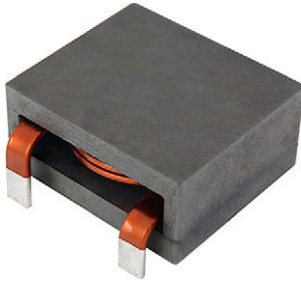


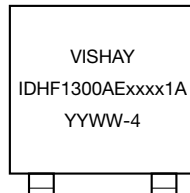
## Low Profile, Through-Hole, High Current Inductors, Edge-Wound Series



### LINKS TO ADDITIONAL RESOURCES



### MARKINGS



STANDARD ELECTRICAL SPECIFICATIONS					
$L_0$ INDUCTANCE $\pm 10\%$ AT 100 kHz, 0.25 V, 0 A ( $\mu\text{H}$ )	DCR MAX. 25 °C (m $\Omega$ )	HEAT RATING CURRENT DC TYP. (1) (A)	SATURATION CURRENT DC TYP. (2) AT 100 °C (2) (A)	SRF TYP. (MHz)	HIPOT CORE TO WIRE, 500 V <sub>DC</sub> , 2 s (mA)
1.0	0.79	72.0	230	39	< 2
2.2	1.11	59.0	149	23	< 2
3.3	1.11	59.0	112	18	< 2
4.7	1.11	59.0	92	16	< 2
5.0	1.11	59.0	78	15	< 2

#### Notes

- All test data is referenced to 25 °C ambient
  - Operating temperature range -55 °C to +155 °C
  - The part temperature (ambient + temp. rise) should not exceed 155 °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
- (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
- AEC-Q200 qualified
- Custom options are available
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

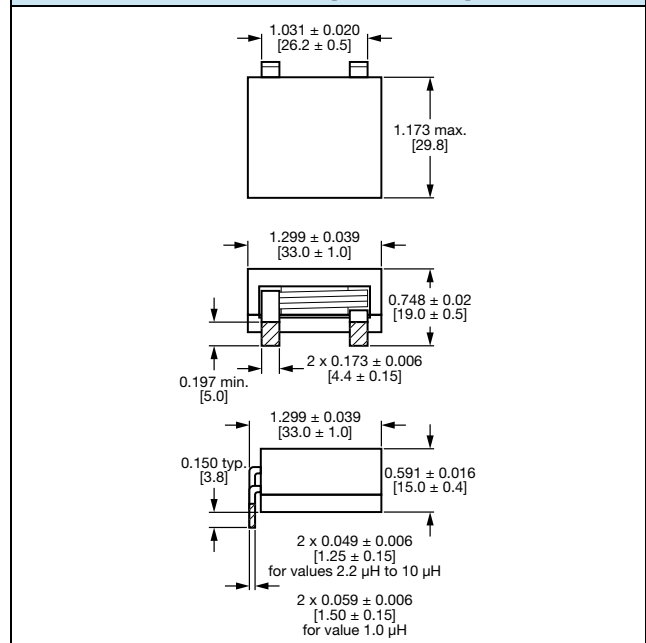
 AUTOMOTIVE  
GRADE

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

### APPLICATIONS

- High current and high temperature applications
- DC/DC converters
- High current motor and switching noise suppression
- Inverters
- On board chargers

### DIMENSIONS in inches [millimeters]



### DESCRIPTION

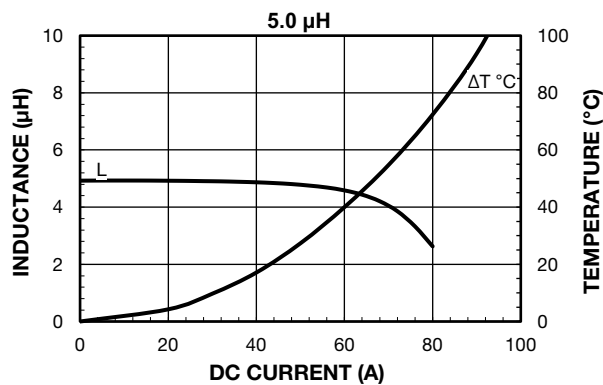
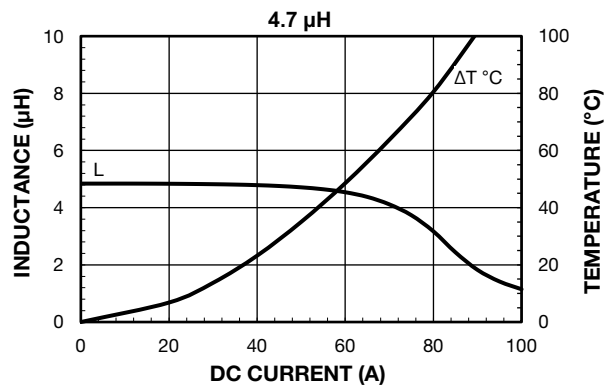
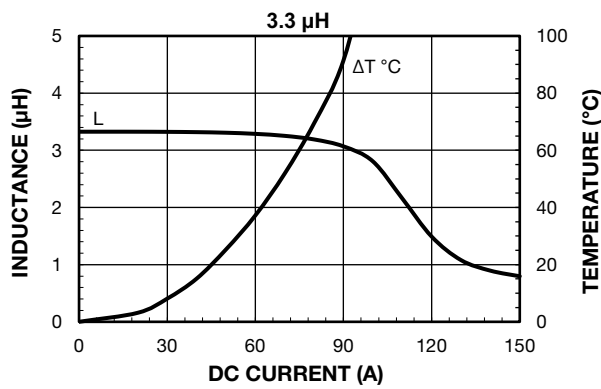
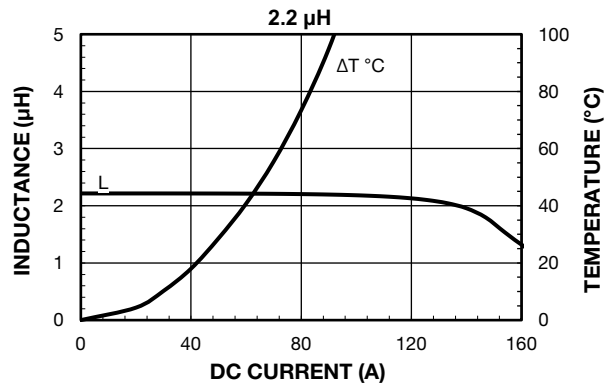
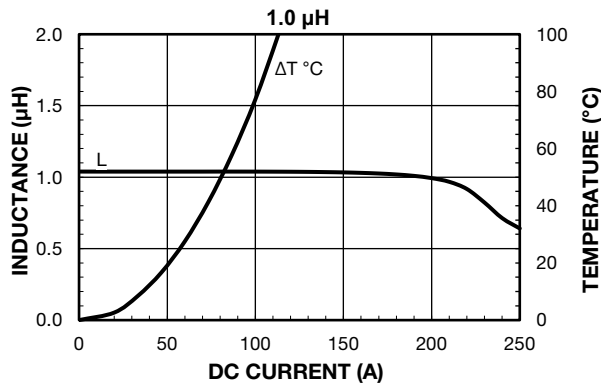
<b>IHDF-1300AE-1A</b>	<b>4.7 <math>\mu\text{H}</math></b>	<b><math>\pm 10\%</math></b>	<b>EH</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

### GLOBAL PART NUMBER

I	H	D	F	1	3	0	0	A	E	E	H	4	R	7	K	1	A
MODEL				SIZE				LEAD (Pb)-FREE	STYLE H: horizontal	INDUCTANCE VALUE			TOL.		SERIES		

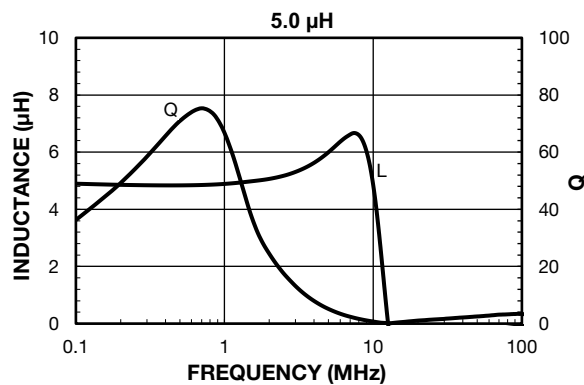
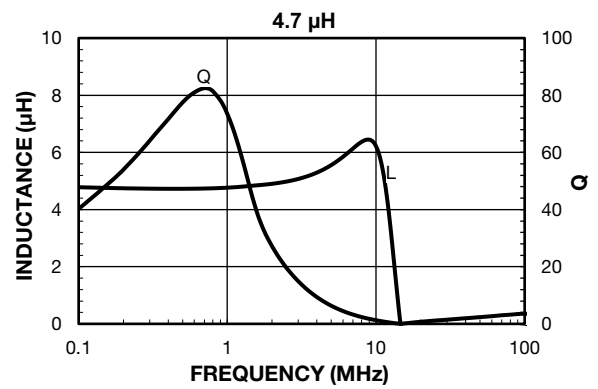
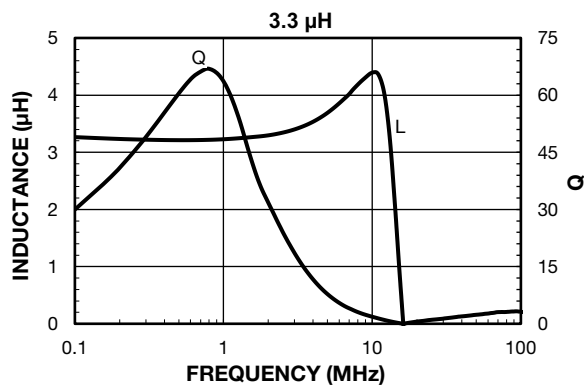
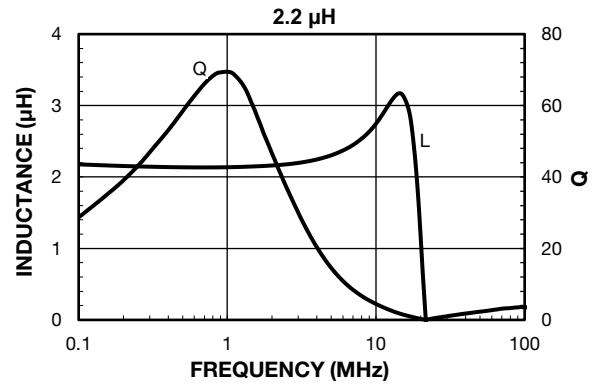
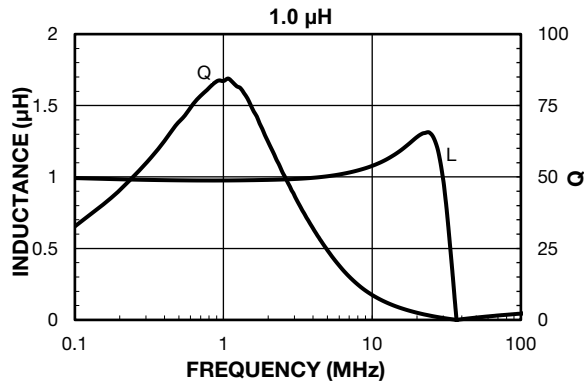


PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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