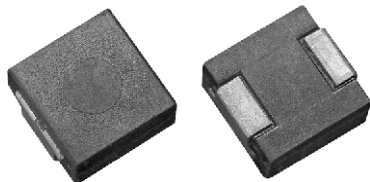


# Tin / Lead, 5 % DCR Tolerance, Low Profile, Power Inductor



## LINKS TO ADDITIONAL RESOURCES



STANDARD ELECTRICAL SPECIFICATIONS				
$L_0$ INDUCTANCE $\pm 20\%$ AT 100 kHz, 0.25 V, 0 A ( $\mu$ H)	DCR $\pm 5\%$ 25 °C (m $\Omega$ )	HEAT RATING CURRENT DC TYP. (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(2)</sup>	SRF TYP. (MHz)
0.10	1.37	32.5	60	400
0.15	1.85	26	52	180
0.20	2.34	24	41	150
0.33	3.20	20	30	100
0.47	3.86	17.5	26	75
0.68	5.20	15.5	25	62
0.82	7.41	13	24	60
1.0	8.84	11	22	55
1.5	14.50	9	18	40
2.2	17.73	8	14	38
3.3	28.21	6	13.5	30
4.7	37.11	5.5	10	25
8.2	61.47	4	7.5	17
10	97.71	3	7.0	16

### 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) = 75 V
- <sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta T$  of 40 °C
- <sup>(2)</sup> DC current (A) that will cause  $L_0$  to drop approximately 20 %

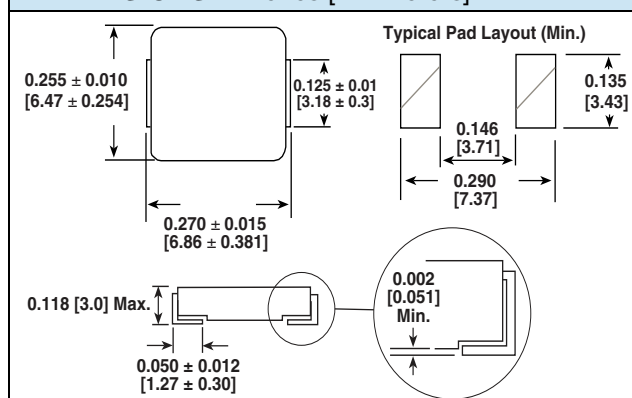
## FEATURES

- Lowest molded height (3.0 mm) in this package footprint
- Shielded construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- Lowest DCR/ $\mu$ H, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Encapsulated body offers improved environmental protection and moisture resistance
- Higher dielectric withstanding voltage vs IHLP
- Flame retardant encapsulant (UL 94 V-0)
- Corrosion resistant package
- Tin / lead Sn / Pb **plated** (not dipped) terminals
- IHLP design; PATENT(S): [www.vishay.com/patents](http://www.vishay.com/patents)

## APPLICATIONS

- Tolerance DCR for current sense applications
- Improved current balance in phased power supplies
- Improved thermal management
- PDA / notebook / desktop / server and battery powered devices
- High current, low profile POL converters
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate arrays (FPGA)

## DIMENSIONS in inches [millimeters]



DESCRIPTION			
IHLM-2525CZ-L7	1.0 $\mu$ H	$\pm 20\%$	RZ
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE

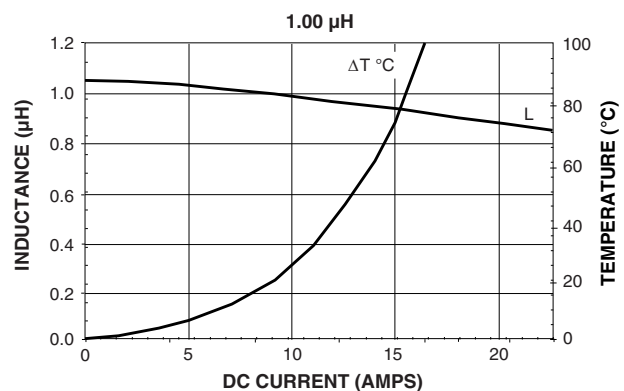
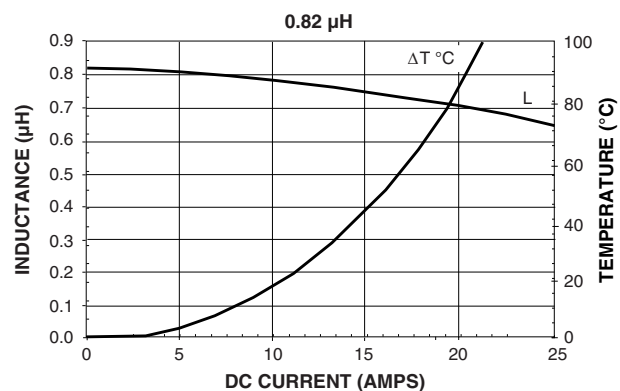
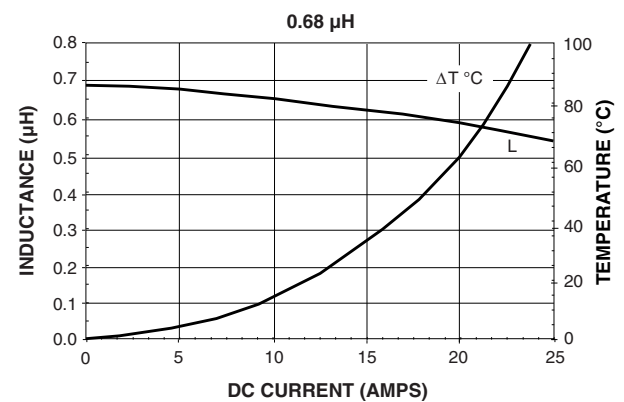
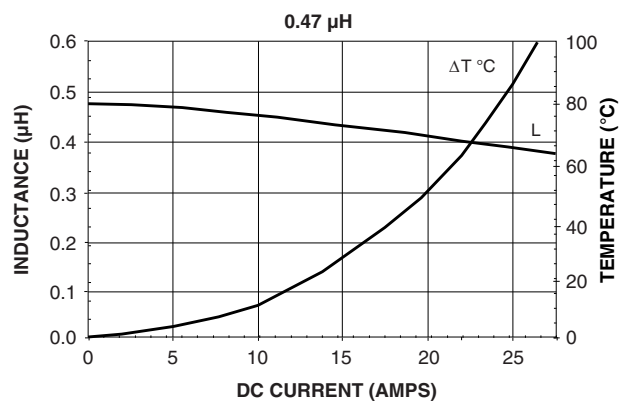
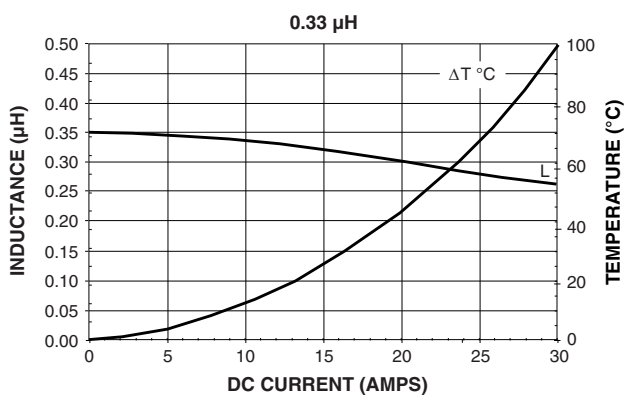
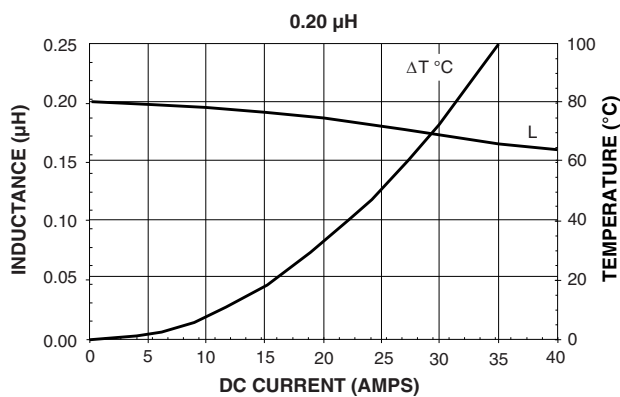
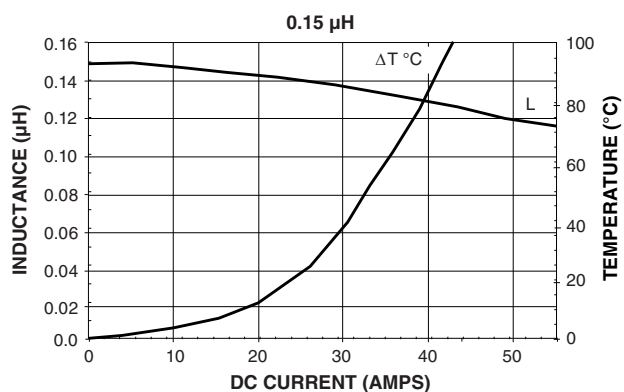
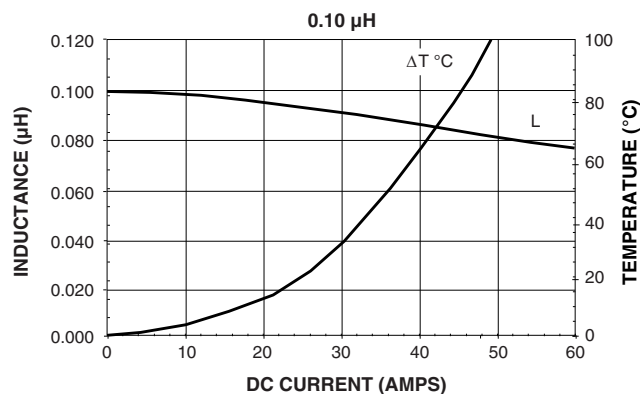
GLOBAL PART NUMBER																	
I	H	L	M	2	5	2	5	C	Z	R	Z	1	R	0	M	L	7
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

PATENT(S): [www.vishay.com/patents](http://www.vishay.com/patents)

This Vishay product is protected by one or more United States and international patents.

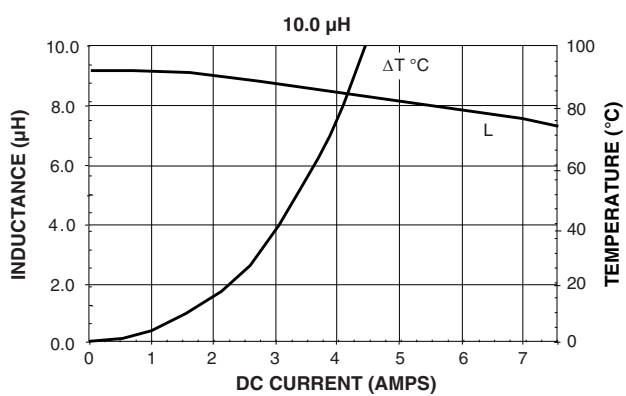
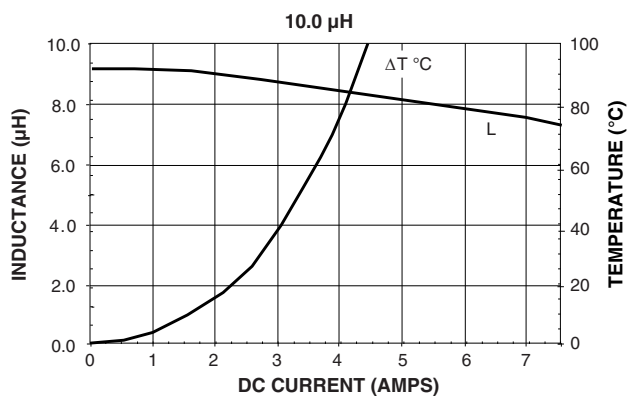
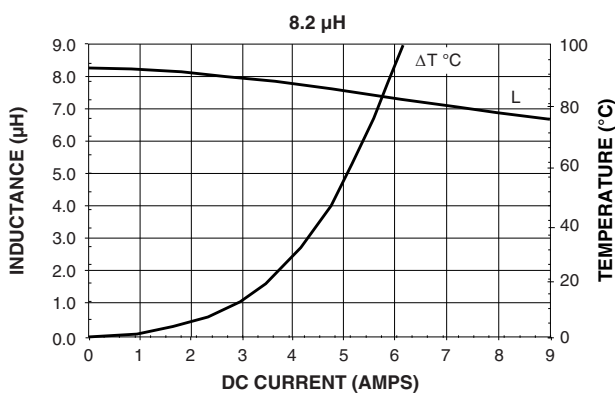
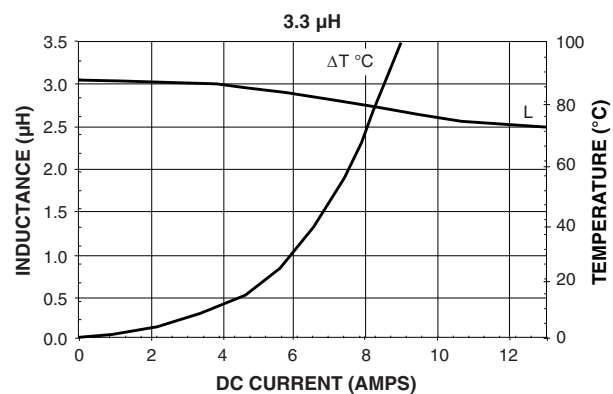
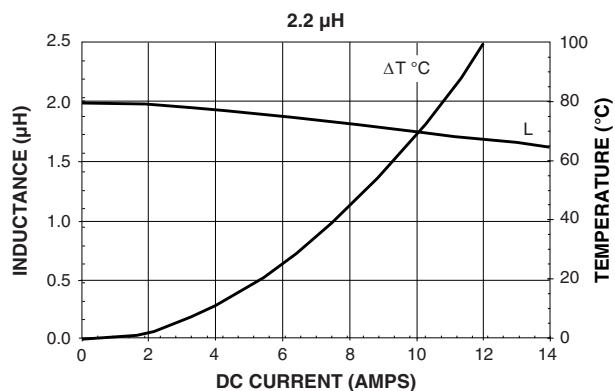
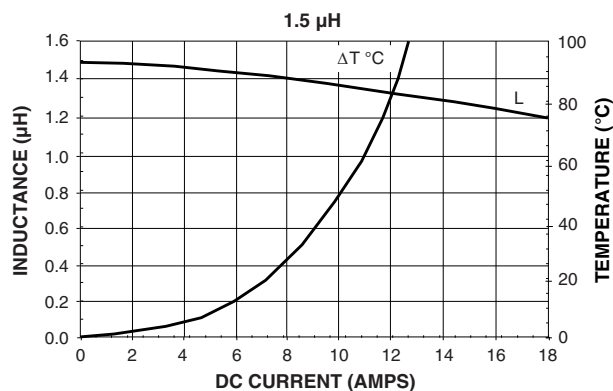


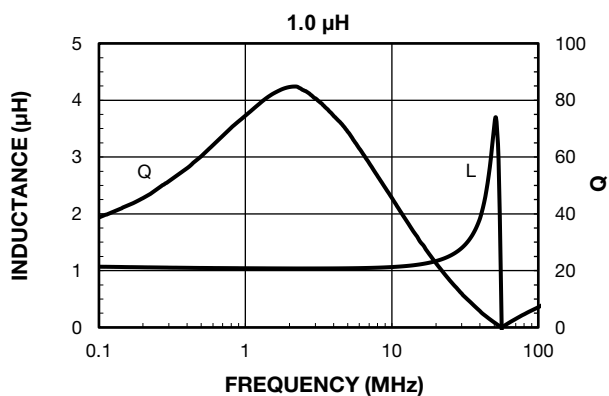
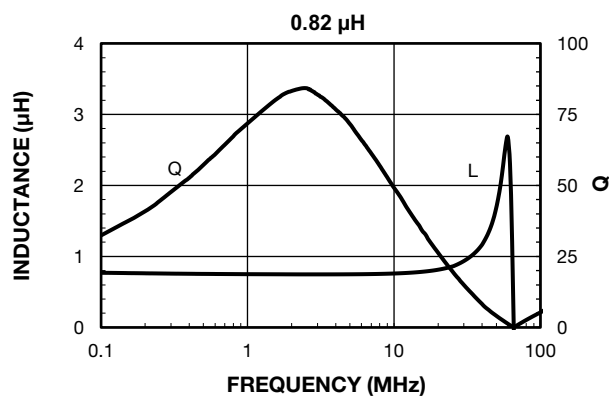
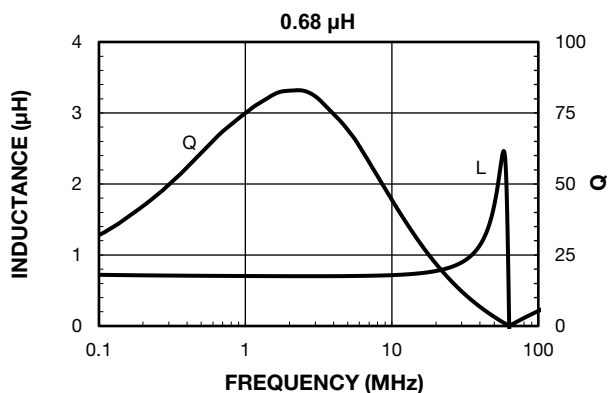
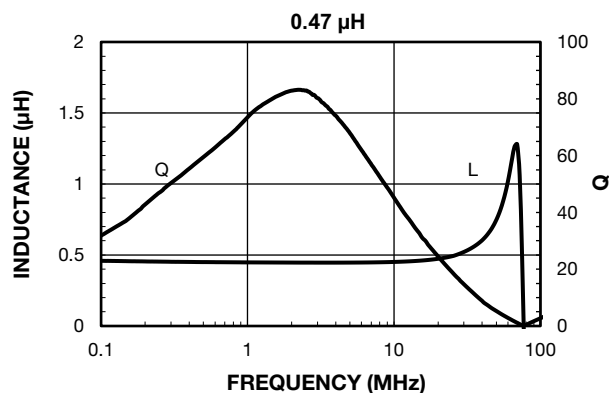
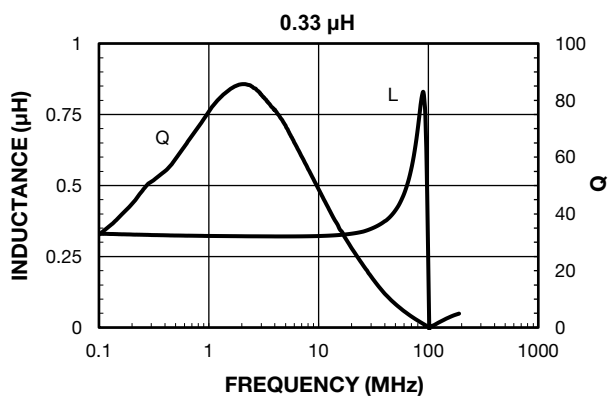
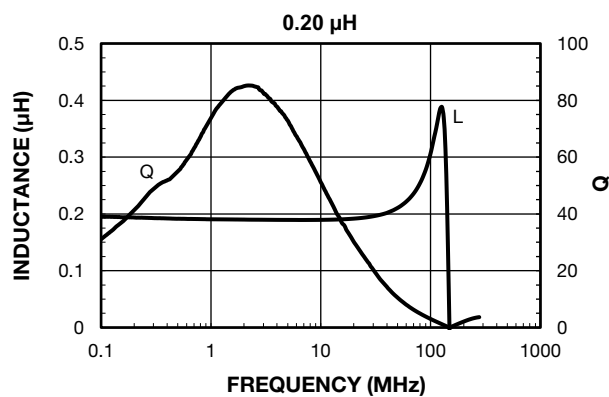
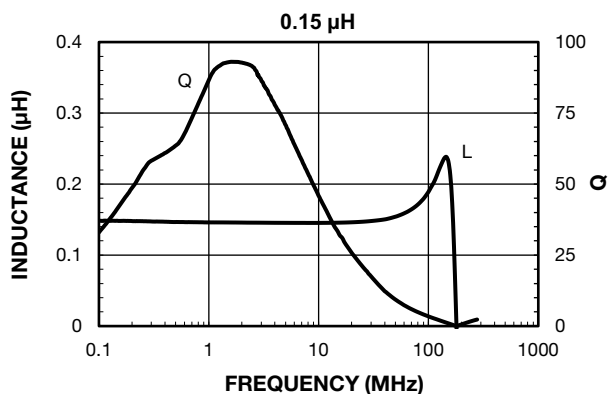
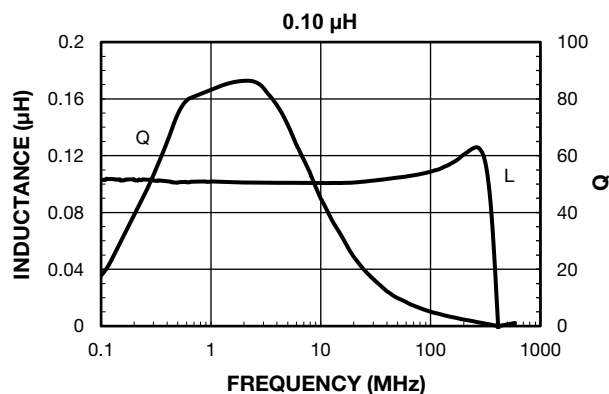
PERFORMANCE GRAPHS





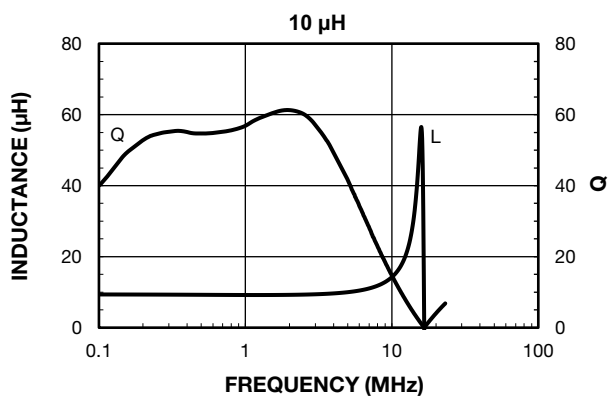
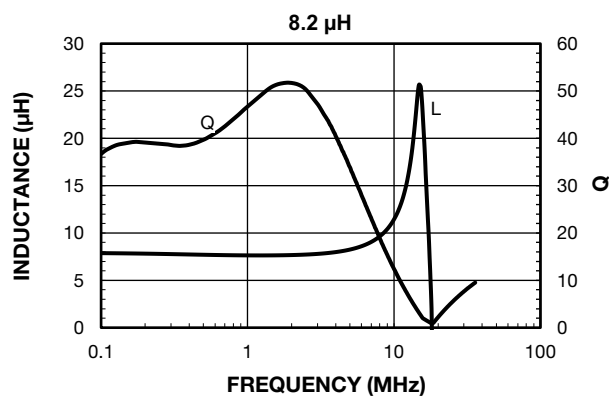
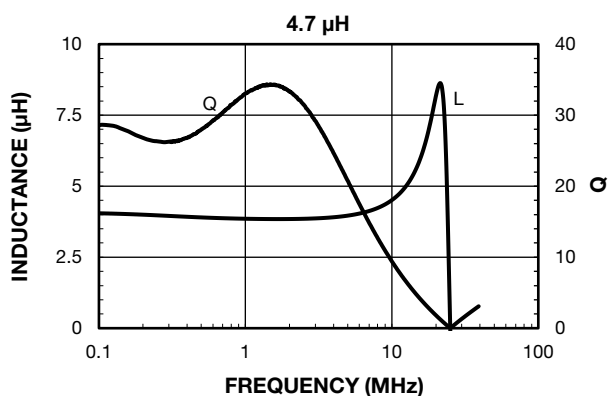
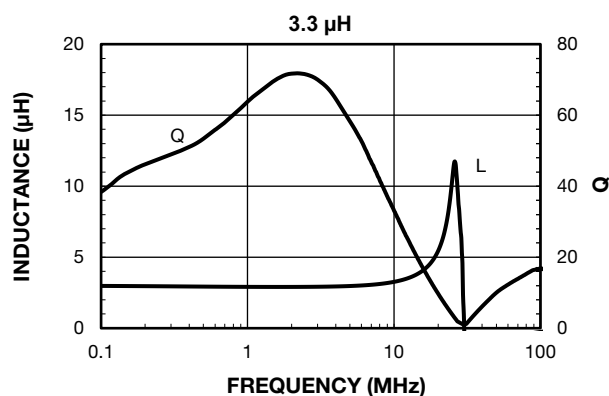
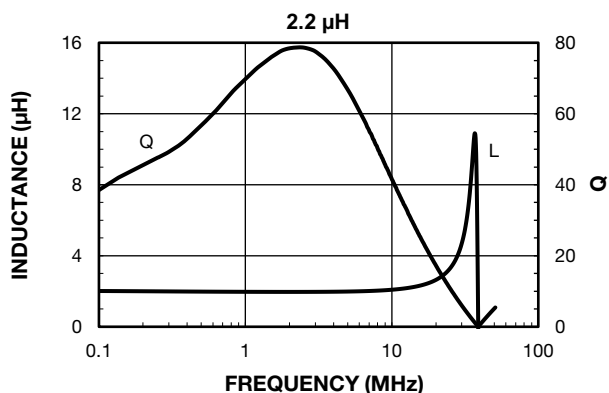
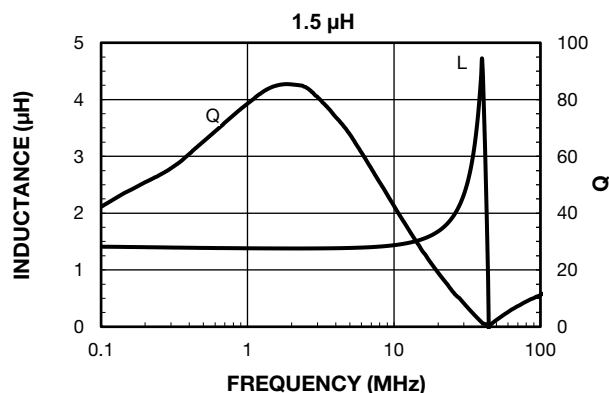
PERFORMANCE GRAPHS



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




PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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