

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



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

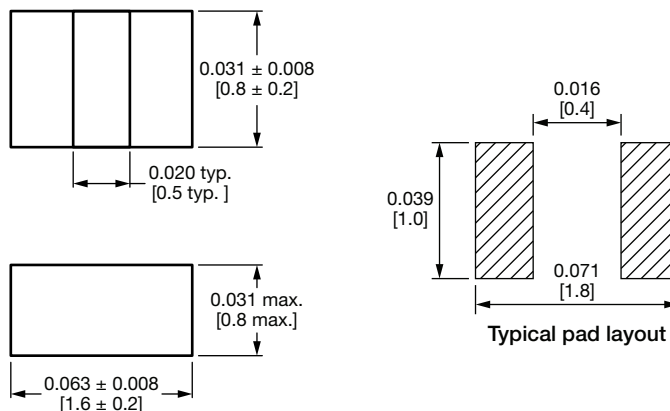
STANDARD ELECTRICAL SPECIFICATIONS

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 L₀ 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]





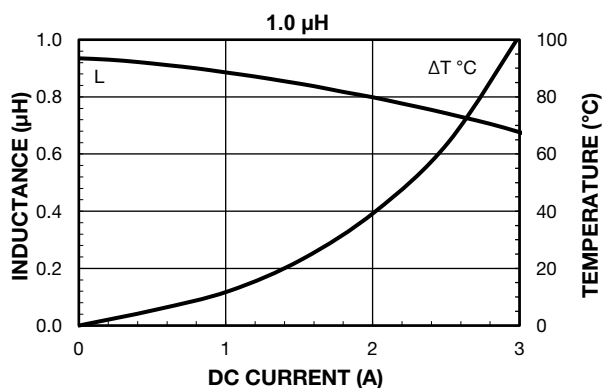
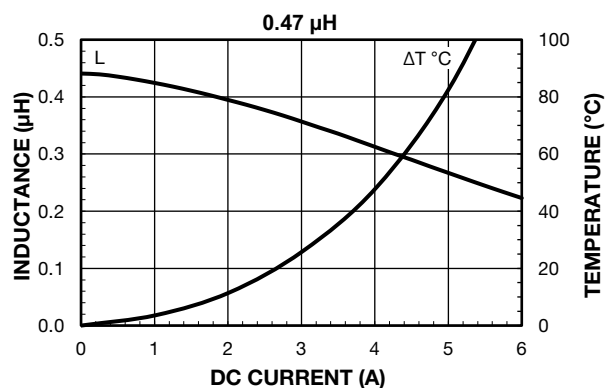
DESCRIPTION

IHHP-0603ZH-01	1.0 μ H	$\pm 20\%$	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

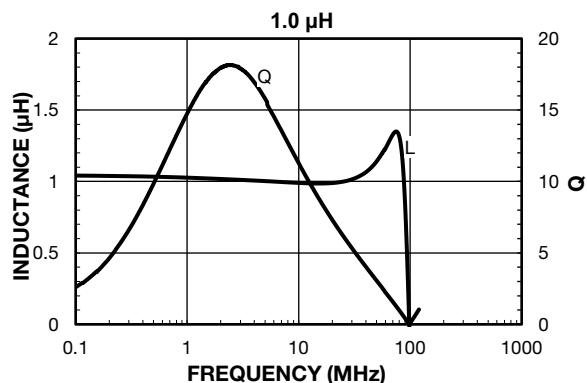
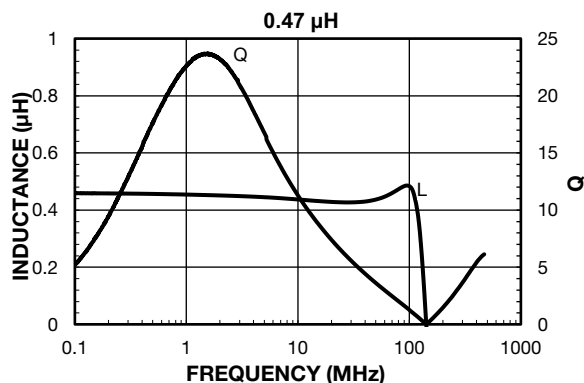
GLOBAL PART NUMBER

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 μ H		M = $\pm 20\%$ N = $\pm 30\%$					

PERFORMANCE GRAPHS



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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