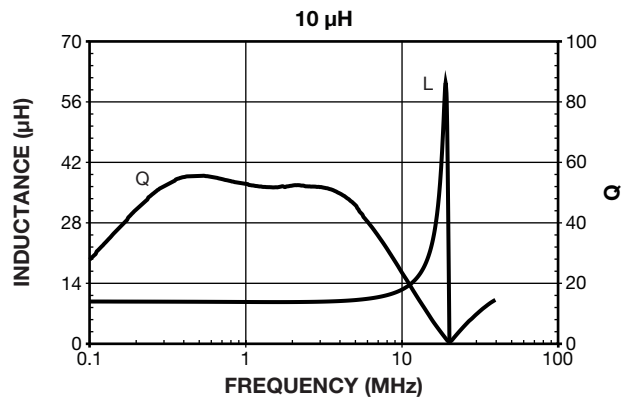
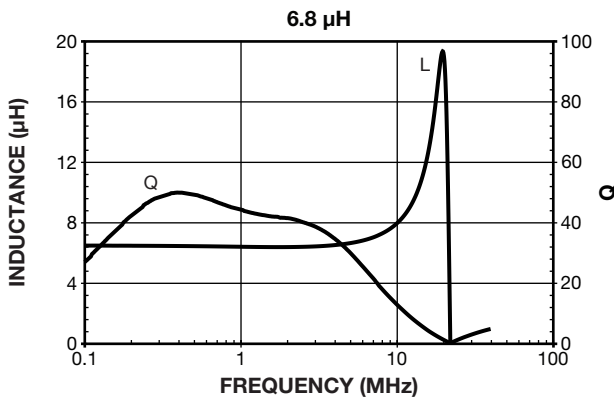
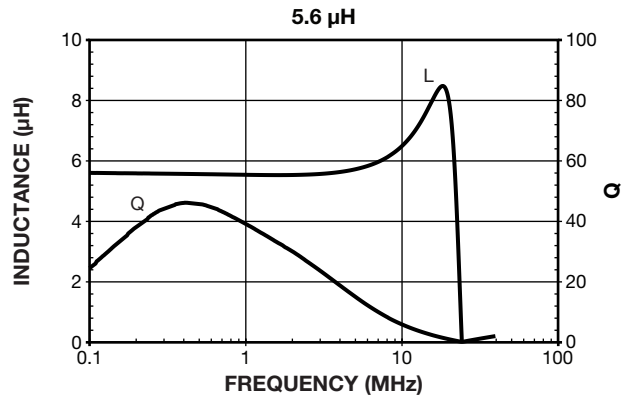
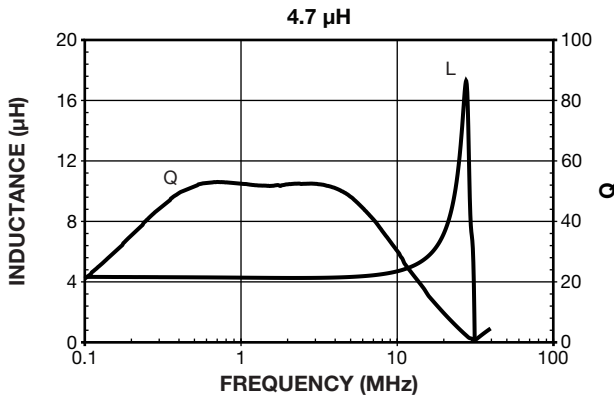


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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





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