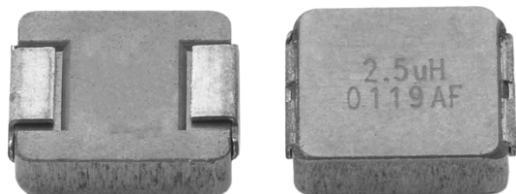


IHLP® Commercial Inductors, High Saturation Series



LINKS TO ADDITIONAL RESOURCES



FEATURES

- Lowest height (1.8 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)
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

STANDARD ELECTRICAL SPECIFICATIONS

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)
0.1	3.0	3.5	18	40	288
0.15	4.7	5.2	15	38	222
0.22	5.3	5.7	14	26	183
0.33	6.6	7.0	12	18	136
0.47	8.4	9.3	11	18	96
0.68	12.7	13.9	9	17	84
0.82	13.8	15.9	8	17	78
1.0	17.5	18.3	7	14	65
1.5	32.6	34.0	4	11.5	50
2.2	40.3	46.0	3.75	13	43
2.5	49.9	52.4	3.5	10.4	37
3.3	56.2	60.1	3.25	10	36
4.7	76.6	78.0	3	8	25

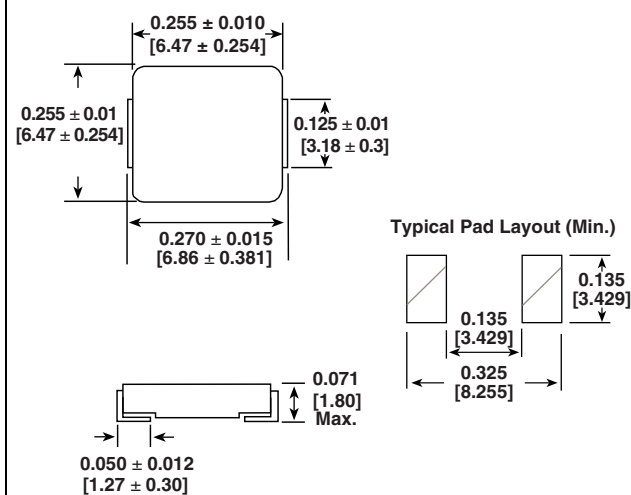
Notes

- 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
- ⁽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 %

APPLICATIONS

- PDA / notebook / desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

DIMENSIONS in inches [millimeters]





DESCRIPTION

IHLP-2525AH-01	1.0 μH	± 20 %	EK	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	H	L	P	2	5	2	5	A	H	E	K	1	R	0	M	0	1
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE			INDUCTANCE TOLERANCE		SERIES		
								E K = tape and reel		1R0 = 1.0 μ H			M = ± 20 %				

PACKAGE CODE OPTIONS

EK = tape and reel packaging (3400 pcs on 13-inch reel)

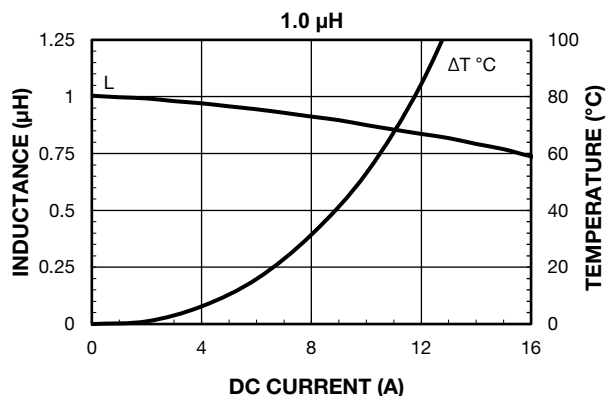
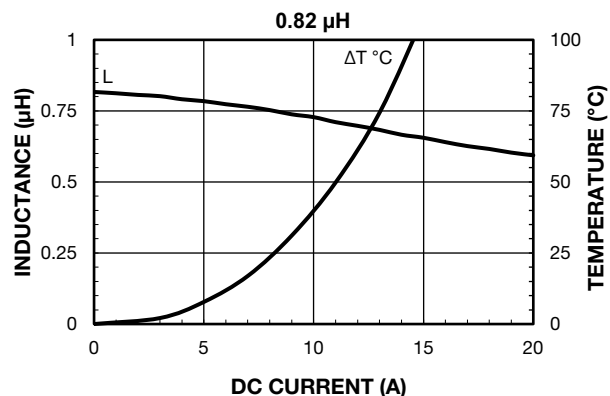
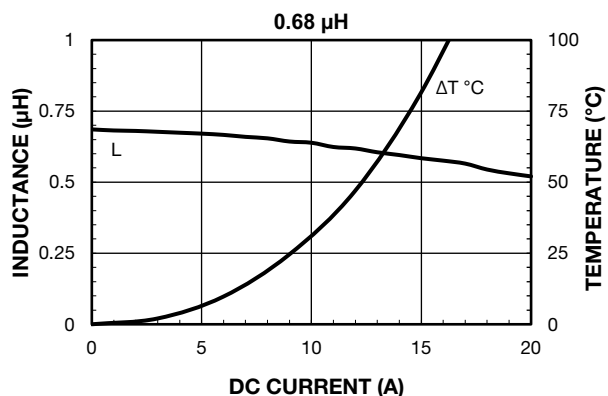
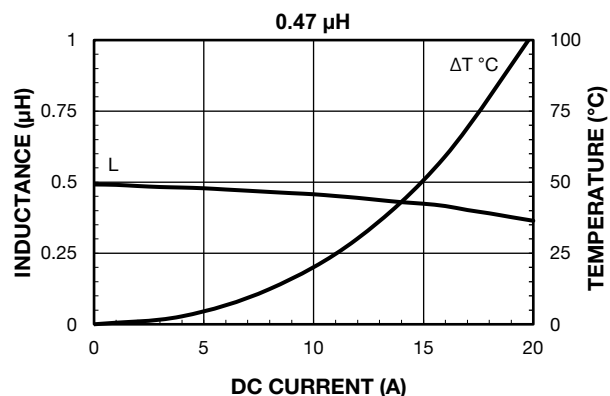
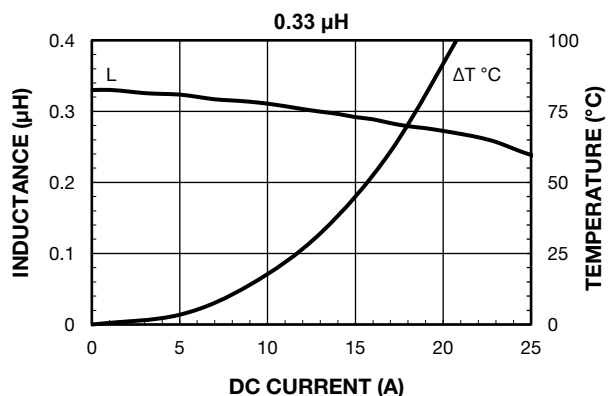
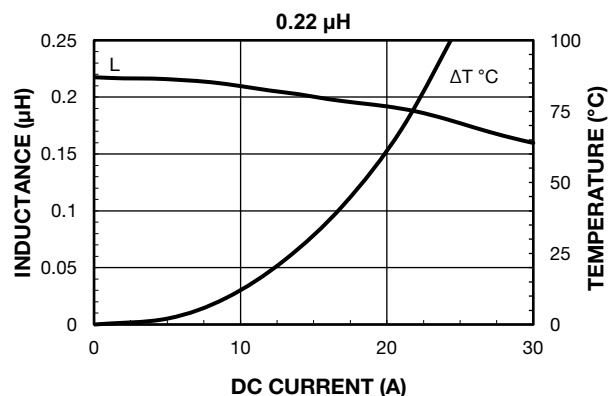
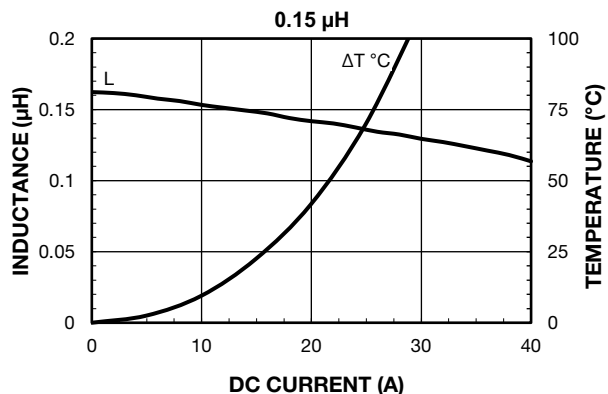
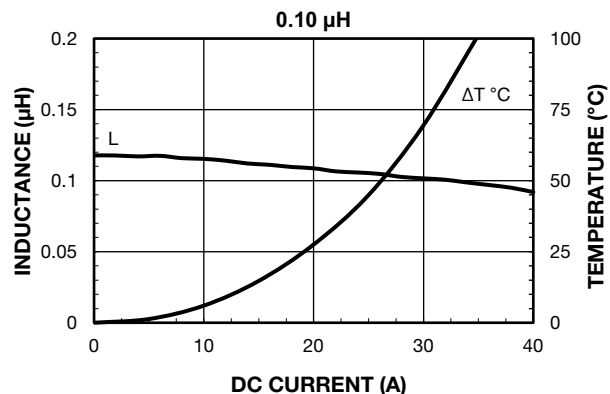
ER = tape and reel packaging (2000 pcs on 13-inch reel)

Note

- For additional packaging details see "[Packaging Methods](#)"

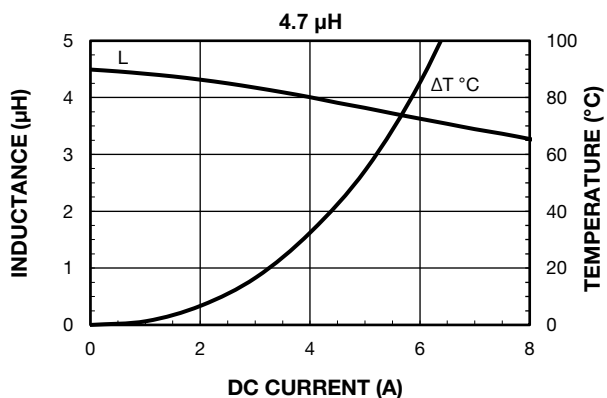
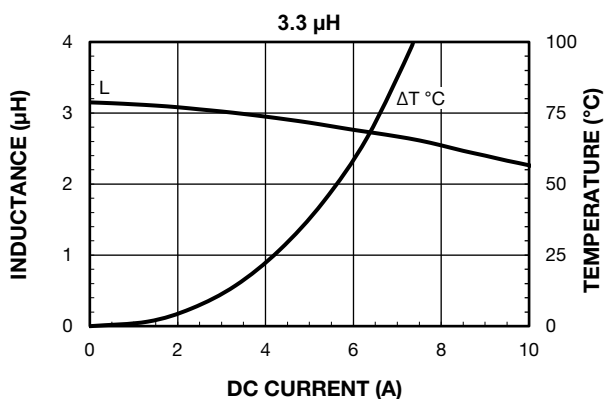
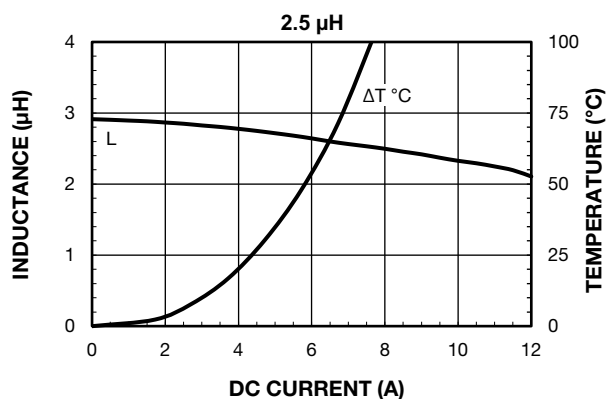
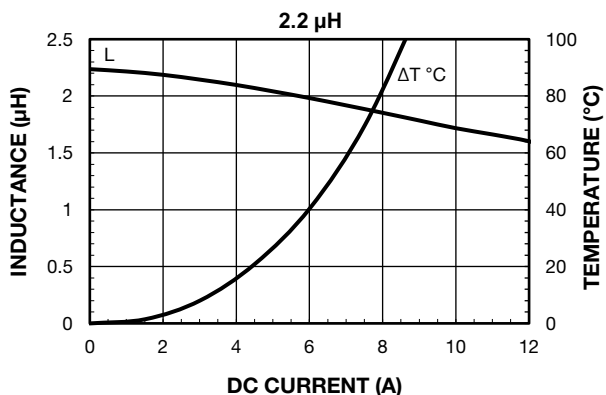
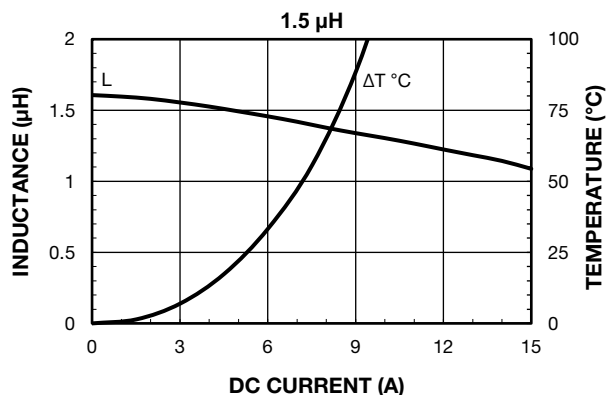


PERFORMANCE GRAPHS



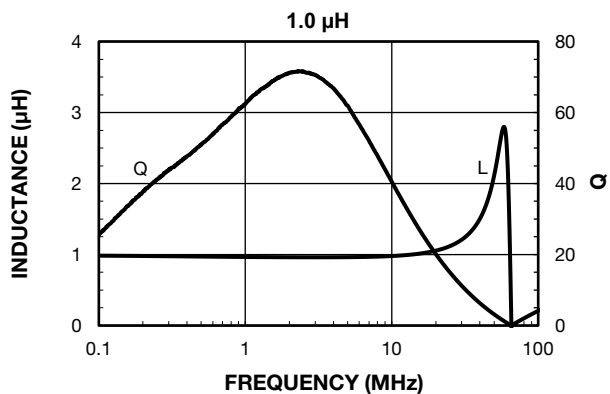
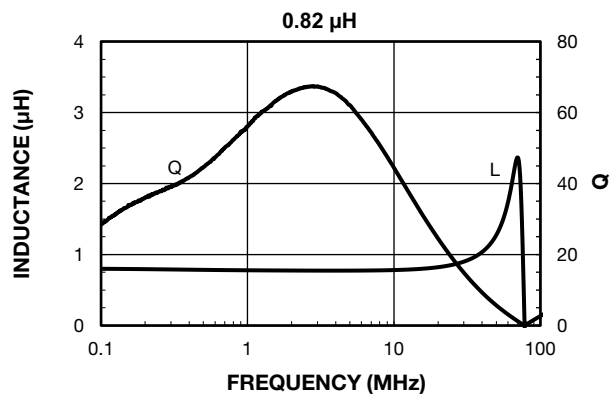
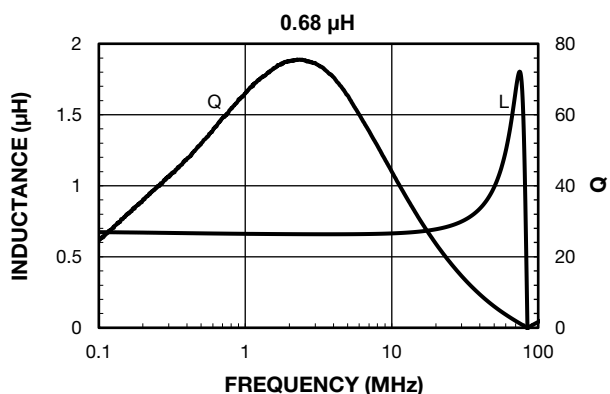
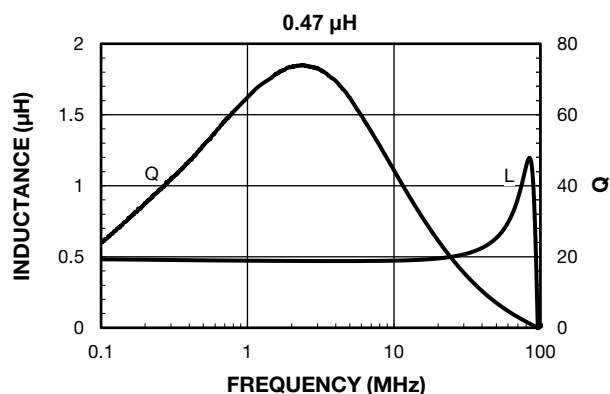
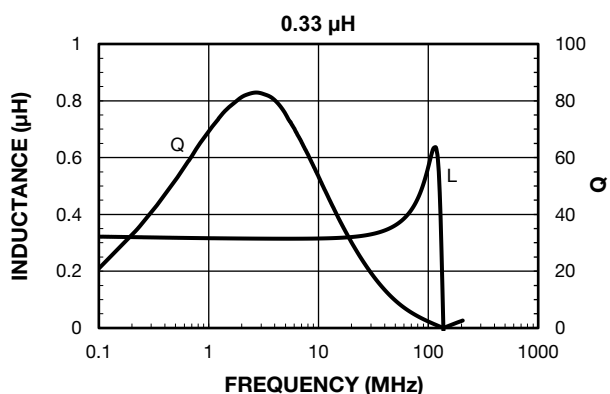
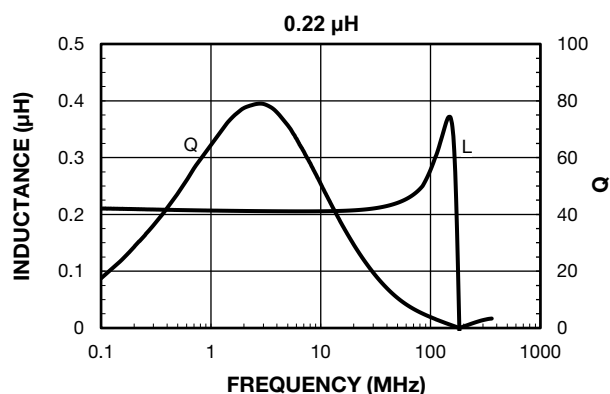
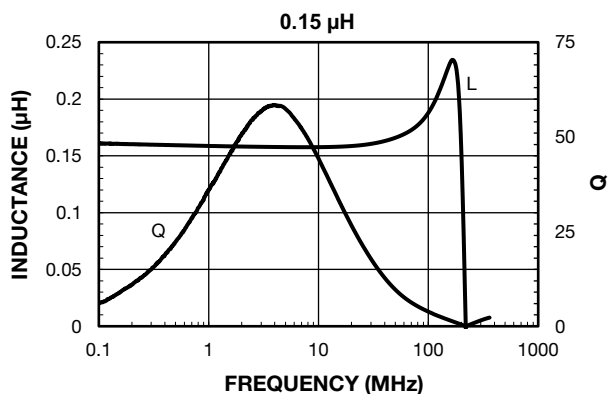
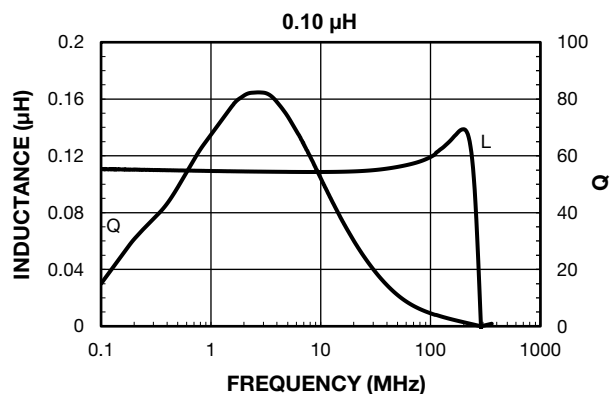


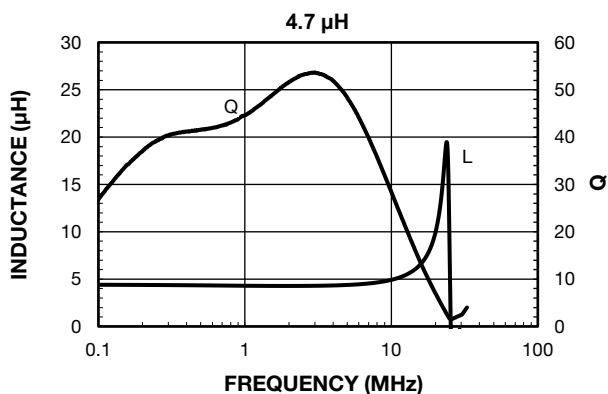
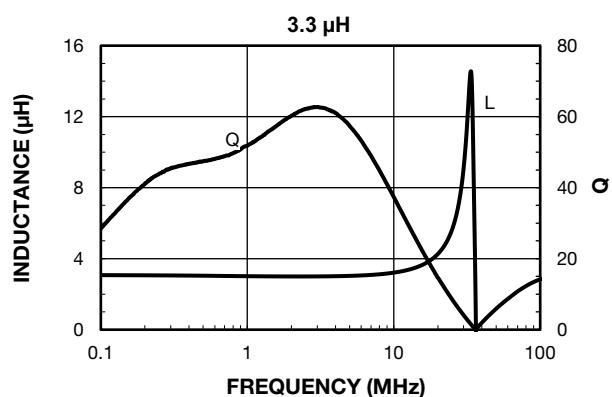
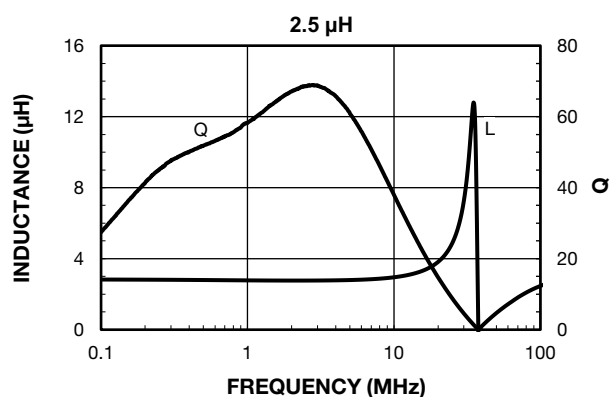
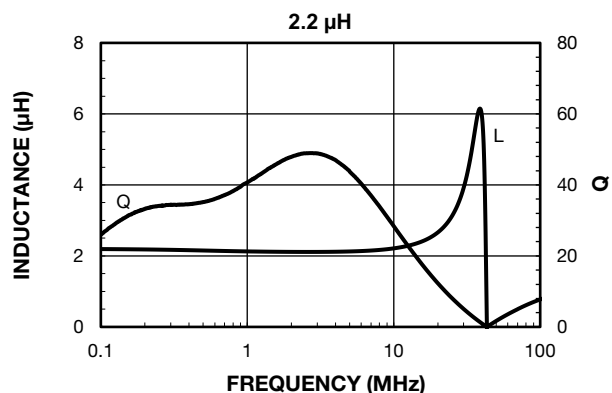
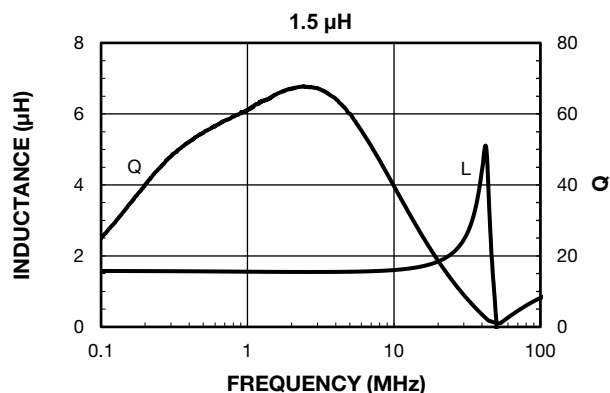
PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY




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