

### Low-Profile, High-Current Inductors



#### KEY BENEFITS

- Compact 3 mm by 3 mm footprint with height profiles of 0.8 mm and 1.0 mm
- Magnetic alloy power choke coil
- Magnetic shielded
- Low acoustic noise and high efficiency
- Inductance values up to 10  $\mu$ H

#### APPLICATIONS

- DC/DC conversion in portable electronics

#### RESOURCES

- Datasheets: IHHP-1212AZ-01 - [www.vishay.com/doc?34404](http://www.vishay.com/doc?34404),  
IHHP-1212ZH-01 - [www.vishay.com/doc?34405](http://www.vishay.com/doc?34405)
- For technical questions contact [magnetics@vishay.com](mailto:magnetics@vishay.com)
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS** **HALOGEN**  
COMPLIANT **FREE**

A **WORLD OF**  
**SOLUTIONS**

### Low-Profile, High-Current Inductors

#### IHHP-1212AZ-01

STANDARD ELECTRICAL SPECIFICATIONS				
L <sub>0</sub> INDUCTANCE AT 1 MHz, 0.10 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC (A) <sup>(3)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(4)</sup>
0.47 ± 30 %	27	30	5.2	5.0
1.0 ± 20 %	59	66	3.2	4.2
2.2 ± 20 %	130	144	2.4	3.0
4.7 ± 20 %	227	252	1.6	1.8
6.8 ± 20 %	261	290	1.3	1.6
10 ± 20 %	369	410	1.1	1.3

#### 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<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.

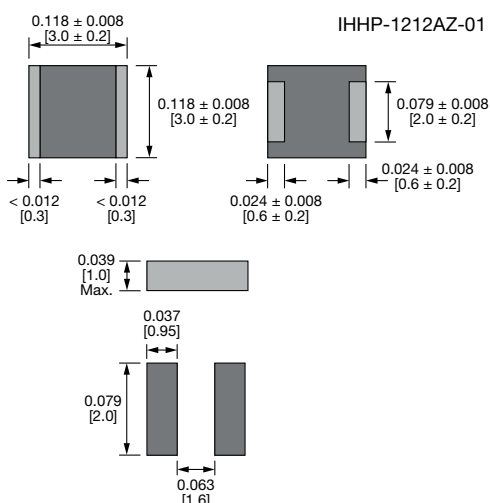
#### IHHP-1212ZH-01

STANDARD ELECTRICAL SPECIFICATIONS				
L <sub>0</sub> INDUCTANCE AT 1 MHz, 0.10 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC (A) <sup>(3)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(4)</sup>
0.33 ± 30 %	21	23	6.0	6.5
0.47 ± 30 %	25	28	5.3	5.3
1.0 ± 20 %	70	78	2.9	3.4
4.7 ± 20 %	281	312	1.4	1.7

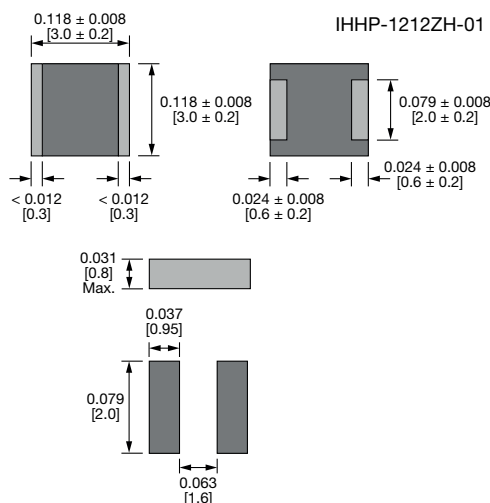
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#### DIMENSIONS in inches [millimeters]



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#### DESCRIPTION

IHHP-1212AZ-01	1.0 μH	± 20 %	ER	e3
IHHP-1212ZH-01				
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	

Revision 10-Nov-15