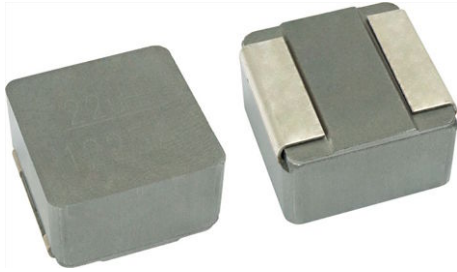


## Low Profile, High Current IHLP® Inductors



Manufactured under one or more of the following:  
**US Patents; 6,198,375/6,204,744/6,449,829/6,460,244.**  
 Several foreign patents, and other patents pending.

STANDARD ELECTRICAL SPECIFICATIONS				
L <sub>0</sub> INDUCTANCE + 20 %/- 10 % 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>(3)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(4)</sup>
0.47	0.56	0.67	80.0	100.0
1.0	0.82	0.89	69.0	71.0
2.2	1.23	1.25	58.0	48.0
3.3	1.63	1.77	49.0	41.0
4.7	1.69	1.84	47.0	37.0
6.8	2.84	3.09	36.0	36.0
10	4.04	4.14	28.0	28.0
15	5.62	6.11	23.5	24.0
22	10.60	10.80	17.5	16.0
33	15.10	15.40	15.5	10.5
47	17.30	17.70	13.5	10.0
75	29.76	32.35	12.0	12.0
82	31.46	34.20	10.2	9.0
100	36.25	39.40	9.1	7.0

### Notes

- (1) All test data is referenced to 25 °C ambient
- (2) Operating temperature range - 55 °C to + 155 °C
- (3) DC current (A) that will cause an approximate ΔT of 40 °C
- (4) DC current (A) that will cause L<sub>0</sub> to drop approximately 20 %
- (5) The part temperature (ambient + temp. rise) should not exceed 155 °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.

### FEATURES

- High temperature rating, up to 155 °C
- Shielded construction
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- AEC-Q200 qualified
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

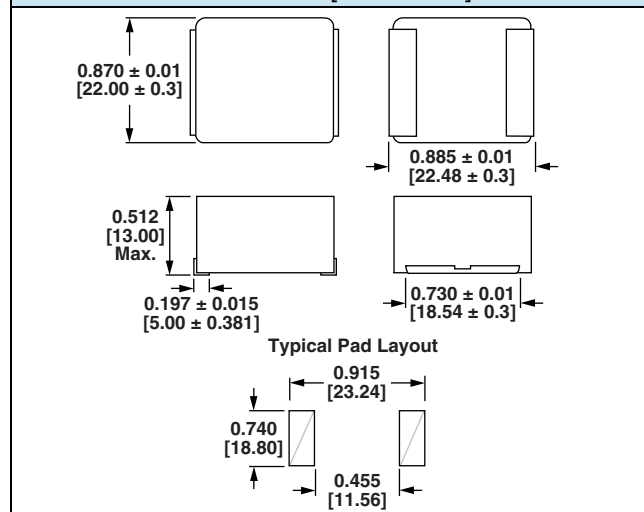
 AUTOMOTIVE  
GRADE

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

### 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 blowers
  - HID lighting
- LED drivers

### DIMENSIONS in inches [millimeters]



### DESCRIPTION

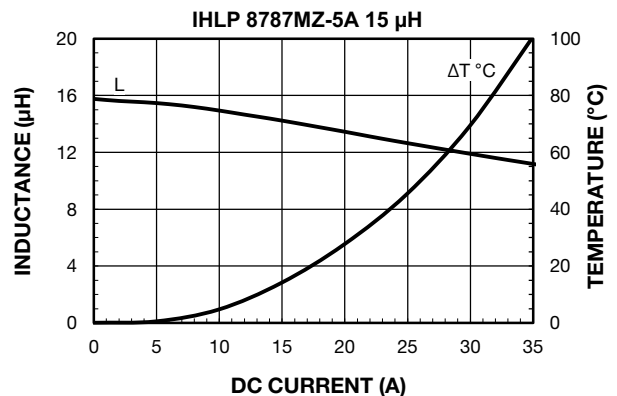
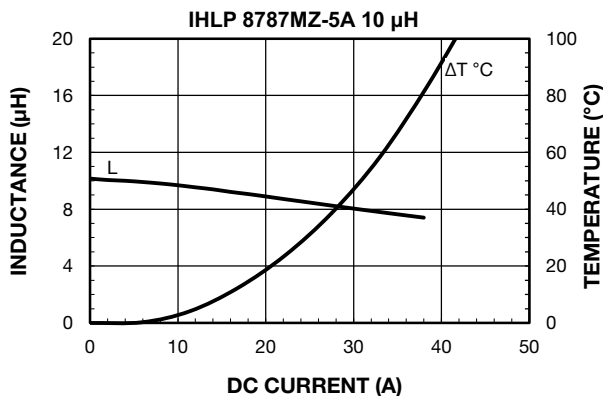
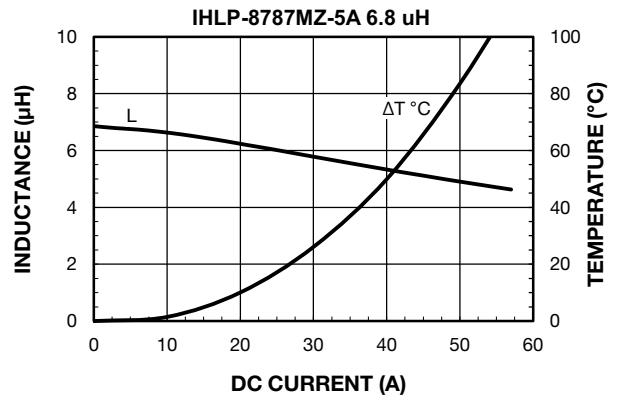
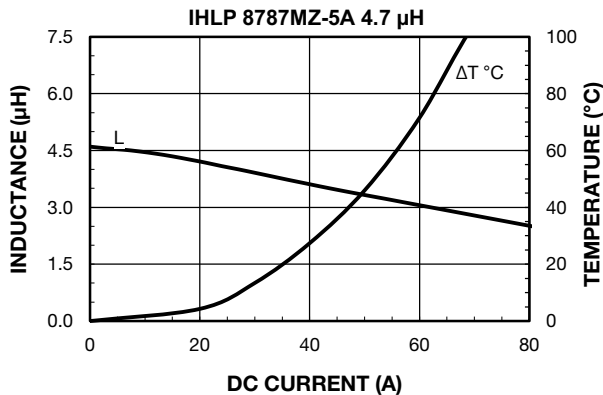
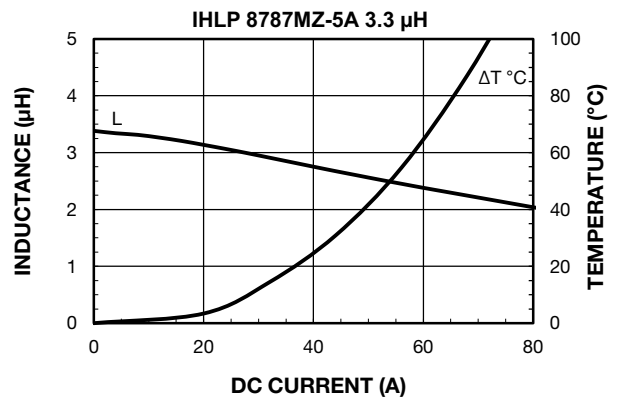
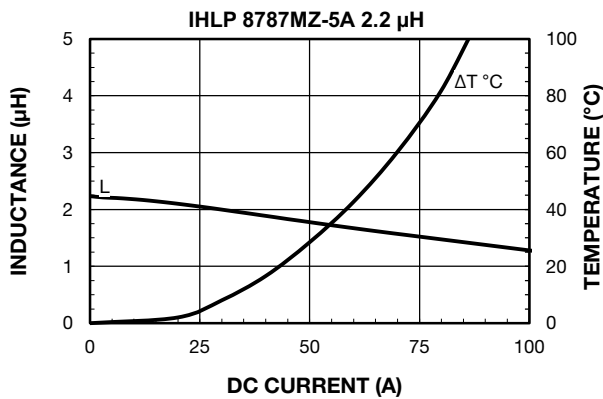
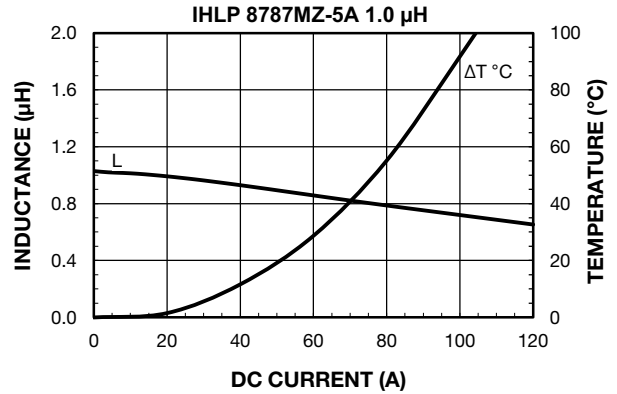
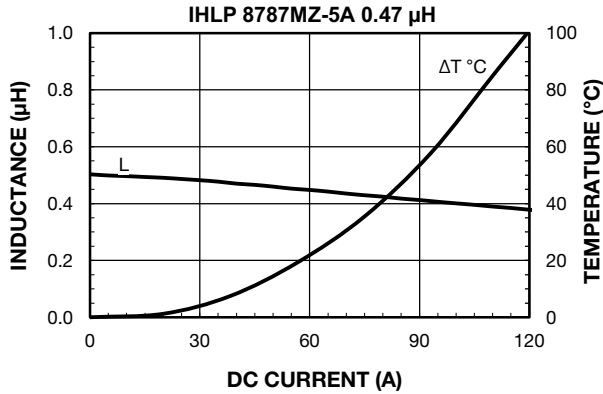
IHLP-8787MZ-5A	100 μH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

### GLOBAL PART NUMBER

I	H	L	P	8	7	8	7	M	Z	E	R	1	0	1	M	5	A
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES			

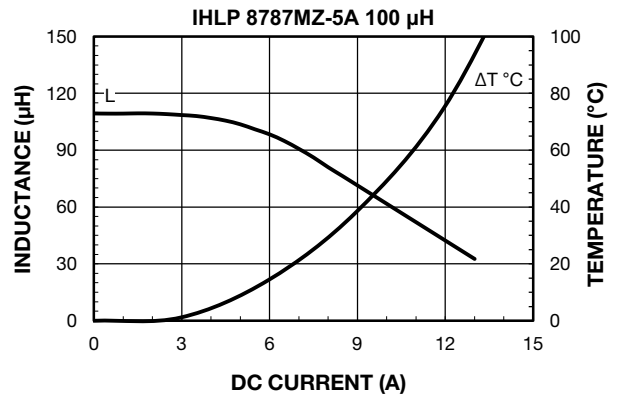
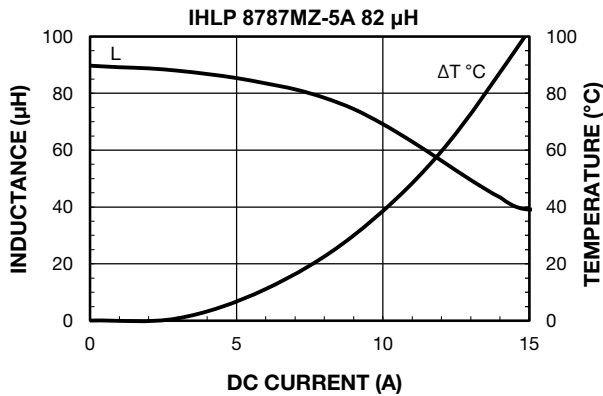
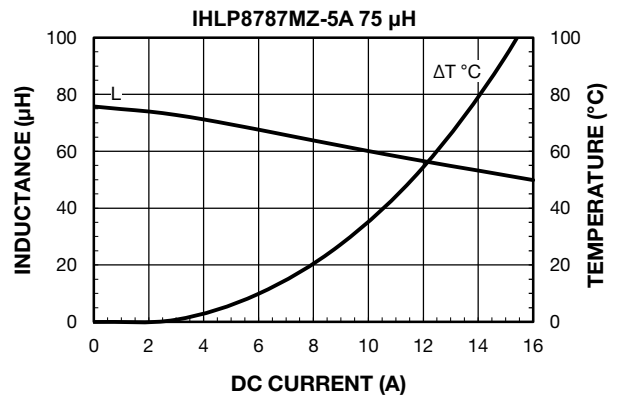
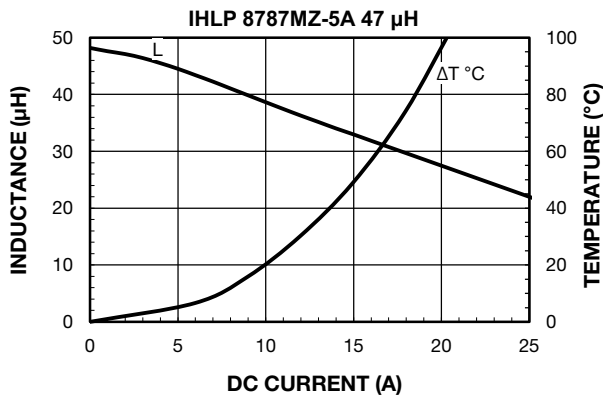
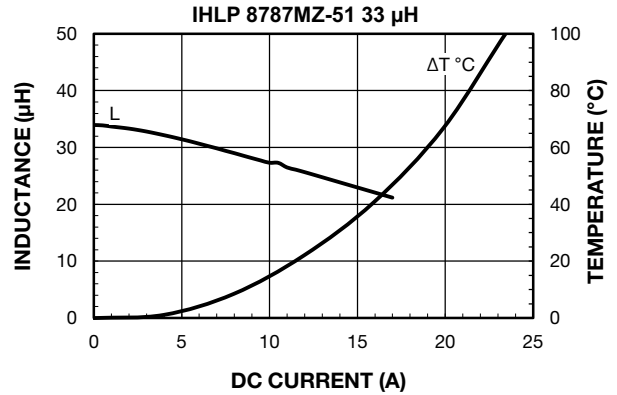
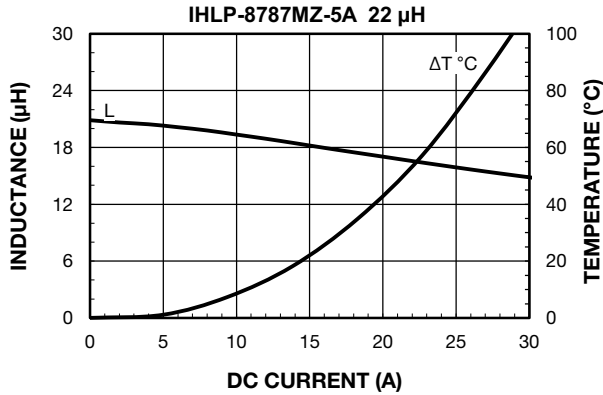


PERFORMANCE GRAPHS



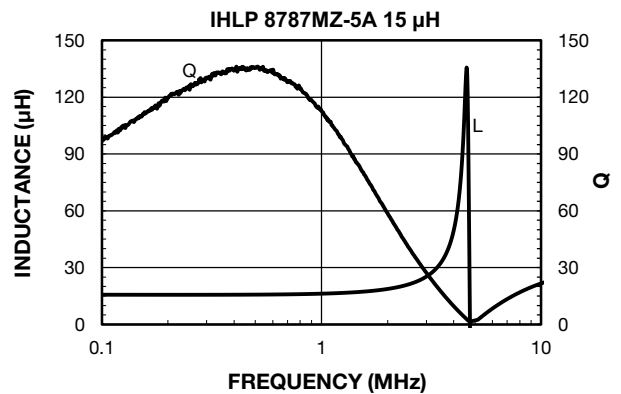
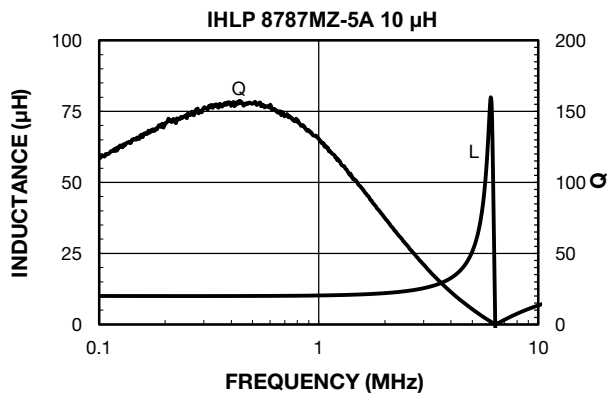
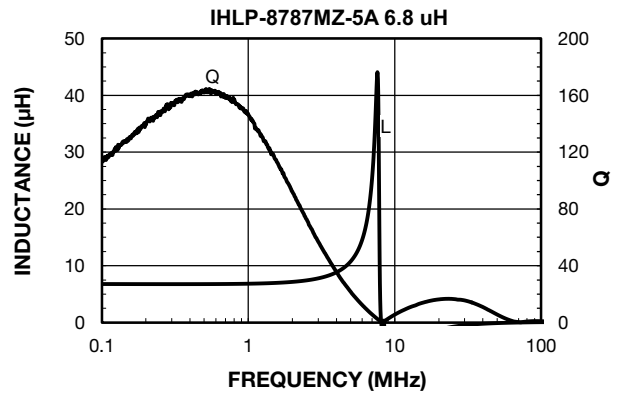
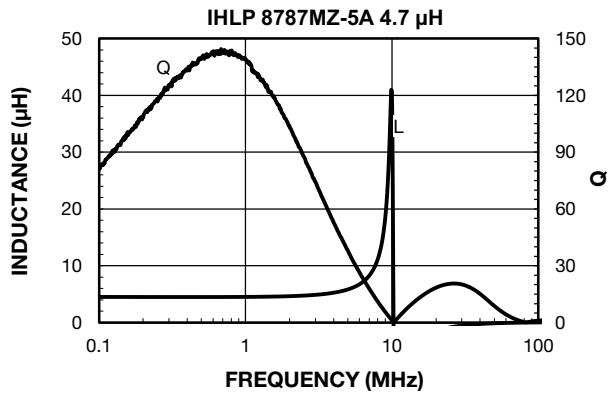
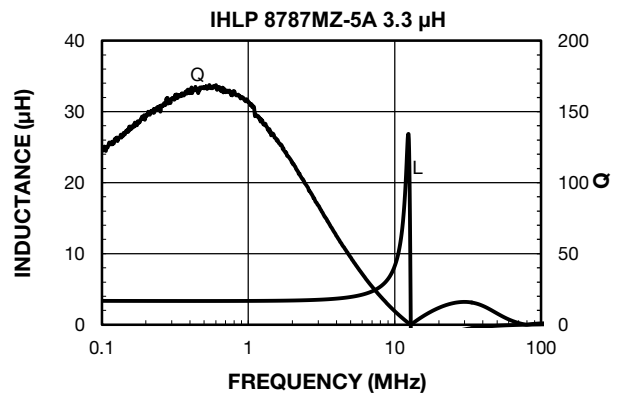
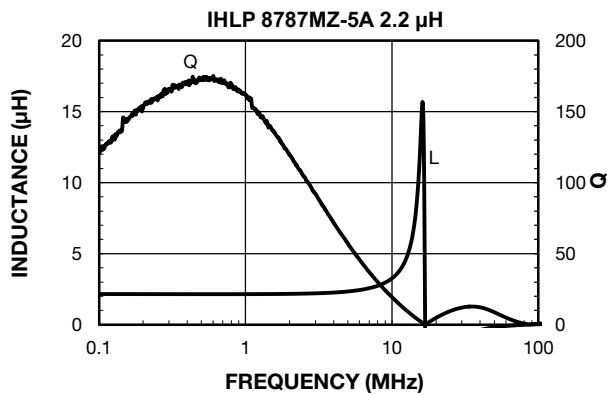
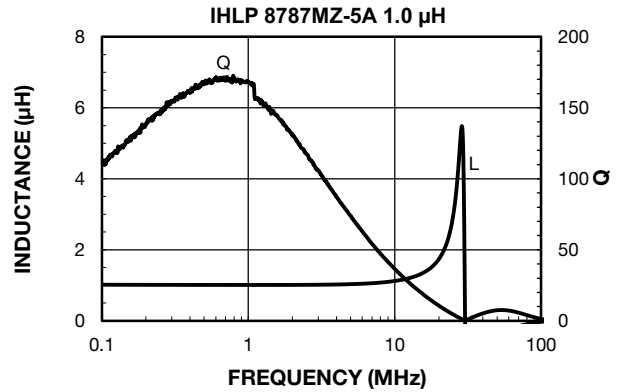
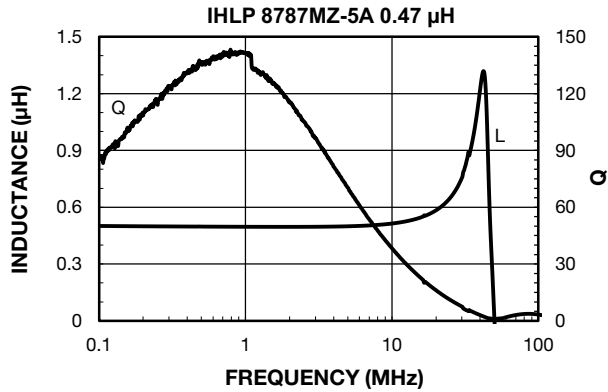


## PERFORMANCE GRAPHS



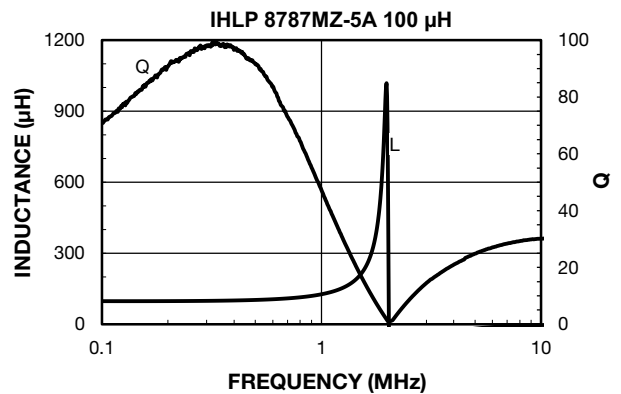
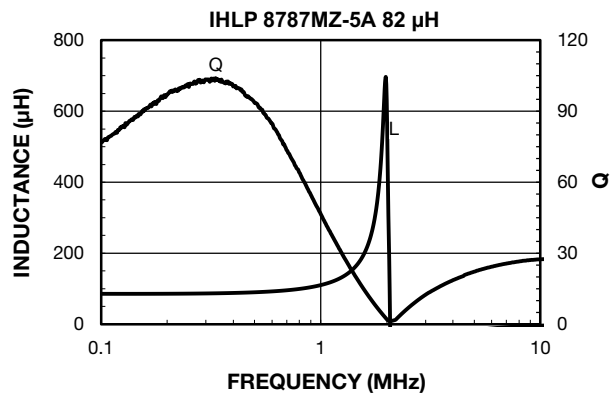
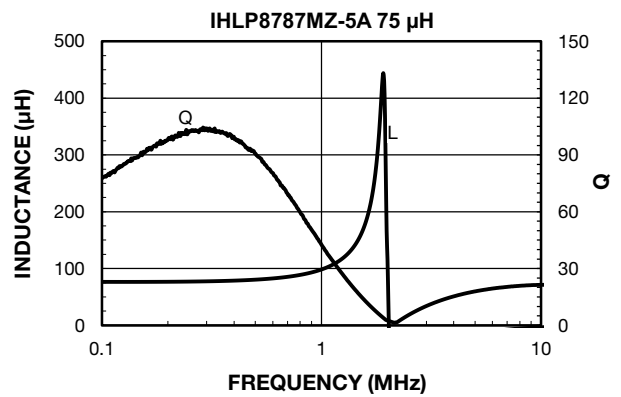
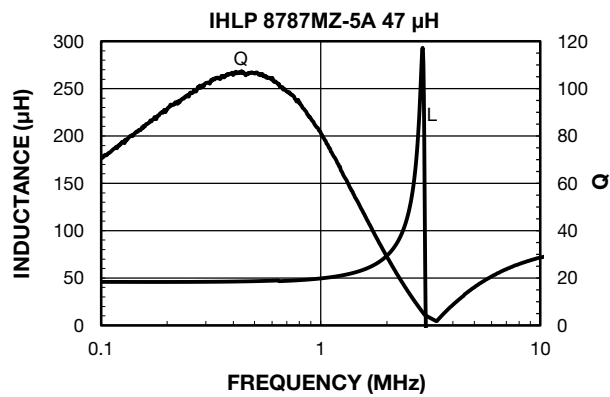
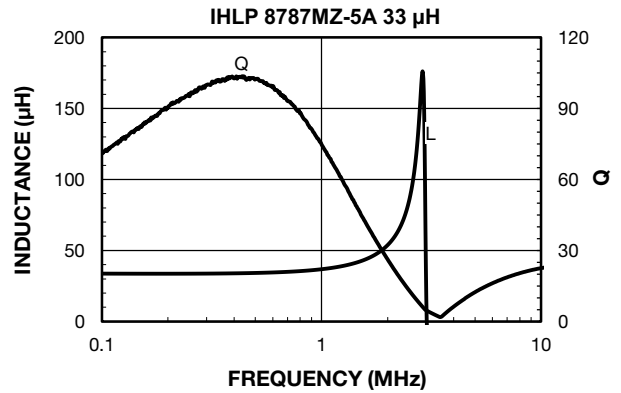
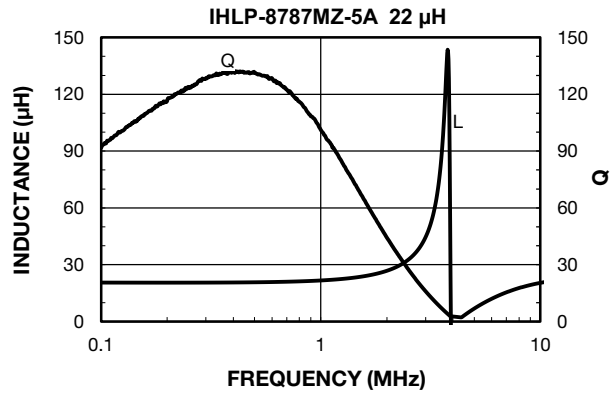


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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