

## Low Profile, High Current Inductors



### FEATURES

- Magnetic alloy power choke coil
- Magnetic shielded
- Low acoustic noise and high efficiency
- 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
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)

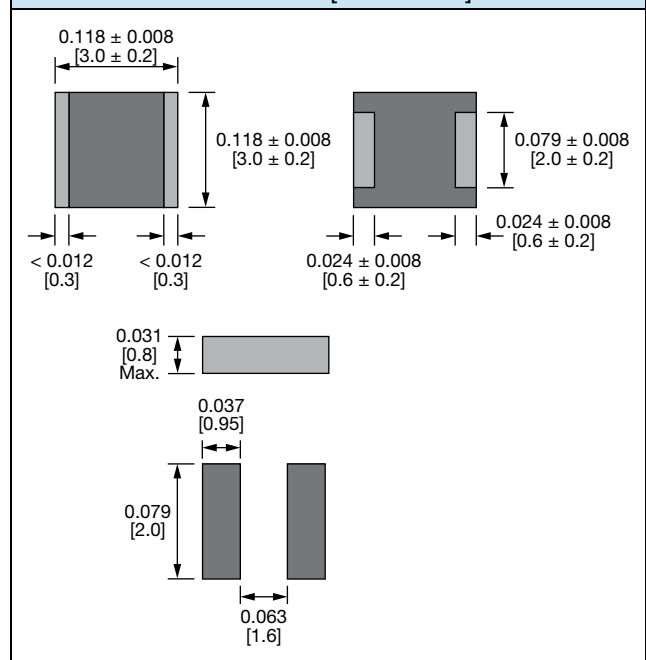
### STANDARD ELECTRICAL SPECIFICATIONS

$L_0$ INDUCTANCE AT 1 MHz, 0.10 V, 0 A ( $\mu\text{H}$ )	DCR TYP. 25 °C (m $\Omega$ )	DCR MAX. 25 °C (m $\Omega$ )	HEAT RATING CURRENT DC (A) <sup>(3)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(4)</sup>
0.33 $\pm$ 30 %	21	23	6.0	6.5
0.47 $\pm$ 30 %	25	28	5.3	5.3
1.0 $\pm$ 20 %	70	78	2.9	3.4
4.7 $\pm$ 20 %	281	312	1.4	1.7

#### 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  $\Delta T$  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

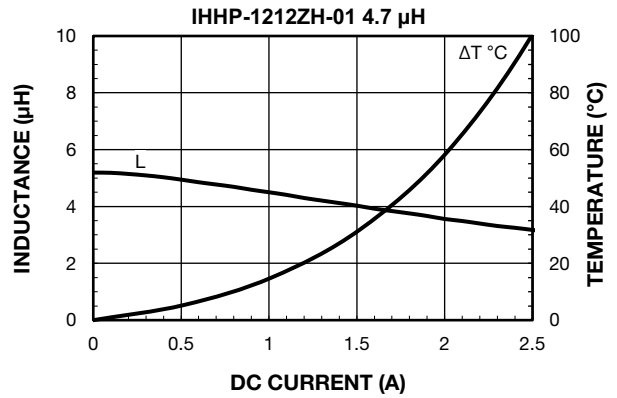
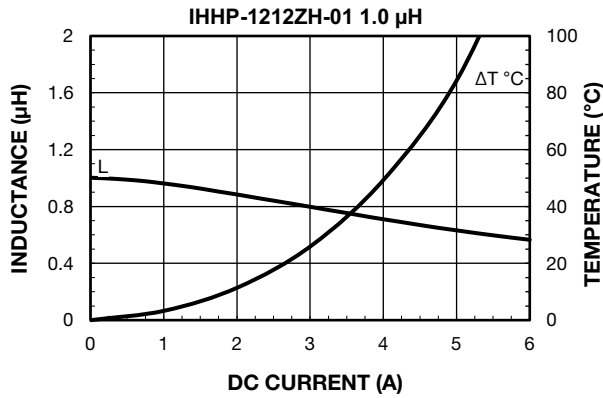
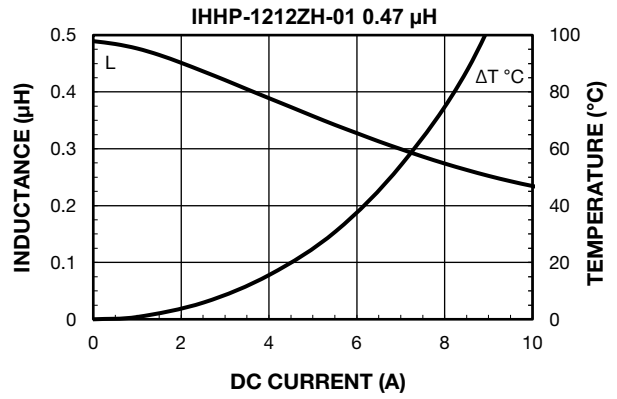
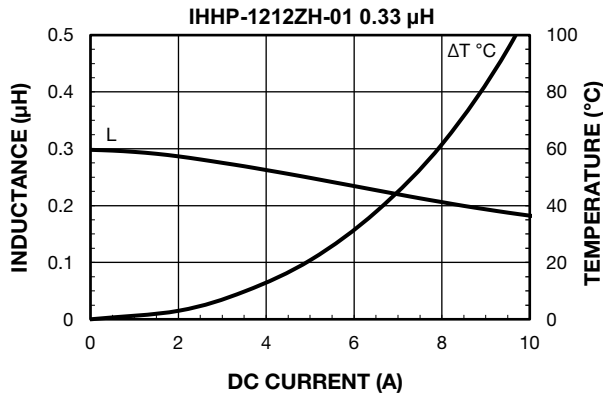
<b>IHHP-1212ZH-01</b>	<b>1.0 <math>\mu\text{H}</math></b>	<b><math>\pm</math> 20 %</b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

### GLOBAL PART NUMBER

I	H	H	P	1	2	1	2	Z	H	E	R	1	R	0	M	0	1
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE		TOL.		SERIES			

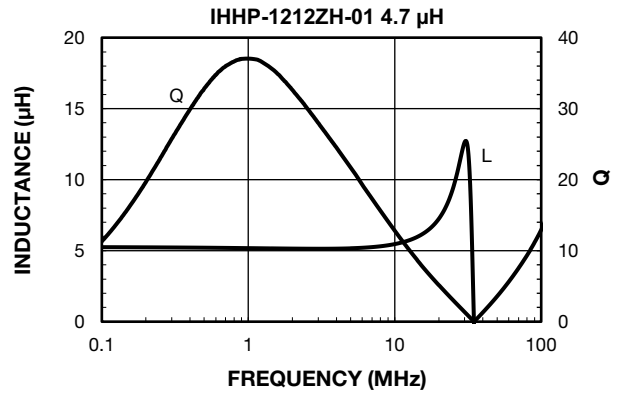
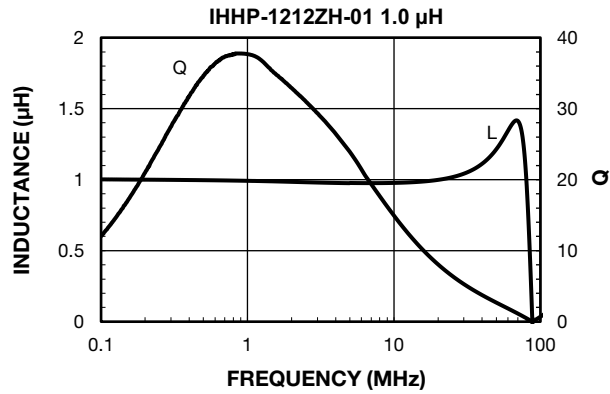
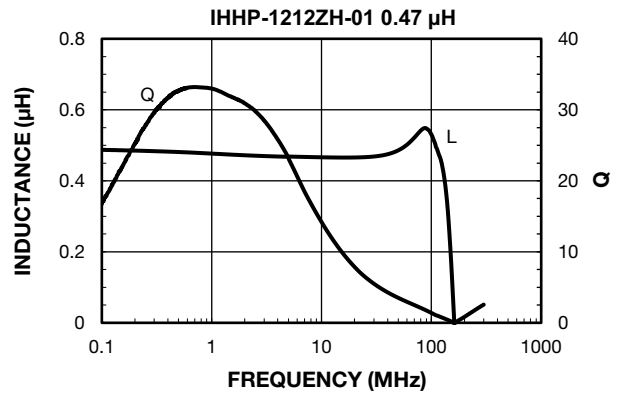
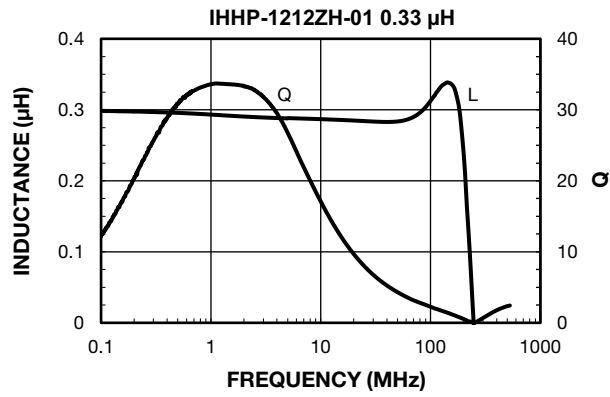


## PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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