

## Low Profile, High Current Inductors



### FEATURES

- Shielded construction
- Frequency range up to 5.0 MHz
- 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**

### APPLICATIONS

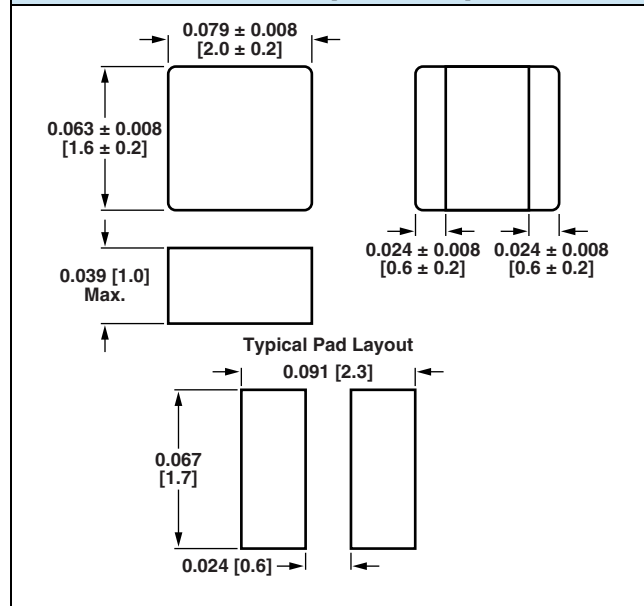
- PDA / notebook / desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

STANDARD ELECTRICAL SPECIFICATIONS						
L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR 25 °C (mΩ)		HEAT RATING CURRENT DC I <sub>DC</sub> (A) <sup>(3)</sup>		SATURATION CURRENT DC I <sub>SAT</sub> (A) <sup>(4)</sup>	
	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.
0.47	49	59	2.60	2.34	3.00	2.70
1.0	87	107	1.70	1.50	2.00	1.80
1.5	137	164	1.60	1.44	1.65	1.50
2.2	192	230	1.35	1.22	1.45	1.31
3.3	243	292	1.05	0.95	1.05	0.95
4.7	322	387	0.95	0.85	0.95	0.80
6.8	610	732	0.62	0.56	0.80	0.72
10	932	1119	0.47	0.42	0.62	0.55
22	2365	2838	0.37	0.33	0.45	0.40

#### Notes

- (1) All test data is referenced to 25 °C ambient
- (2) Operating temperature range -55 °C to +125 °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 30 %
- (5) 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

### DIMENSIONS in inches [millimeters]

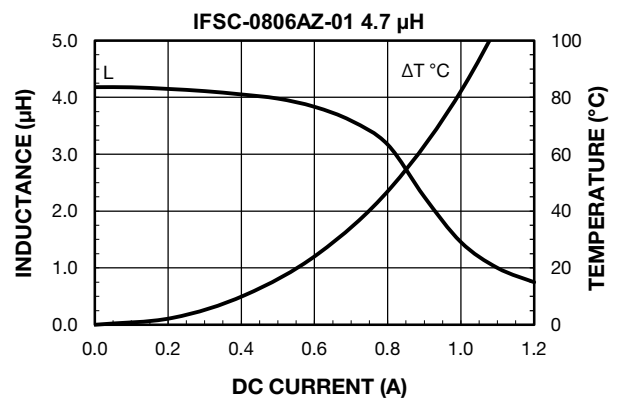
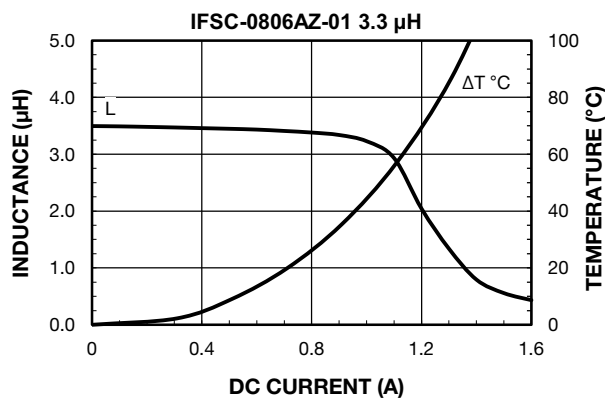
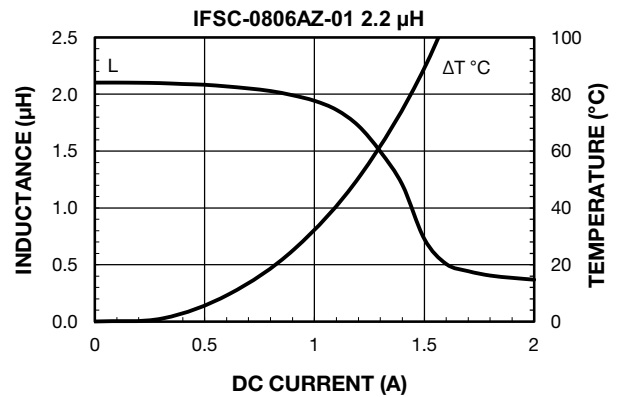
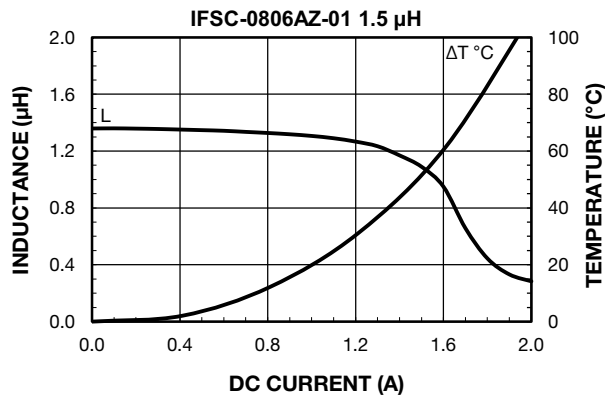
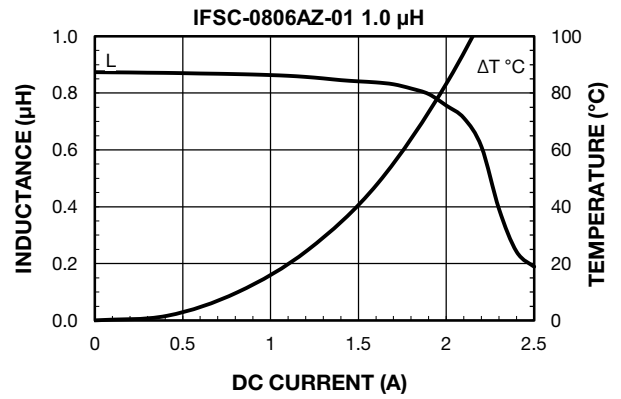
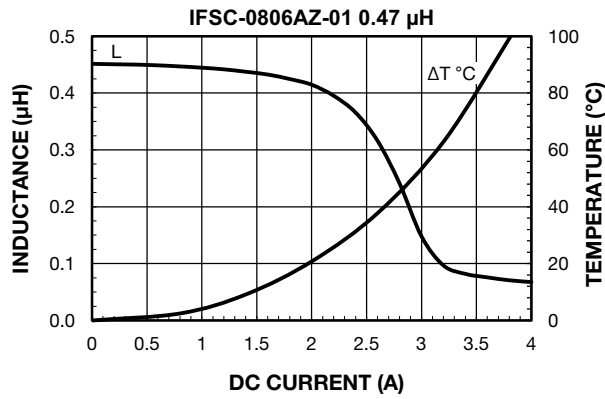


DESCRIPTION					
IFSC-0806AZ-01	4.7 μH	± 20 %	ER	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD	

GLOBAL PART NUMBER																	
I	F	S	C	0	8	0	6	A	Z	E	R	4	R	7	M	0	1
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES			

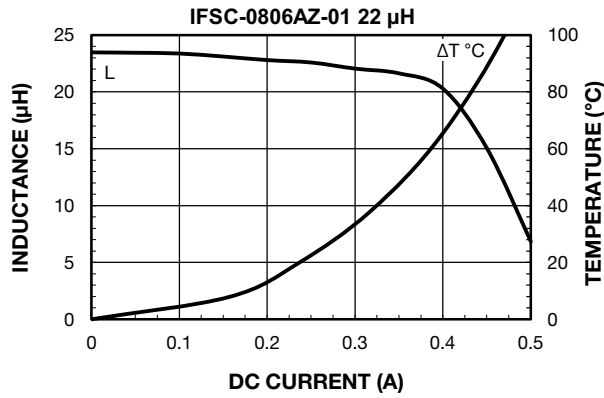
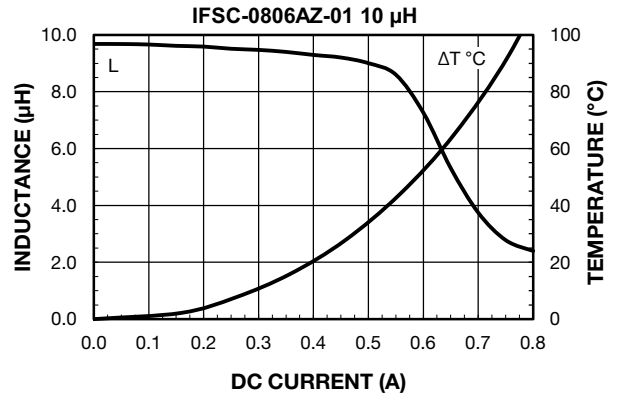
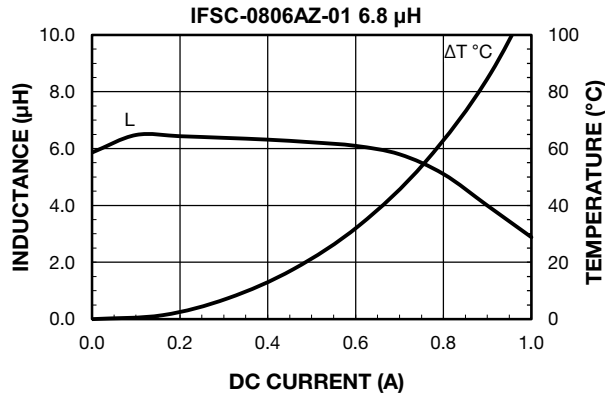


PERFORMANCE GRAPHS



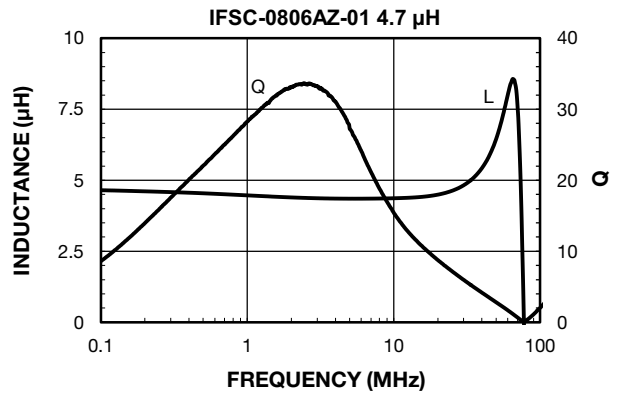
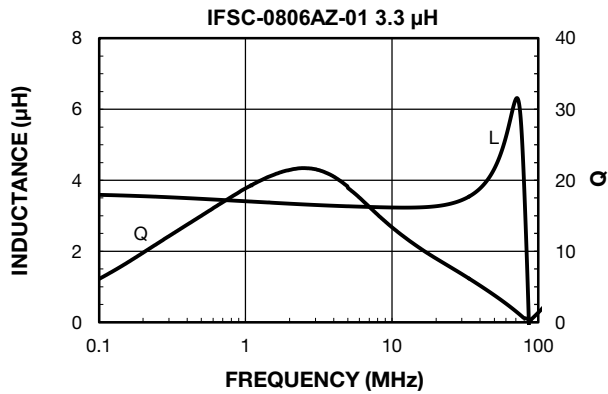
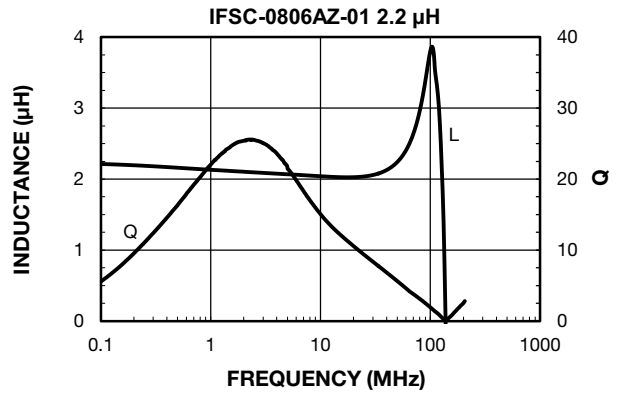
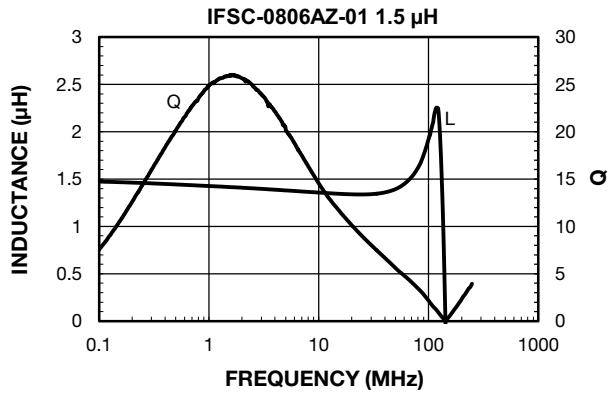
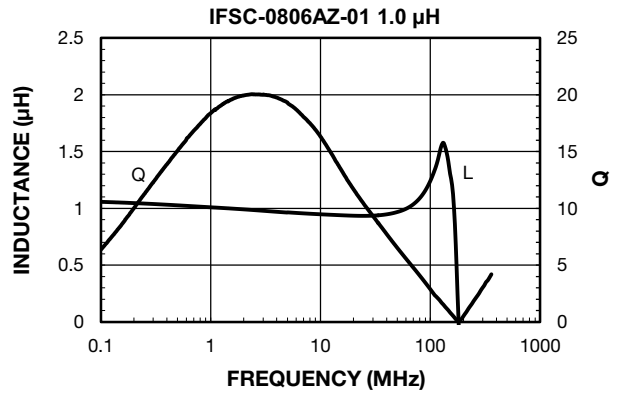
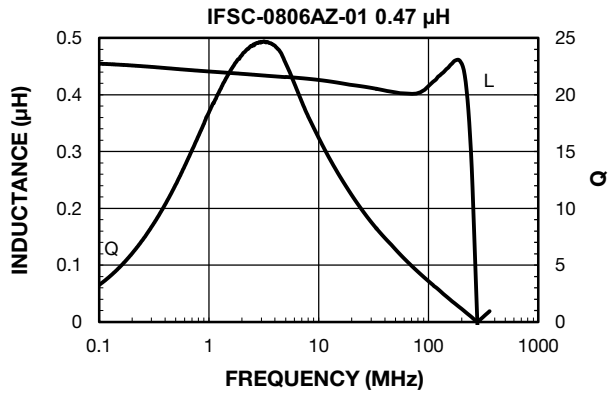


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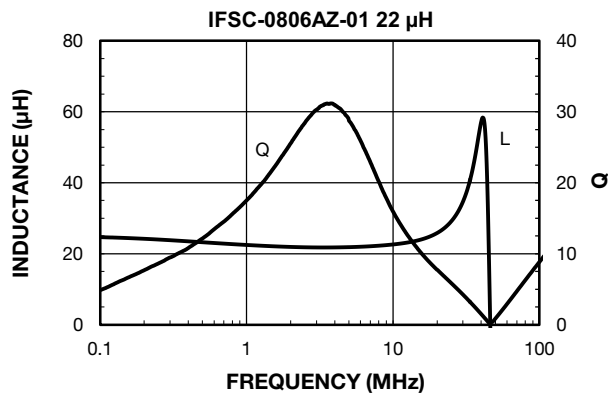
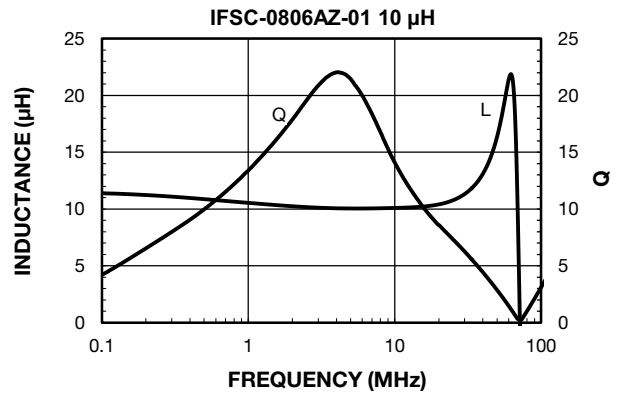
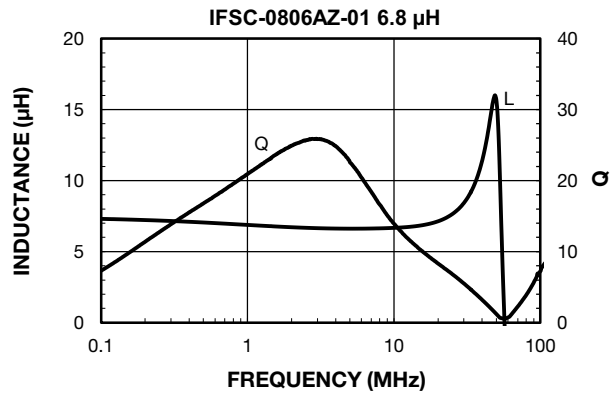


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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