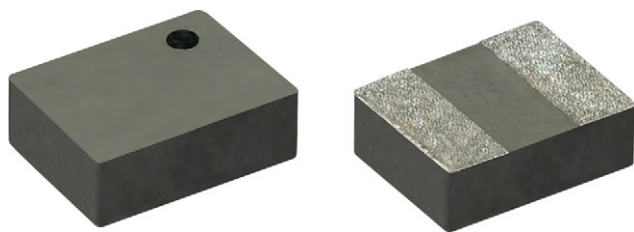


## Ultra Small Footprint, High Current Inductors



### FEATURES

- Composite powdered iron construction
- Miniature 2.0 mm x 1.6 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](http://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

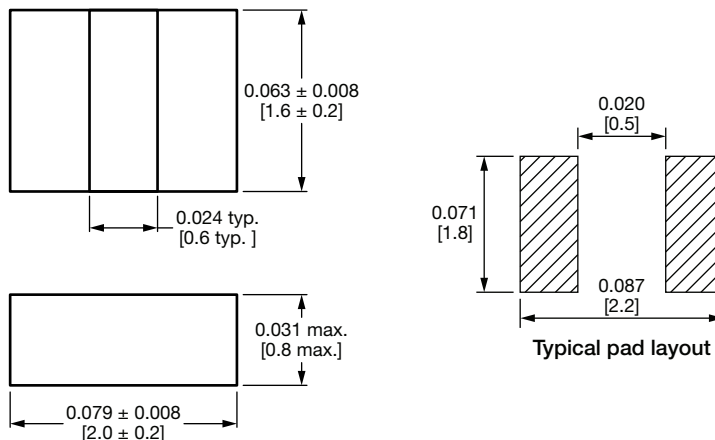
### STANDARD ELECTRICAL SPECIFICATIONS

| PART NUMBER        | L <sub>0</sub> INDUCTANCE ± 20 %<br>AT 1 MHz, 1.0 V, 0 A<br>(μH) | DCR TYP.<br>25 °C<br>(mΩ) | DCR MAX.<br>25 °C<br>(mΩ) | HEAT RATING CURRENT<br>DC TYP.<br>(A) <sup>(3)</sup> | SATURATION CURRENT<br>DC TYP.<br>(A) <sup>(4)</sup> |
|--------------------|------------------------------------------------------------------|---------------------------|---------------------------|------------------------------------------------------|-----------------------------------------------------|
| IHHP0806ZHERR47M01 | 0.47                                                             | 20                        | 24                        | 4.9                                                  | 5.2                                                 |
| IHHP0806ZHER1R0M01 | 1.0                                                              | 29                        | 35                        | 4.4                                                  | 4.0                                                 |
| IHHP0806ZHER2R2M01 | 2.2                                                              | 75                        | 90                        | 2.6                                                  | 2.9                                                 |

#### 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<sub>0</sub> 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]





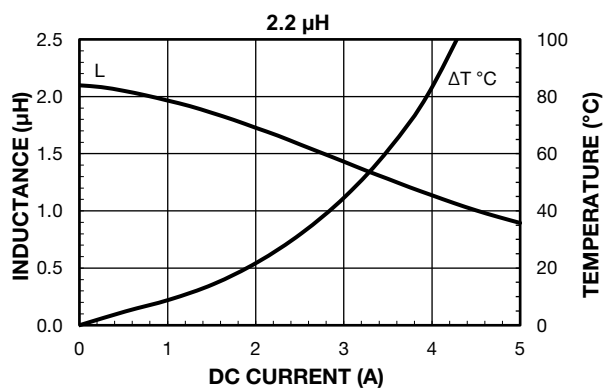
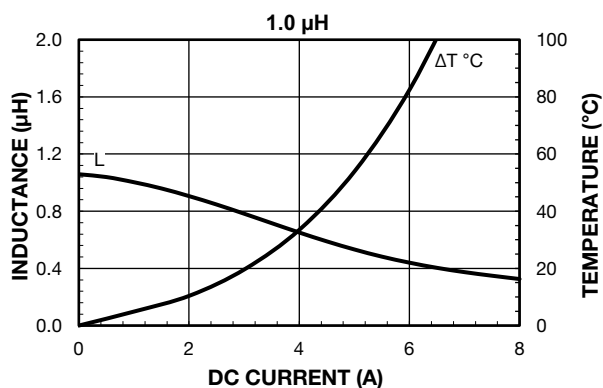
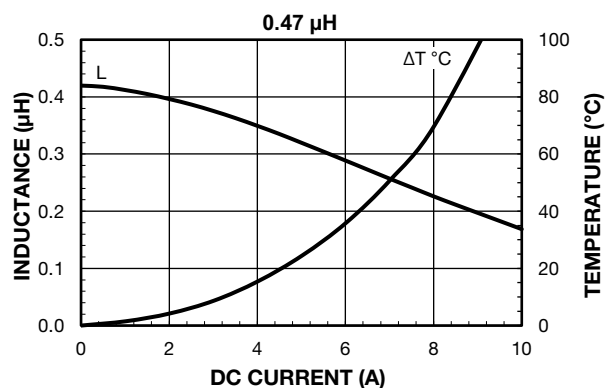
## DESCRIPTION

|                |                  |                      |              |                                |
|----------------|------------------|----------------------|--------------|--------------------------------|
| IHHP-0806ZH-01 | 1.0 $\mu$ H      | $\pm 20\%$           | ER           | e3                             |
| MODEL          | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

## GLOBAL PART NUMBER

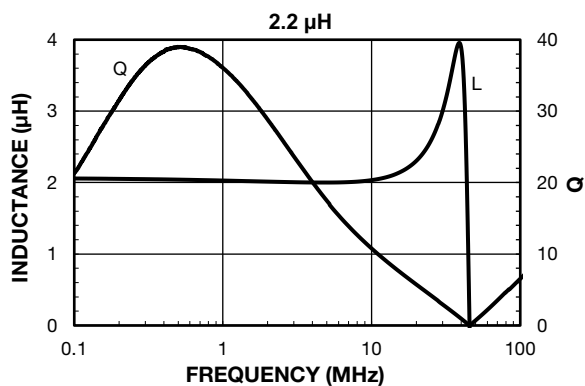
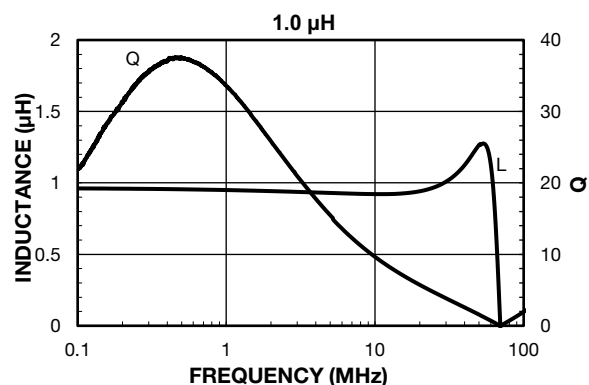
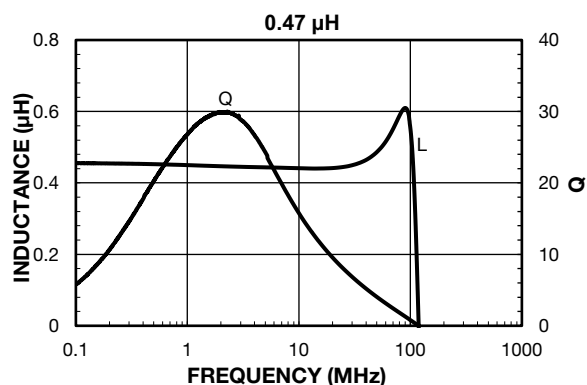
|                |   |   |   |      |   |   |   |                       |   |                  |   |                          |   |        |   |   |   |
|----------------|---|---|---|------|---|---|---|-----------------------|---|------------------|---|--------------------------|---|--------|---|---|---|
| I              | H | H | P | 0    | 8 | 0 | 6 | Z                     | H | E                | R | 1                        | R | 0      | M | 0 | 1 |
| PRODUCT FAMILY |   |   |   | SIZE |   |   |   | PACKAGE CODE          |   | INDUCTANCE VALUE |   | INDUCTANCE TOLERANCE     |   | SERIES |   |   |   |
|                |   |   |   |      |   |   |   | ER =<br>tape and reel |   | 1R0 = 1.0 μH     |   | M = ± 20 %<br>N = ± 30 % |   |        |   |   |   |

## PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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