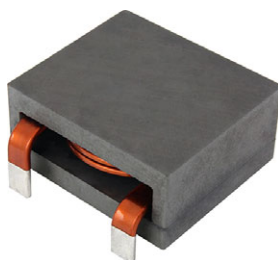


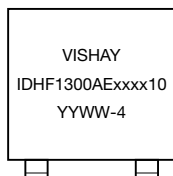
## Low Profile, Through-Hole, High Current Inductors, Edge-Wound Series



### LINKS TO ADDITIONAL RESOURCES



### MARKINGS



STANDARD ELECTRICAL SPECIFICATIONS					
$L_0$ INDUCTANCE $\pm 10\%$ AT 100 kHz, 0.25 V, 0 A ( $\mu$ H)	DCR MAX. 25 °C (m $\Omega$ )	HEAT RATING CURRENT DC TYP. (1) (A)	SATURATION CURRENT DC TYP. AT 100 °C (2) (A)	SRF TYP. (MHz)	HIPOT CORE TO WIRE, 500 V <sub>DC</sub> , 2 s (mA)
1.0	0.79	72	230	39	< 2
2.2	1.11	59	148	23	< 2
3.3	1.11	59	112	18	< 2
4.7	1.11	59	82	16	< 2
5.0	1.11	59	78	15	< 2
5.6	1.11	59	63	14	< 2
6.8	1.11	59	52	12	< 2
8.2	1.11	59	43	10	< 2
10	1.11	59	35	9	< 2

#### Notes

- All test data is referenced to 25 °C ambient
  - Operating temperature range -55 °C to +125 °C
  - 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
  - Not intended for use in resonant LLC inductor applications due to the designed low turns count which generates high flux levels resulting in high core losses and potential saturation. This inductor is better suited for high current filtering applications
- (1) DC current (A) that will cause an approximate  $\Delta T$  of 40 °C  
(2) DC current (A) that will cause  $L_0$  to drop approximately 20 %

### FEATURES

- Low loss ferrite core for high performance designs with minimal ac power losses
- Low DCR losses that provides high rated current performance
- Low profile package - better for mechanical shock and vibration
- Hot dipped Sn plating provides low risk of whisker growth
- Custom options are available
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

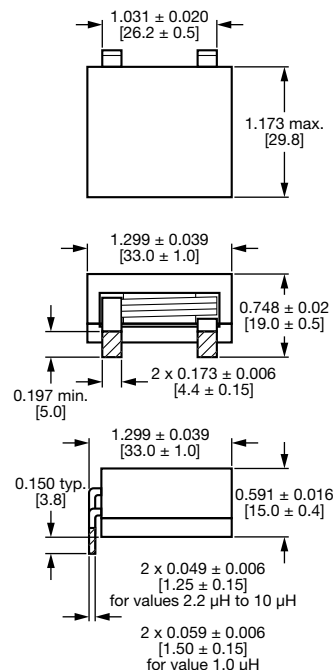


**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

### APPLICATIONS

- High current and high temperature applications
- DC/DC converters
- Motor noise suppression
- Commercial

### DIMENSIONS in inches [millimeters]

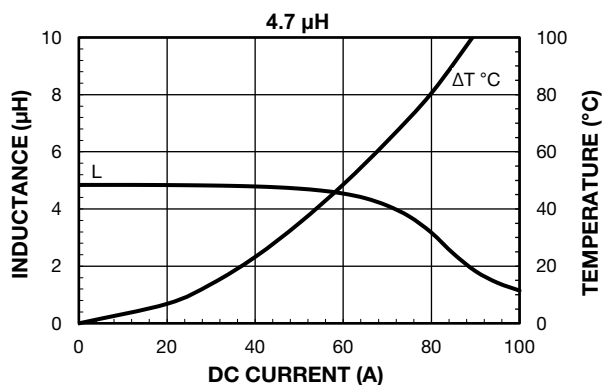
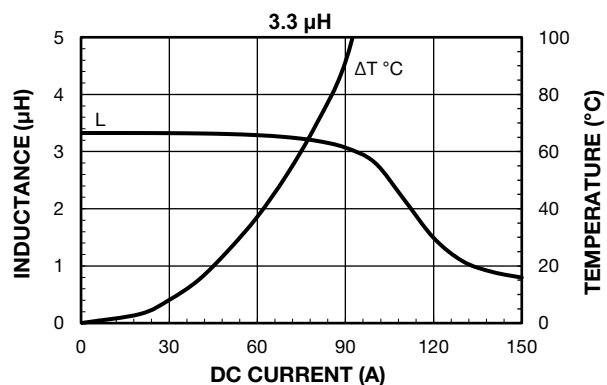
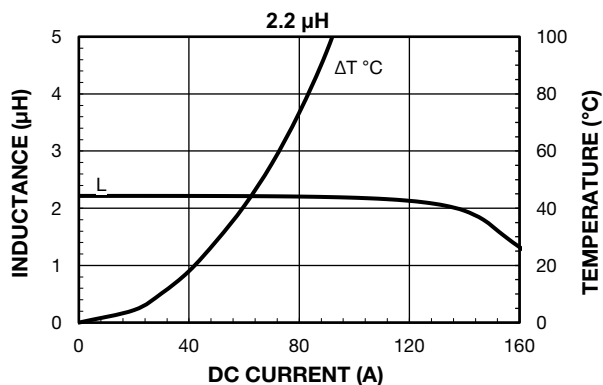
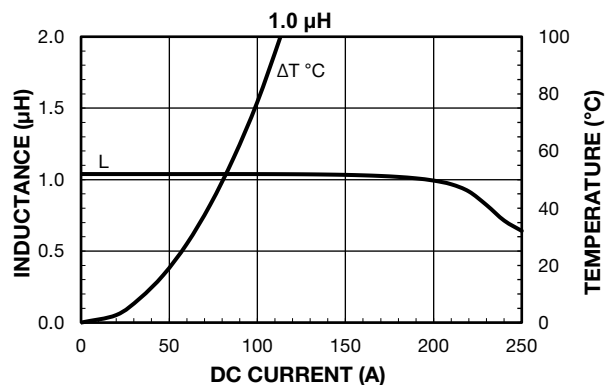



**DESCRIPTION**

<b>IHDF-1300AE-10</b>	<b>4.7 <math>\mu</math>H</b>	<b><math>\pm 10\%</math></b>	<b>EH</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

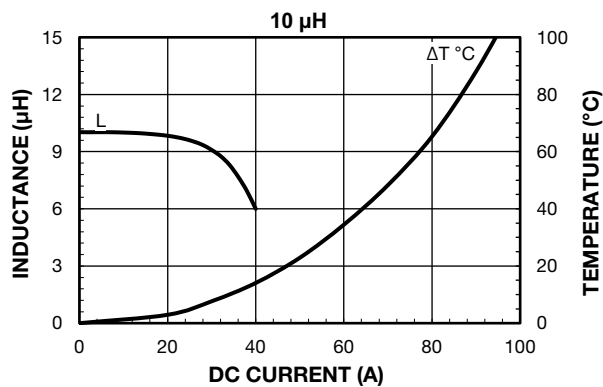
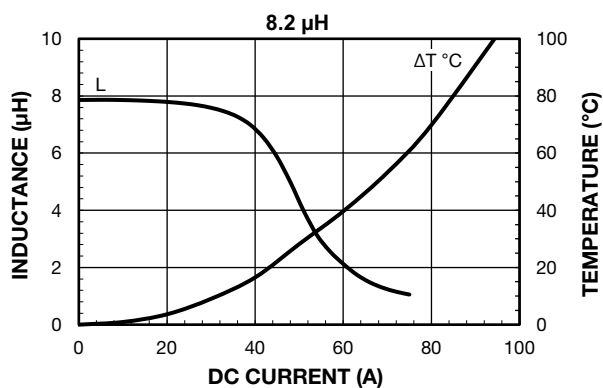
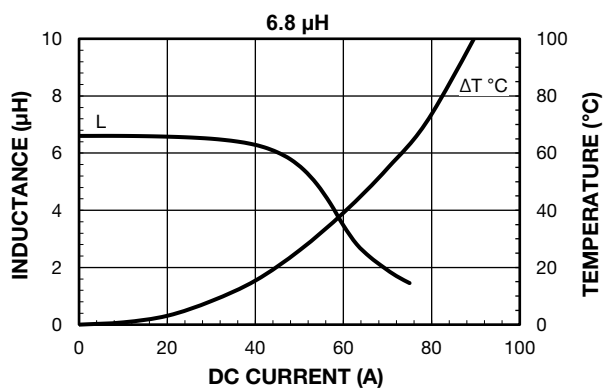
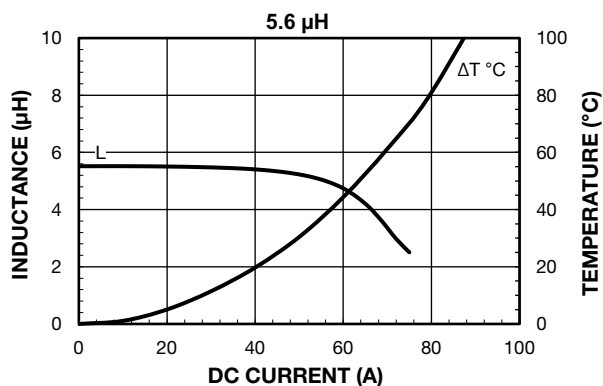
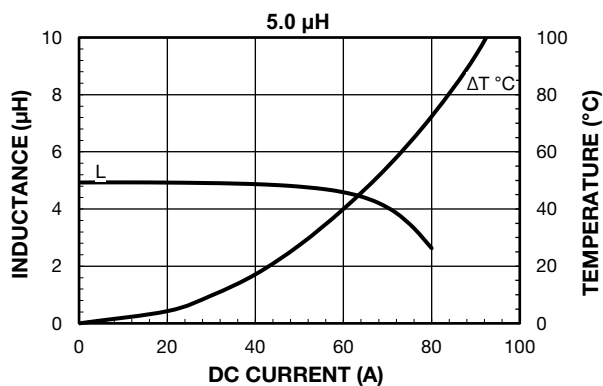
**GLOBAL PART NUMBER**

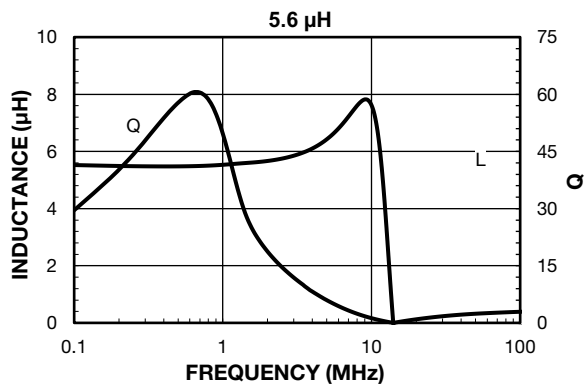
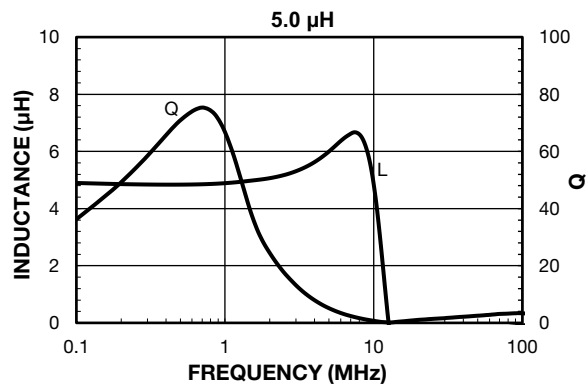
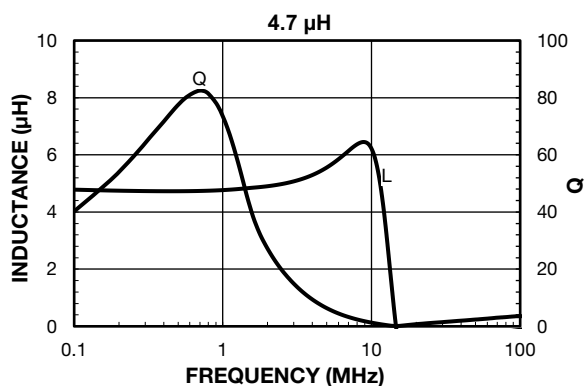
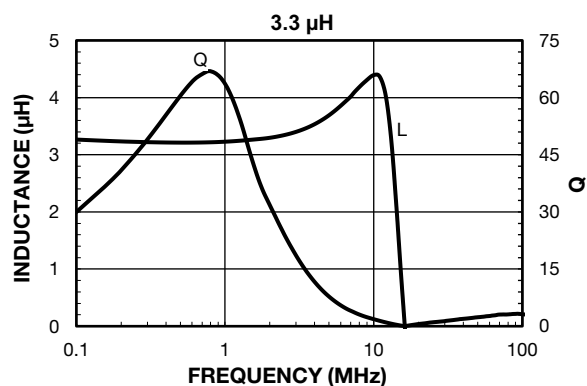
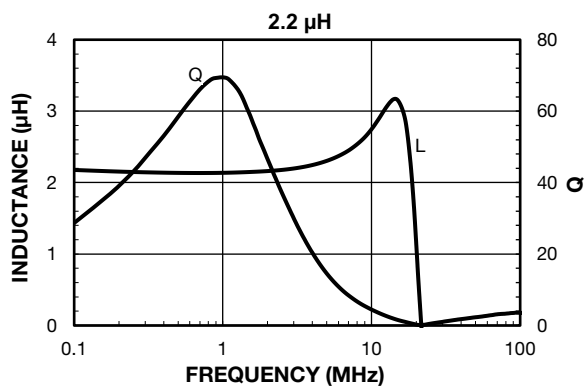
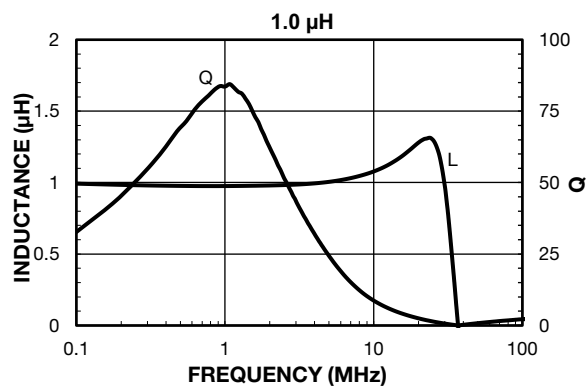
<b>I</b>	<b>H</b>	<b>D</b>	<b>F</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>A</b>	<b>E</b>	<b>E</b>	<b>H</b>	<b>4</b>	<b>R</b>	<b>7</b>	<b>K</b>	<b>1</b>	<b>0</b>
PRODUCT FAMILY				SIZE				LEAD (Pb)-FREE		STYLE		INDUCTANCE VALUE		INDUCTANCE TOLERANCE		SERIES	
										H = horizontal		4R7 = 4.7 $\mu$ H		K = $\pm 10\%$			

**PERFORMANCE GRAPHS**




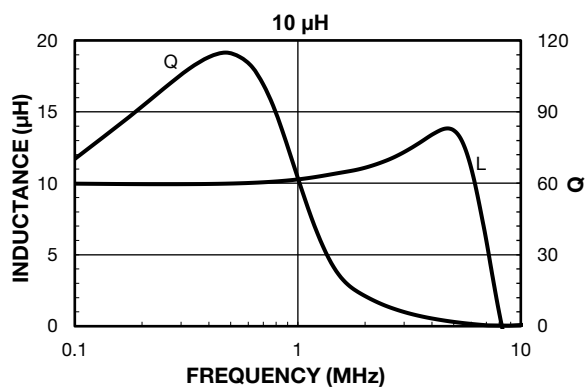
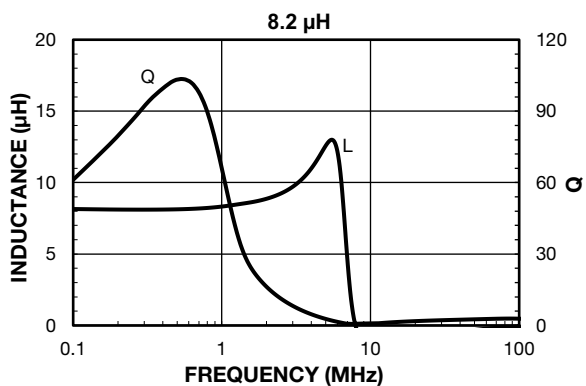
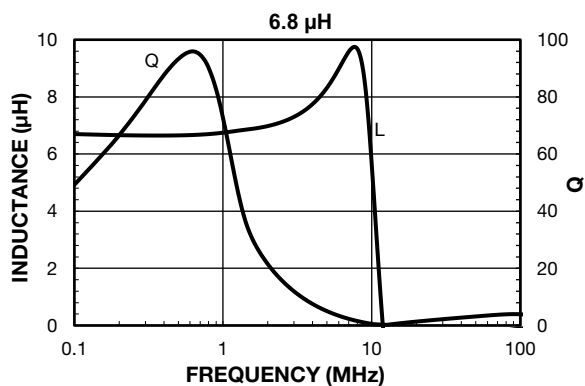
PERFORMANCE GRAPHS



**PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY**




PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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