3 % DCR Tolerance, Low Profile, High Current Inductor

Patents Pending

FEATURES

- Shielded construction
- Frequency range up to 5.0 MHz
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Compliant to RoHS Directive 2002/95/EC

Pb-free
RoHS COMPLIANT

APPLICATIONS

- Notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems

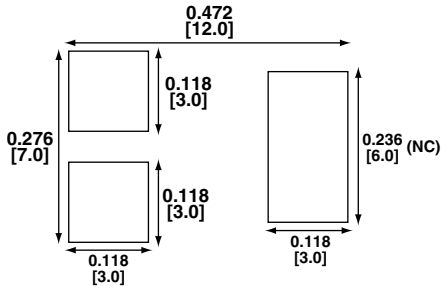
STANDARD ELECTRICAL SPECIFICATIONS

L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR ± 3 % AT 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (3)	SATURATION CURRENT DC TYP. (A) (4)
0.34	0.88	32	36
0.42			30
0.50			25
0.62			20

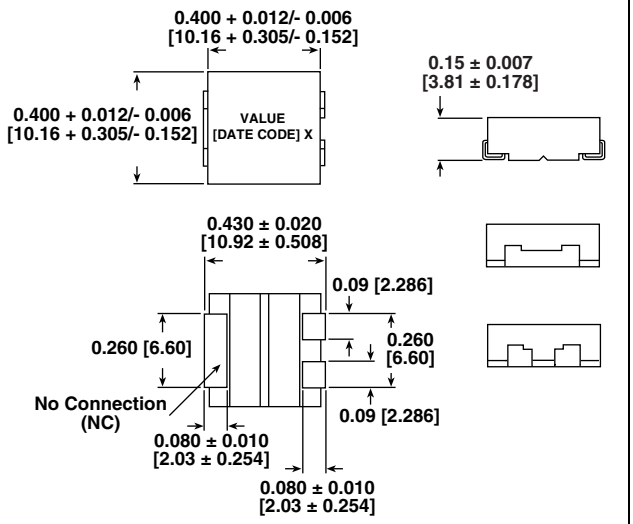
Notes

(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 20 %
(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.

RECOMMENDED PAD LAYOUT



DIMENSIONS in inches [millimeters]



The No Connection (NC) terminal must not be connected to the ground or to any electrical traces as this will cause a short in the circuit.

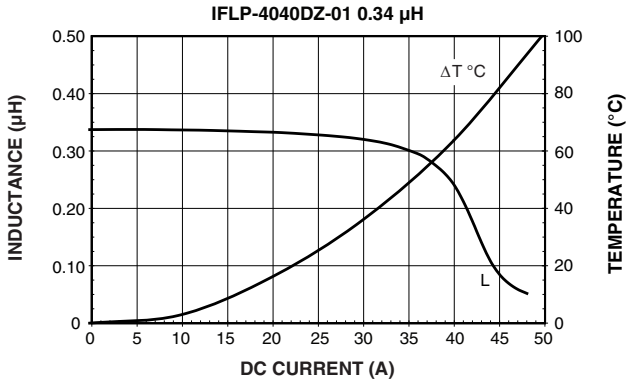
DESCRIPTION

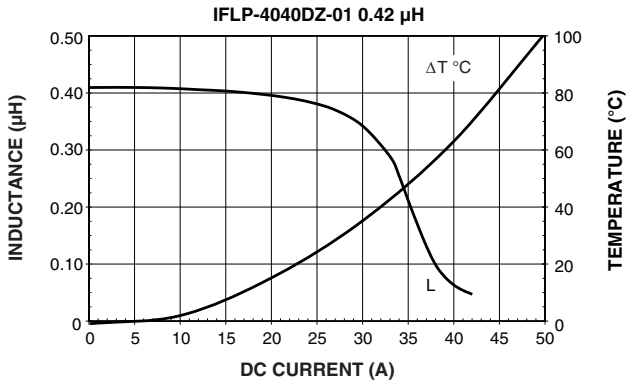
IFLP-4040DZ-01	0.42 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

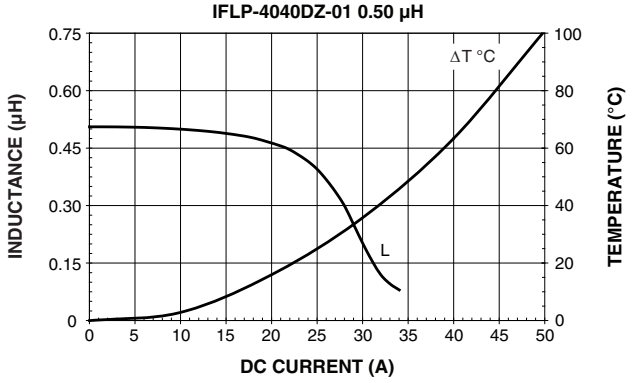
GLOBAL PART NUMBER

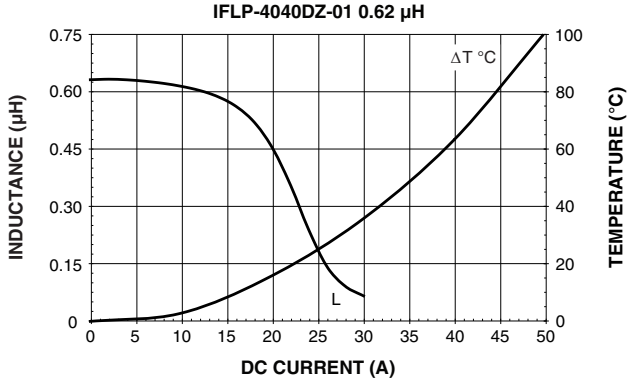
I	F	L	P	4	0	4	0	D	Z	E	R	R	4	2	M	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

PERFORMANCE GRAPHS









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