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Vishay Dale

RoHS

COMPLIANT HALOGEN

FREE

**GREEN** 

(5-2008)

# IHLP® Commercial Inductors, High Temperature (155 °C) Series



#### **LINKS TO ADDITIONAL RESOURCES**





STANDARD ELECTRICAL SPECIFICATIONS							
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) <sup>(2)</sup>	SRF TYP. (MHz)		
0.10	2.8	3	25.3	23.4	360		
0.47	7.3	7.8	13.43	9.35	101.6		
0.68	13.3	14.2	9.44	8.01	92.3		
1.0	19.5	20.9	7.40	7.25	55.7		
2.2	44.5	47.6	5.10	6.40	43.1		
3.3	70.0	74.9	4.00	5.10	33.7		
4.7	89.1	95.3	3.20	2.80	30.5		
6.8	126.9	135.8	2.80	2.60	24.8		
10	181.0	193.7	2.50	2.13	17.5		
15	289.0	303.0	1.72	1.72	16.8		
22	413.0	433.0	1.62	1.50	12.0		

#### Notes

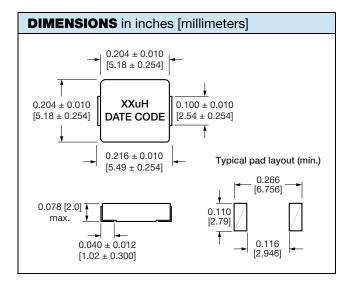
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- Rated operating voltage (across inductor) = 50 V
- (1) DC current (A) that will cause an approximate ΔT of 40 °C
- $^{(2)}\,$  DC current (A) that will cause  $L_0$  to drop approximately 20 %

#### **FEATURES**

- High temperature, up to 155 °C
- 5.18 mm x 5.18 mm x 2.0 mm size
- Magnetically shielded iron alloy encapsulation
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912"><u>www.vishay.com/doc?99912</u></a>

### **APPLICATIONS**

- DC/DC converters
- · Power line noise suppression and filtering
- SSD modules, USB chargers

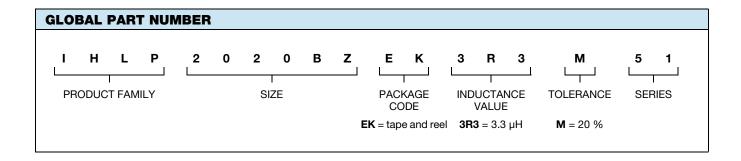




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DESCRIPTION							
IHLP-2020BZ-51	3.3 µH	± 20 %	EK	e3			
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD			

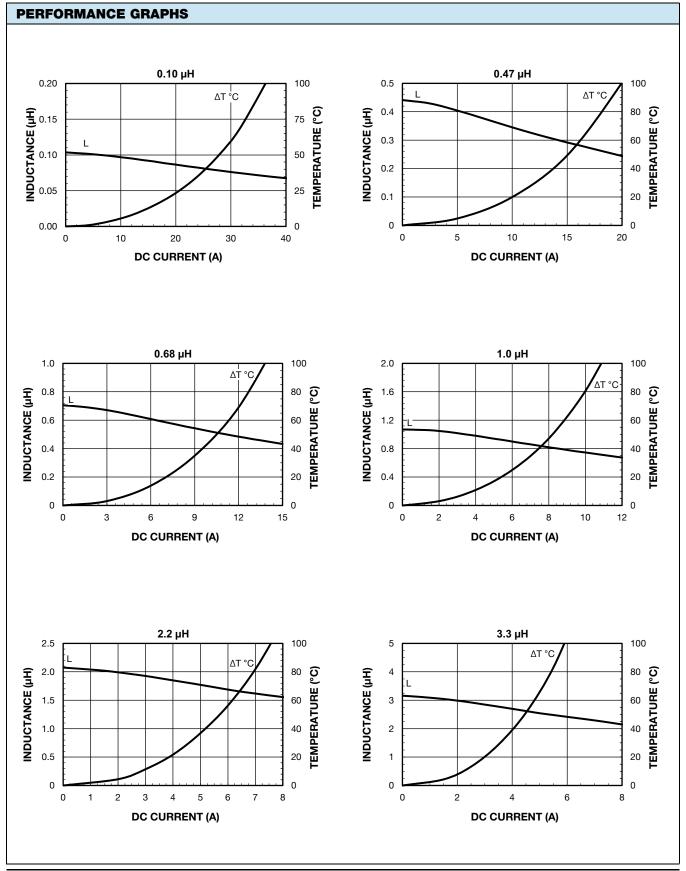


#### **PACKAGE CODE OPTIONS**

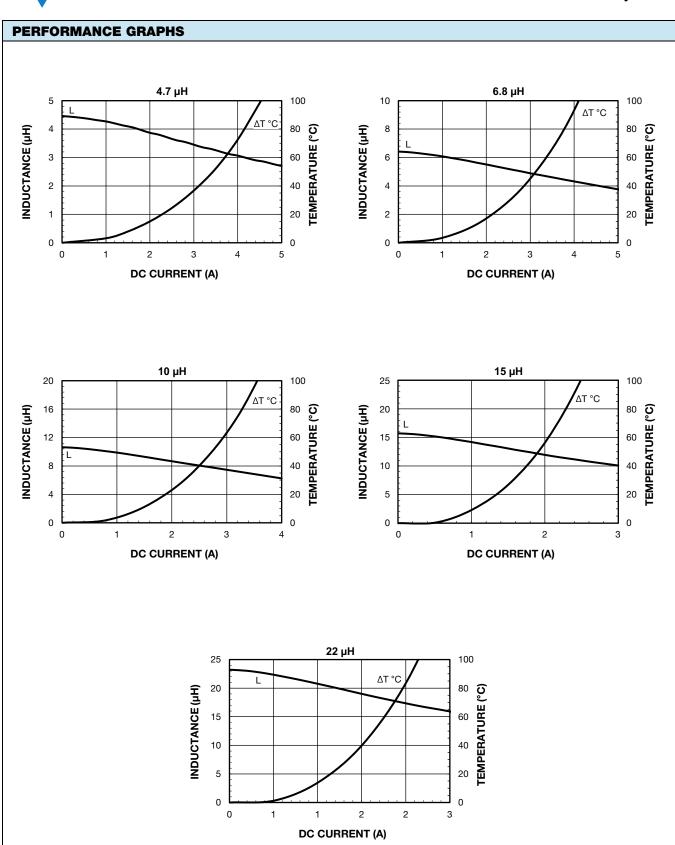
**EK** = tape and reel packaging (3500 pcs on 13-inch reel)

ER = tape and reel packaging (2000 pcs on 13-inch reel)

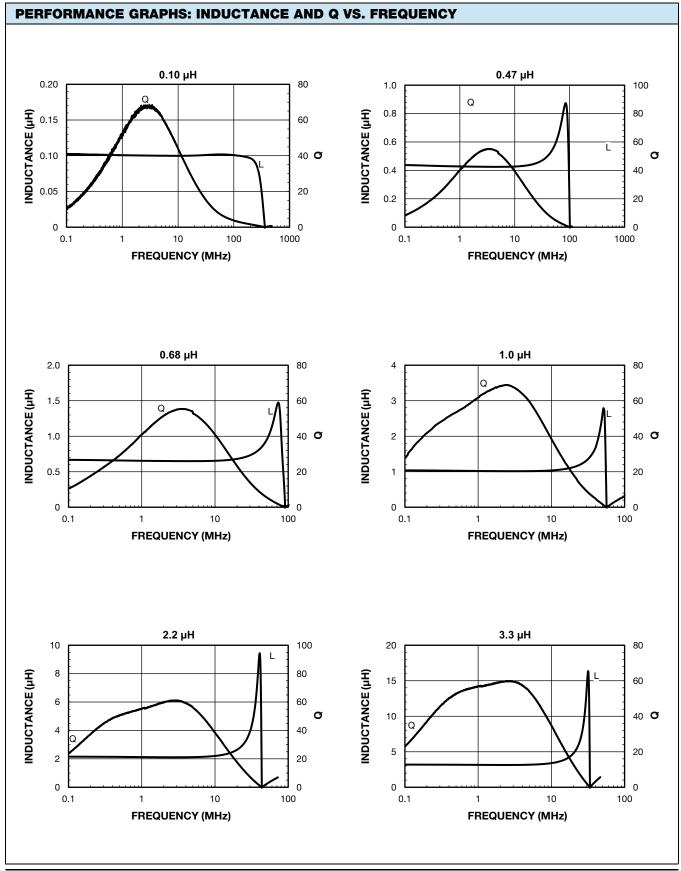


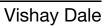




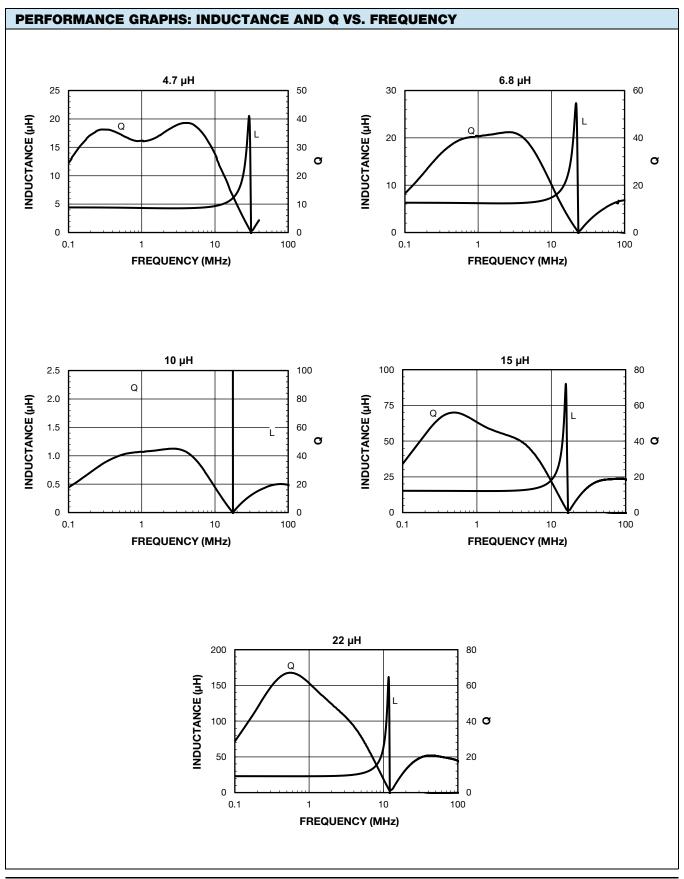














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