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



ADDITIONAL RESOURCES



STANDARD ELECTRICAL SPECIFICATIONS									
L ₀ 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) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾	SRF TYP. (MHz)				
0.47	0.56	0.67	80.0	100.0	47.5				
1.0	0.82	0.89	69.0	71.0	25.7				
2.2	1.15	1.25	58.0	48.0	17.5				
3.3	1.63	1.77	49.0	41.0	12.8				
4.7	1.69	1.84	47.0	37.0	10.2				
6.8	2.84	3.09	36.0	36.0	8.03				
10	4.04	4.14	28.0	28.0	6.04				
15	5.62	6.11	23.5	24.0	4.71				
22	10.60	10.80	17.5	16.0	3.88				
33	15.10	15.40	15.5	10.5	3.01				
47	17.30	17.70	13.5	10.0	2.99				
75	29.76	32.35	12.0	12.0	2.01				
82	31.46	34.20	10.2	9.0	2.07				
100	36.25	39.40	9.1	7.0	2.01				

STANDADD ELECTRICAL SPECIEICATIONS

Notes

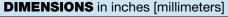
- All test data is referenced to 25 $^\circ C$ ambient Operating temperature range -55 $^\circ C$ to +155 $^\circ C$
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- Rated operating voltage (across inductor) = 75 V
- (1) DC current (A) that will cause an approximate ΔT of 40 °C
- DC current (A) that will cause L_0 to drop approximately 20 % (2)

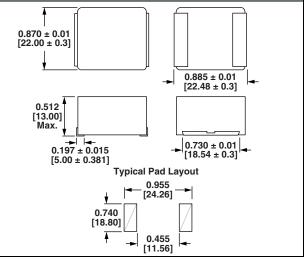
FEATURES

- High temperature rating, up to 155 °C
- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 MHz. Filter inductor applications up the SRF (see Standard Electrical Specifications table).
- Lowest DCR/µH, in this package size
- · Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- IHLP design. PATENT(S): <u>www.vishay.com/patents</u>
- · Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

- · Low profile, high current power supplies
- High current POL converters
- DC/DC converters in distributed power systems
- Servers
- Solar inverters
- Industrial lighting
- Industrial power supplies





DESCRIPTION								
IHLP-8787MZ-51	100 µH	± 20 %	ER	e3				
MODEL	INDUCTANCE VALUE	DUCTANCE VALUE INDUCTANCE TOLERANCE		JEDEC [®] LEAD (Pb)-FREE STANDARD				
GLOBAL PART NUMBER								
I H L	P 8 7	8 7 M Z	E R 1	0 1 M	5 1			
PRODUCT FAN	MILY	SIZE	PACKAGE IN CODE	DUCTANCE TOL. VALUE	SERIES			
PATENT(S): www.	vishay.com/patents							

This Vishay product is protected by one or more United States and international patents.

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Document Number: 34353

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COMPLIANT

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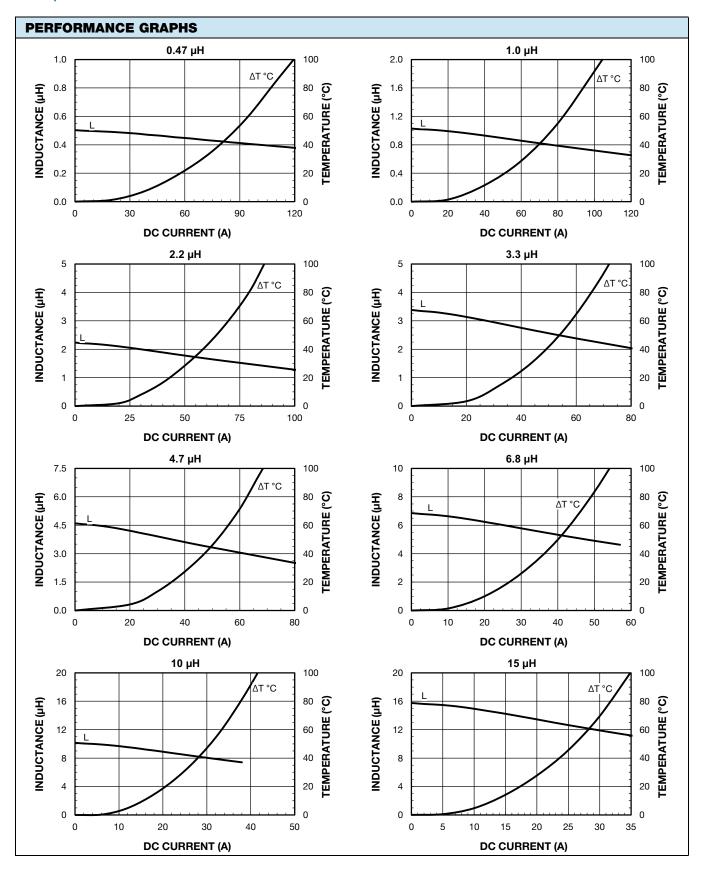
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¹ For technical questions, contact: magnetics@vishay.com



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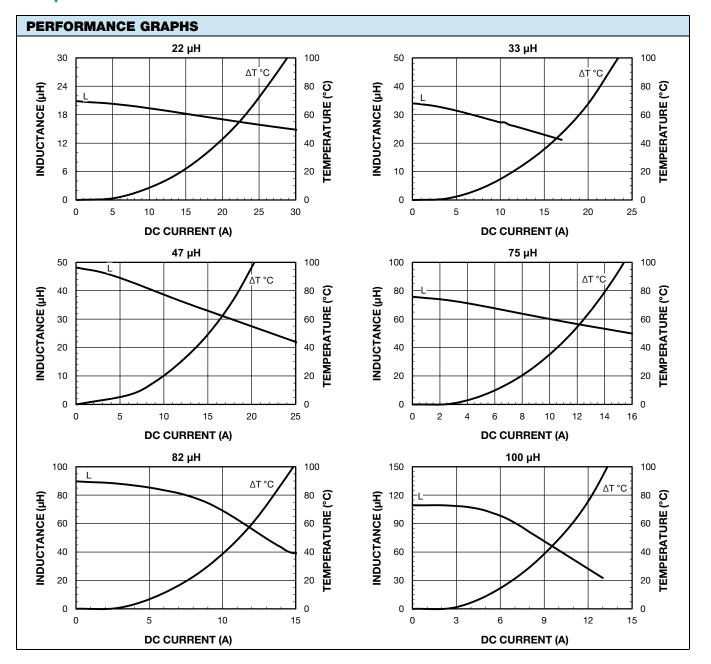
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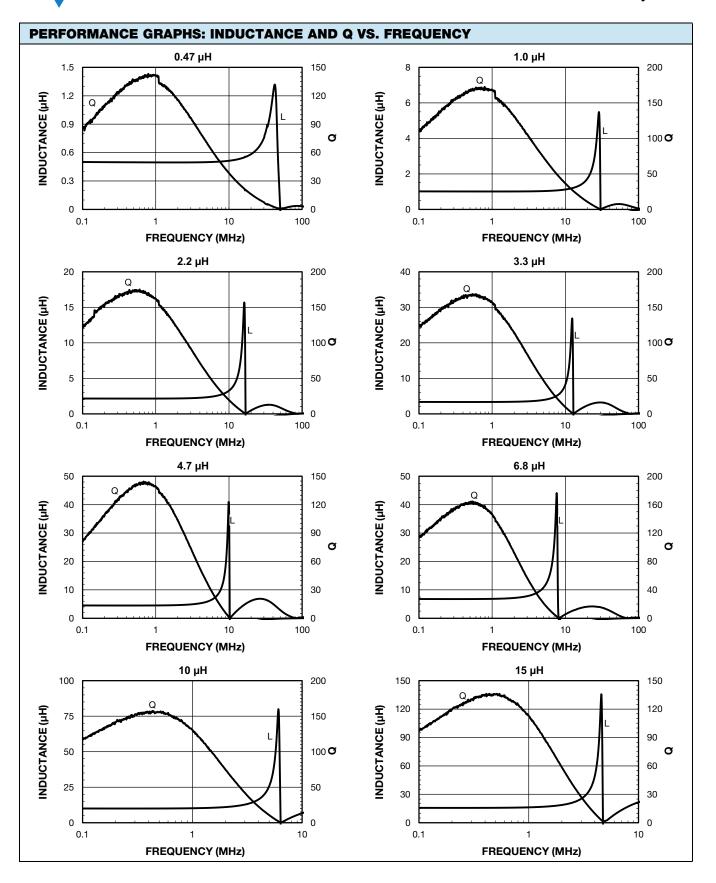


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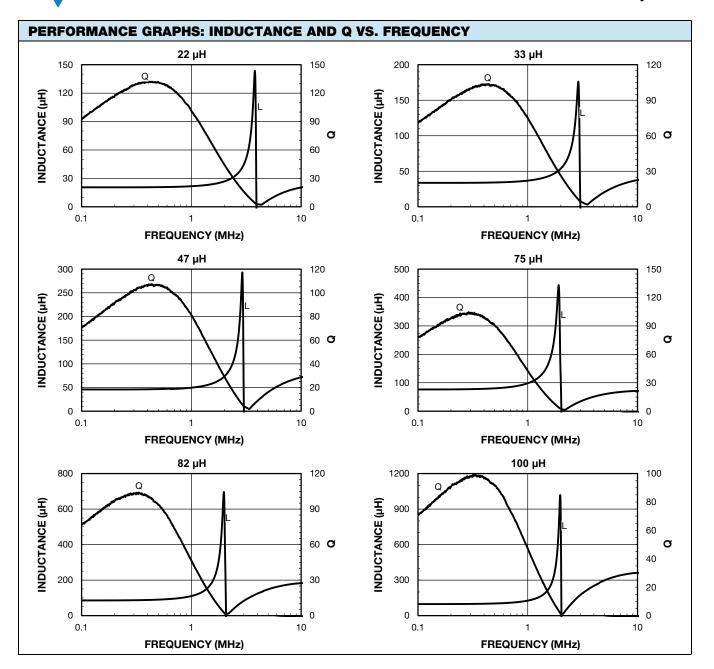
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