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

Pb-free

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_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR 25 °C (mΩ)		HEAT RATING CURRENT DC I_{DC} (A) (3)		SATURATION CURRENT DC I_{SAT} (A) (4)	
	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.
0.47	49	59	2.60	2.34	2.85	2.56
1.0	96	115	1.60	1.44	1.88	1.69
1.5	143	172	1.40	1.26	1.63	1.46
2.2	196	236	1.30	1.17	1.40	1.26
3.3	247	297	1.05	0.94	1.00	0.90
4.7	331	398	0.90	0.81	0.85	0.76
6.8	623	748	0.60	0.54	0.80	0.72
10.0	1108	1330	0.45	0.40	0.62	0.55
22.0	2367	2840	0.37	0.33	0.43	0.38

Notes

(1) All test data is referenced to 25 °C ambient

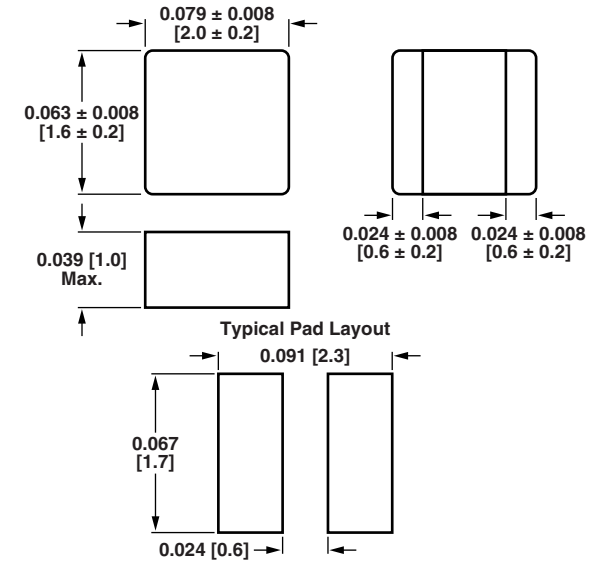
(2) Operating temperature range -55 °C to +125 °C

(3) DC current (A) that will cause an approximate ΔT of 40 °C

(4) DC current (A) that will cause L_0 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]



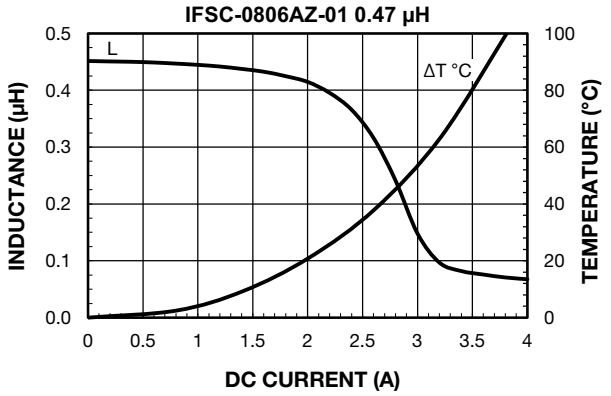
DESCRIPTION

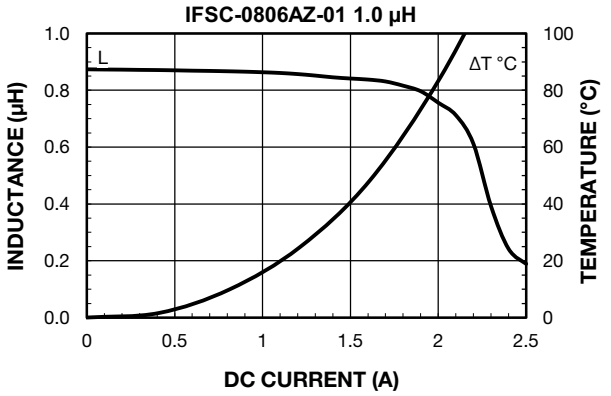
IFSC-0806AZ-01	4.7 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

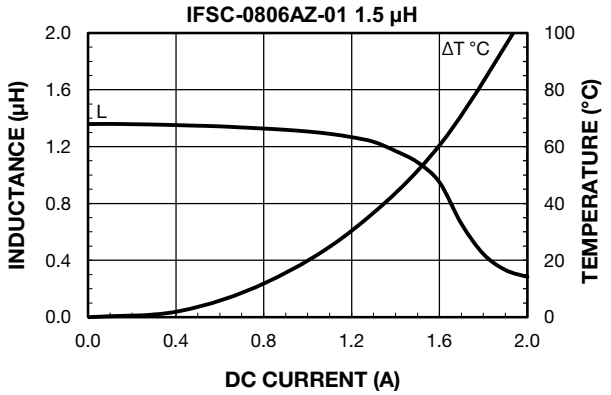
GLOBAL PART NUMBER

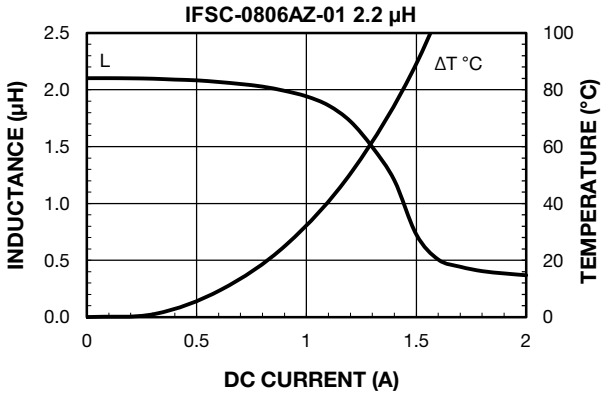
I	F	S	C	0	8	0	6	A	Z	E	R	4	R	7	M	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

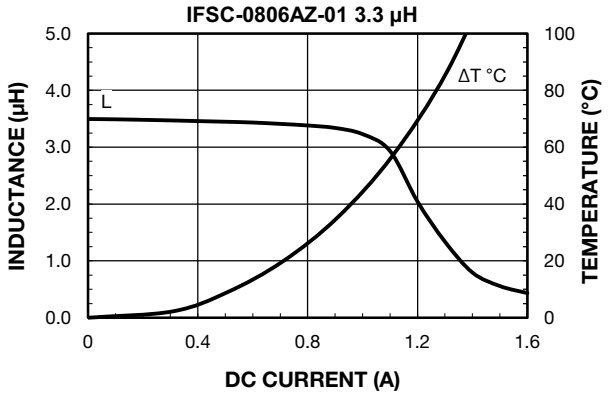
PERFORMANCE GRAPHS

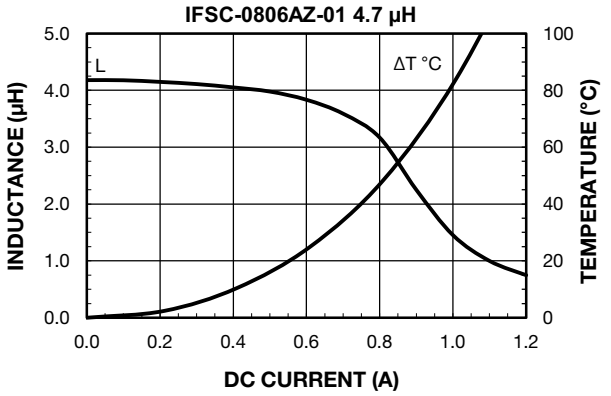




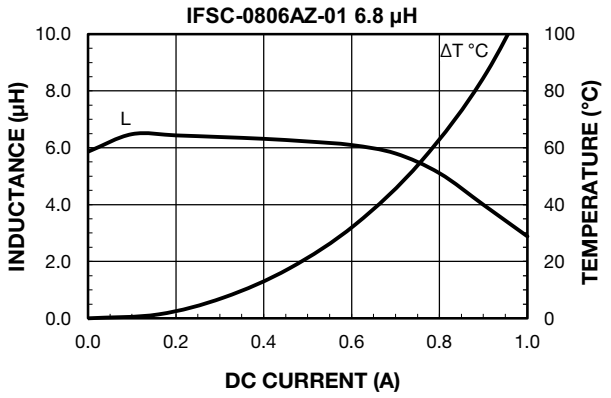


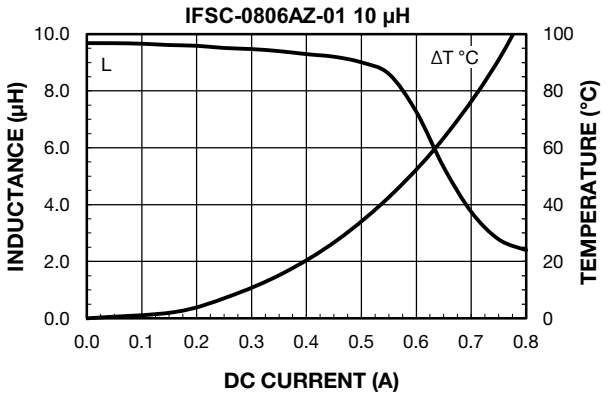


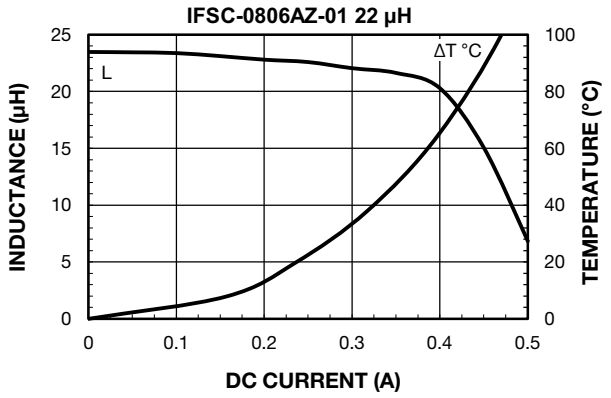




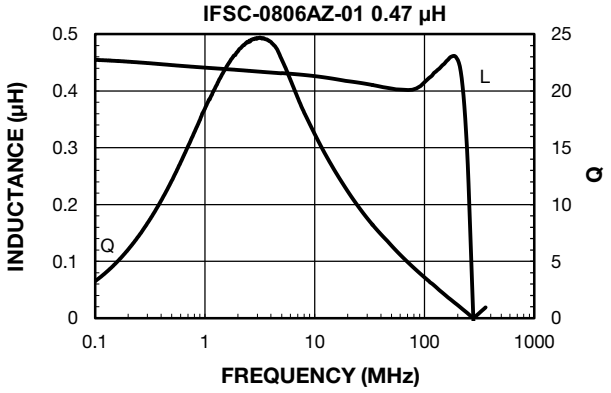
PERFORMANCE GRAPHS

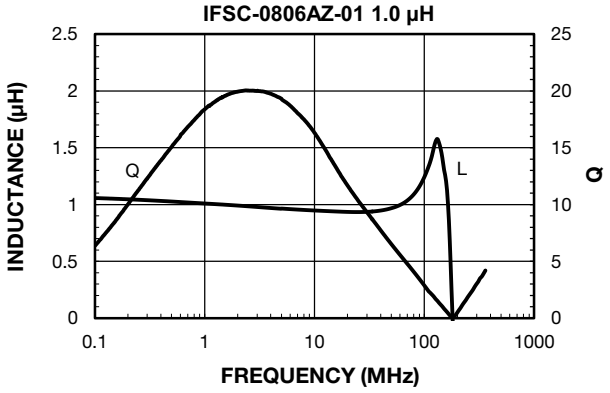


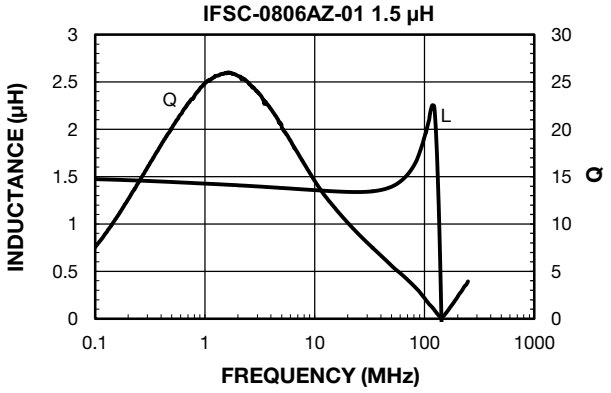


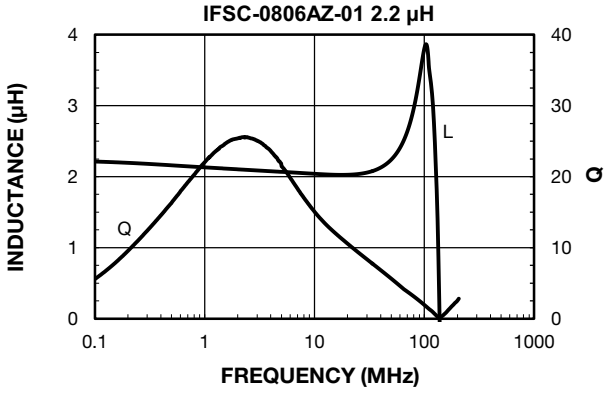


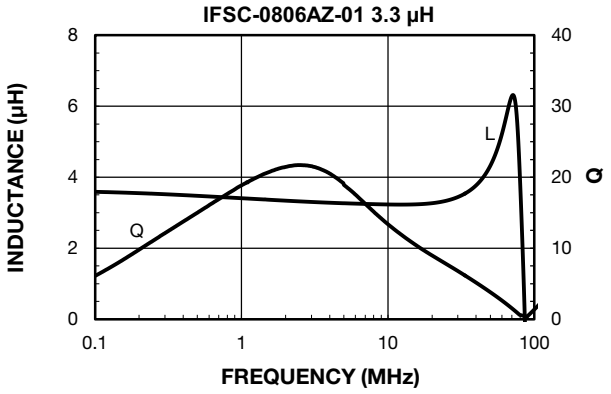
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY

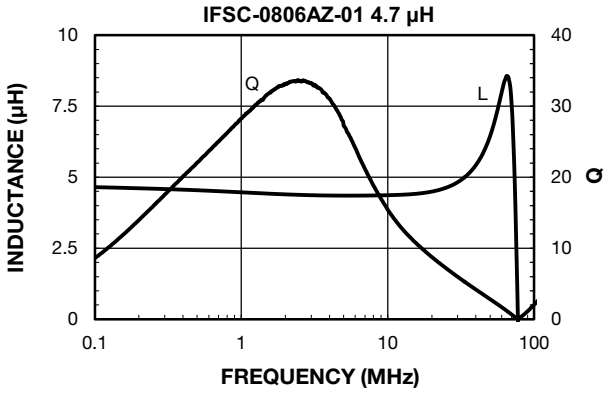












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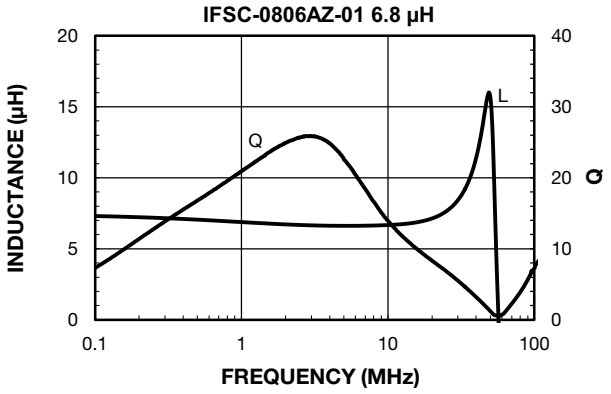

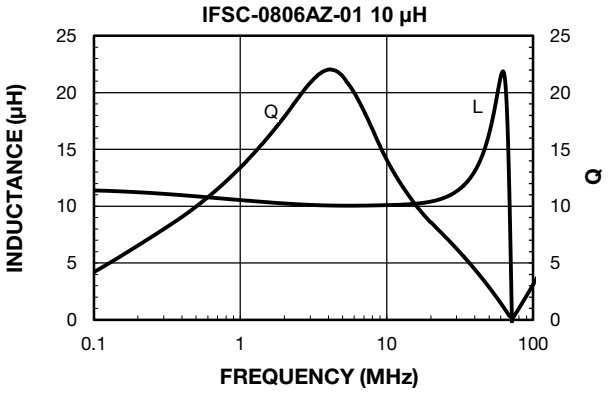

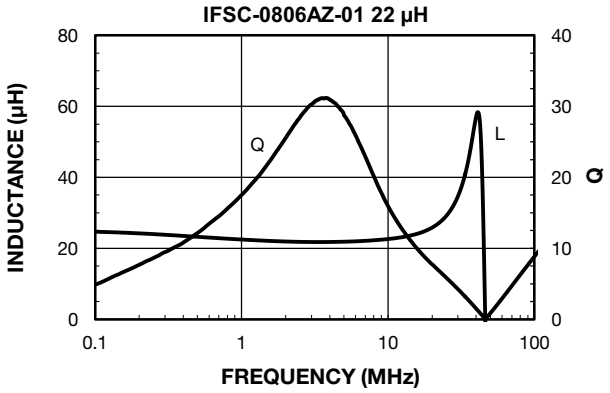

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