Ultra Small Footprint, High Current Inductors



FEATURES

- Composite powdered iron construction
- Miniature 1.6 mm x 0.8 mm x 0.8 mm size
- Magnetic shielded
- Low DCR and core loss for improved efficiency
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE
GREEN (5-2008)

LINKS TO ADDITIONAL RESOURCES

Product Page

APPLICATIONS

- Portable electronics
- Tablets and notebook computers
- POL DC/DC converters
- Battery powered devices
- Internet of things (IoT) devices

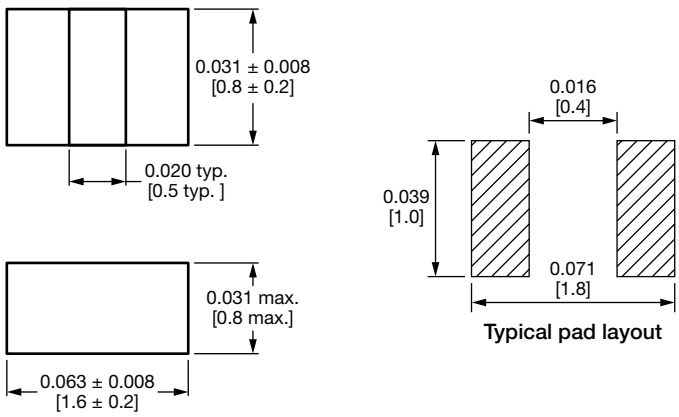
STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 INDUCTANCE ± 20 % AT 1 MHz, 1.0 V, 0 A (µH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (3)	SATURATION CURRENT DC TYP. (A) (4)
IHHP0603ZHERR47M01	0.47	36	43	3.3	3.4
IHHP0603ZHER1R0M01	1.0	95	110	2.0	2.3

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]



Typical pad layout

For technical questions, contact: magnetics@vishay.com

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DESCRIPTION

IHHP-0603ZH-01	1.0 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

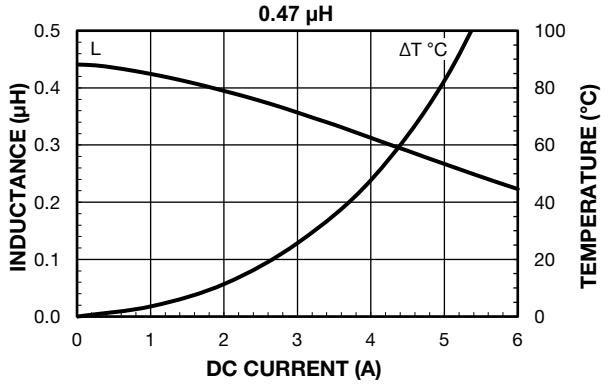
I	H	H	P	0	6	0	3	Z	H	E	R	1	R	0	M	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES	

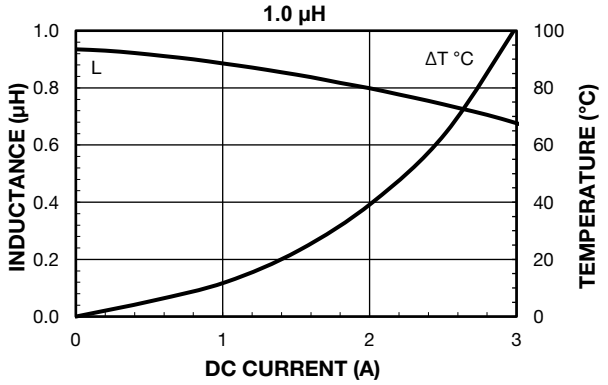
ER = tape and reel

1R0 = 1.0 µH

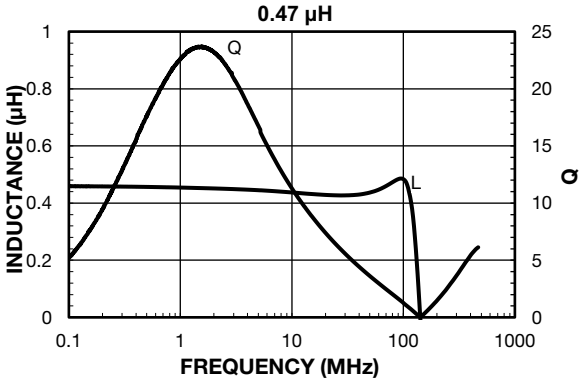
M = ± 20 %
N = ± 30 %

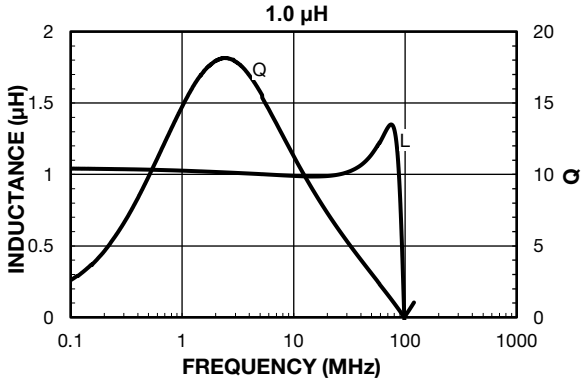
PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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