

## IHLP® Tin / Lead Inductors, Low DCR Series



### FEATURES

- 3.56 mm x 3.3 mm x 1.2mm SMD package
- Magnetically shielded, metal composite construction
- Optimized for low DCR
- Termination: matte 60Sn/40Pb plating
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

### APPLICATIONS

- DC/DC converters
- Telecommunications equipment
- Noise suppression and filtering

### LINKS TO ADDITIONAL RESOURCES


[Product Page](#)

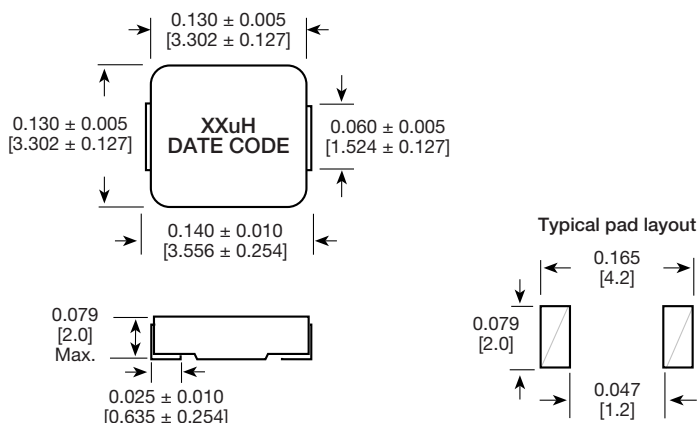
### STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. (A)		SRF TYP. (MHz)
					20 % DROP <sup>(2)</sup>	30 % DROP <sup>(3)</sup>	
IHLP1212BZRZ22M1L	0.22	10.1	10.9	9.7	5.4	8.1	211
IHLP1212BZRZ56M1L	0.56	17.2	18.4	7.5	3.6	5.3	140
IHLP1212BZRZ1R0M1L	1.0	33.7	36.0	5.3	3.4	5.0	75
IHLP1212BZRZ2R2M1L	2.2	56	59.9	4.6	2.3	3.4	54

### 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
  - Rated operating voltage (across inductor) = 40 V
- <sup>(1)</sup> DC current (A) that will cause an approximate ΔT of 40 °C  
<sup>(2)</sup> DC current (A) that will cause L<sub>0</sub> to drop approximately 20 %  
<sup>(3)</sup> DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %

### DIMENSIONS in inches [millimeters]





DESCRIPTION

IHLP-1212BZ-1L  
MODEL

2.2  $\mu\text{H}$   
INDUCTANCE VALUE

$\pm 20\%$   
INDUCTANCE TOLERANCE

RZ  
PACKAGE CODE

GLOBAL PART NUMBER

I H L P  
PRODUCT FAMILY

1 2 1 2 B Z  
SIZE

R Z  
PACKAGE CODE

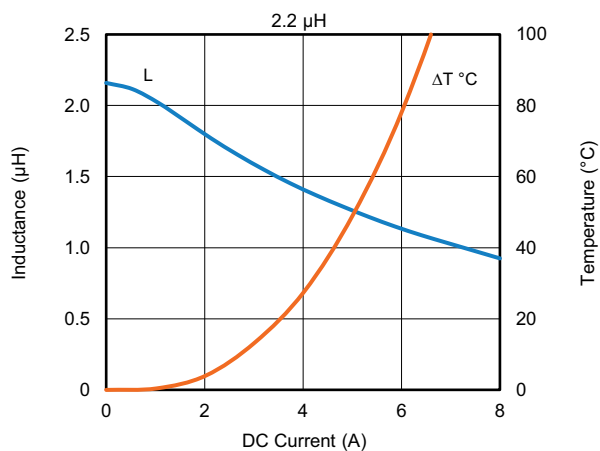
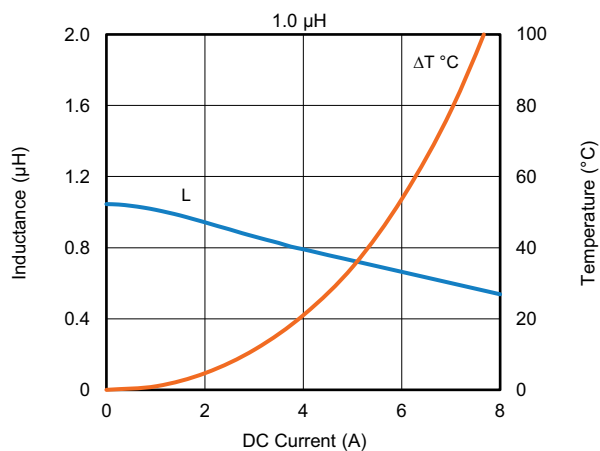
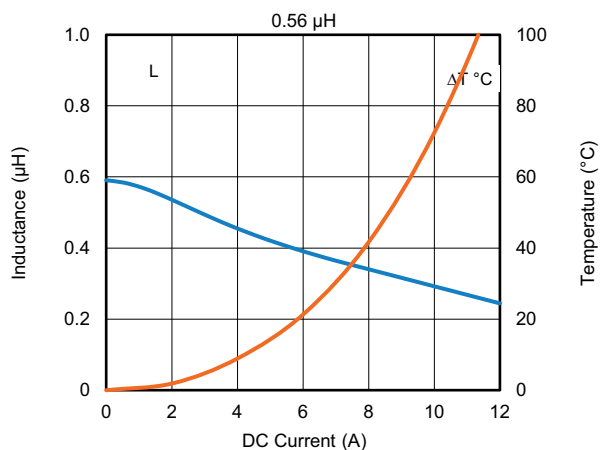
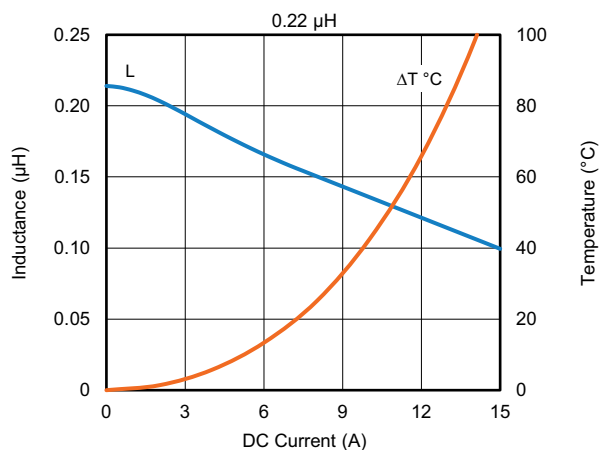
2 R 2  
INDUCTANCE VALUE

M  
TOLERANCE

1 L  
SERIES

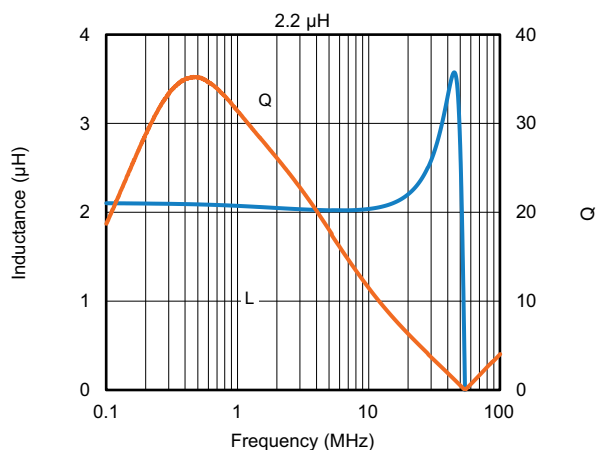
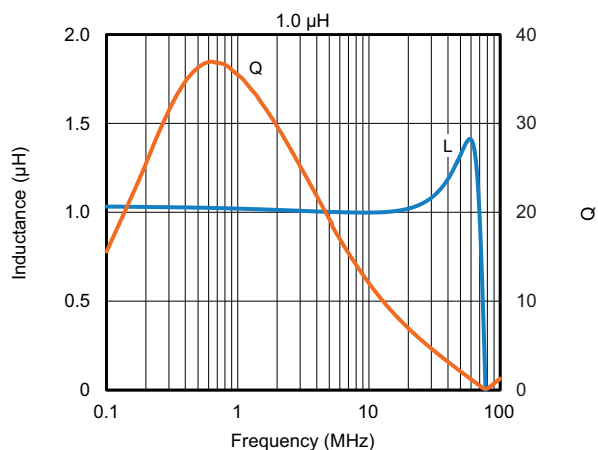
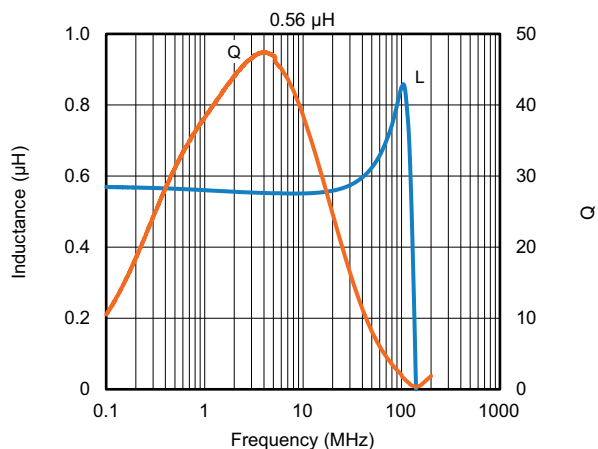
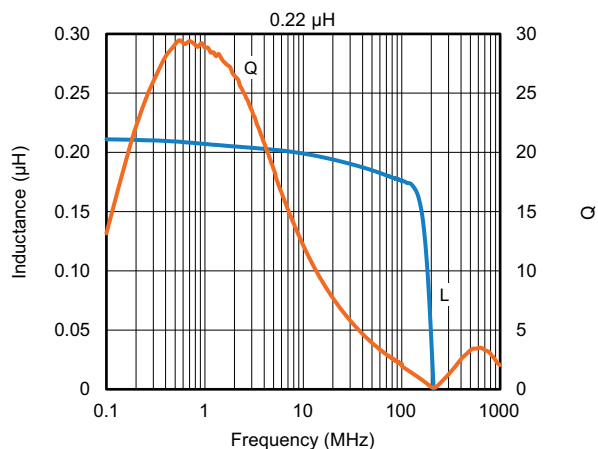
RZ = tape and reel + SnPb  
SL = tape and reel + SnPb + single lot date code  
2R2 = 2.2  $\mu\text{H}$  M =  $\pm 20\%$

PERFORMANCE GRAPHS: SATURATION AND TEMPERATURE RISE





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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