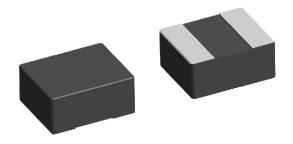


www.vishay.com

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# **Commercial Power Inductor, Low DCR**



#### **FEATURES**

- 3.2 mm x 2.5 mm x 1.2 mm SMD package
- Handles high transient current spikes without saturation
- Magnetically shielded composite construction
- Bottom plated terminals allow for smaller pad layout for compact board spacing
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>



RoHS

HALOGEN FREE GREEN (5-2008)

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



#### **APPLICATIONS**

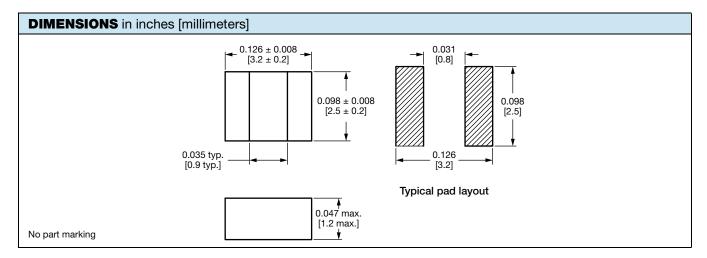
- SSD modules
- DC/DC converter for CPU
- · Noise suppression and filtering
- · Data networking and storage systems

STANDARD ELECTRICAL SPECIFICATIONS									
	L <sub>0</sub> INDUCTANCE ± 20 % AT 0 A	DCR TYP. 25 °C	DCR MAX. 25 °C	HEAT RATING CURRENT DC TYP.	SATURATION CURRENT DC TYP. (A)				
PART NUMBER	(μH)	(m $\Omega$ )	(m $\Omega$ )	(A) <sup>(1)</sup>	20 % DROP (2)	30 % DROP (3)			
IHLL1210ABEZR22M1Z	0.22	6.6	10.0	9.2	9	11.5			
IHLL1210ABEZR47M1Z	0.47	14.0	19.0	7.5	6	8.6			
IHLL1210ABEZ1R0M1Z	1.0	26.0	30.0	5.3	4.5	6.6			
IHLL1210ABEZ2R2M1Z	2.2	42.0	50.0	3.8	4	5.0			
IHLL1210ABEZ3R3M1Z	3.3	75.0	95.0	2.9	3	3.7			
IHLL1210ABEZ4R7M1Z	4.7	115.0	135.0	2.3	2.5	2.9			

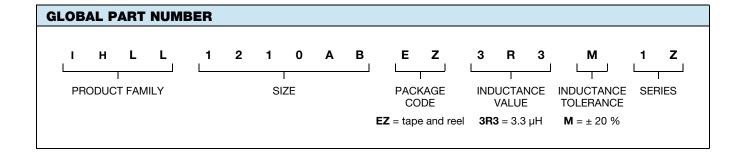
#### Notes

- All test data is referenced to 25 °C ambient
- Test condition: 1 MHz, 1 V
- Operating temperature range -55 °C to +125 °C
- Rated operating voltage (across inductor) = 30 V
- The part temperature (ambient + temp. rise) should not exceed 125 °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
- (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 %
- (3) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %

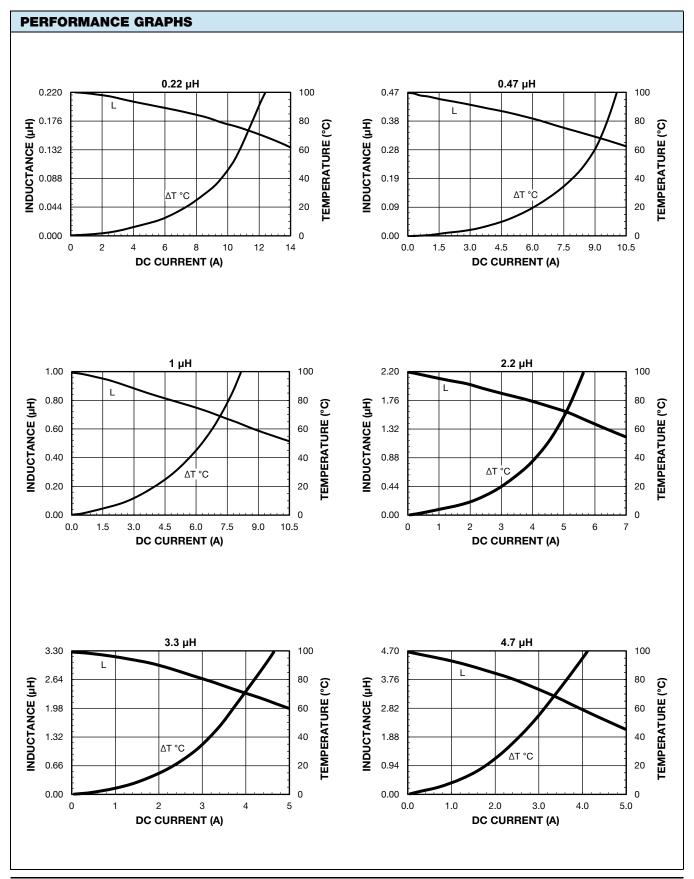
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DESCRIPTION								
IHLL1210AB-1Z	0.47 μΗ	± 20 %	EZ	e3				
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD				









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