



# IHLP® Tin / Lead Inductors, Low DCR Series



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



#### **FEATURES**

- · Magnetically shielded construction
- 11.5 mm x 10.2 mm x 4.0 mm SMD package
- Low DCR
- Termination: tin / lead (60Sn40Pb) plated (not dipped) terminals
- IHLP design; PATENT(S): www.vishay.com/patents

#### **APPLICATIONS**

- DC/DC power supplies
- Smart grid and solar
- Telecommunications equipment
- · Noise suppression and filtering

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) (1)	SATURATION CURRENT DC TYP. (A) (2)	
IHLP4040DZRZR19M1L	0.19	0.70	0.80	40	46	
IHLP4040DZRZR22M1L	0.22	0.85	0.95	33	44	
IHLP4040DZRZR24M1L	0.24	0.85	0.95	33	44	
IHLP4040DZRZR36M1L	0.36	1.05	1.35	32	30	
IHLP4040DZRZR47M1L	0.47	1.53	1.68	30	30	
IHLP4040DZRZR56M1L	0.56	1.61	1.80	32	22	
IHLP4040DZRZR78M1L	0.78	1.80	1.90	27	22	
IHLP4040DZRZ1R0M1L	1.0	2.30	2.50	25	20	
IHLP4040DZRZ1R8M1L	1.8	4.50	5.00	17	16	
IHLP4040DZRZ2R0M1L	2.0	5.20	5.80	16	14	
IHLP4040DZRZ4R7M1L	4.7	12.90	14.20	9.5	7.6	
IHLP4040DZRZ6R8M1L	6.8	17.50	19.30	9.0	7.5	
IHLP4040DZRZ100M1L	10	27.80	30.50	7.5	7.1	
IHLP4040DZRZ150M1L	15	40.90	45.00	6.25	6.0	
IHLP4040DZRZ180M1L	18	46.40	51.90	5.6	4.6	
IHLP4040DZRZ220M1L	22	60.40	66.00	5.0	4.5	
IHLP4040DZRZ330M1L	33	87.50	94.50	4.4	4.0	
IHLP4040DZRZ470M1L	47	132.0	145.0	3.3	3.0	
IHLP4040DZRZ101M1L	100	249.0	270.0	2.5	2.25	

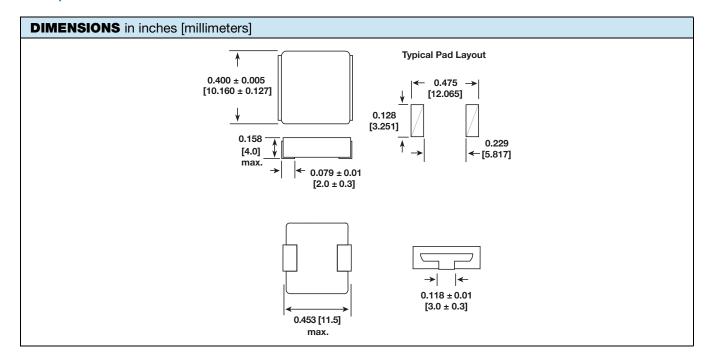
#### Notes

- 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) = 50 V
- (1) DC current (A) that will cause an approximate ΔT of 40 °C
- (2) DC current (A) that will cause L<sub>0</sub> to drop approximately 20 %

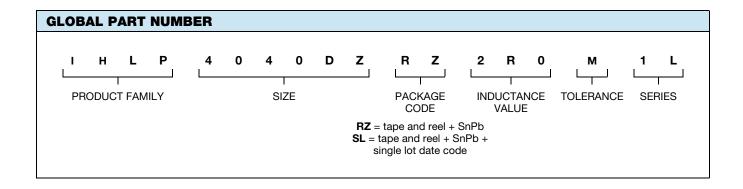
PATENT(S): www.vishay.com/patents

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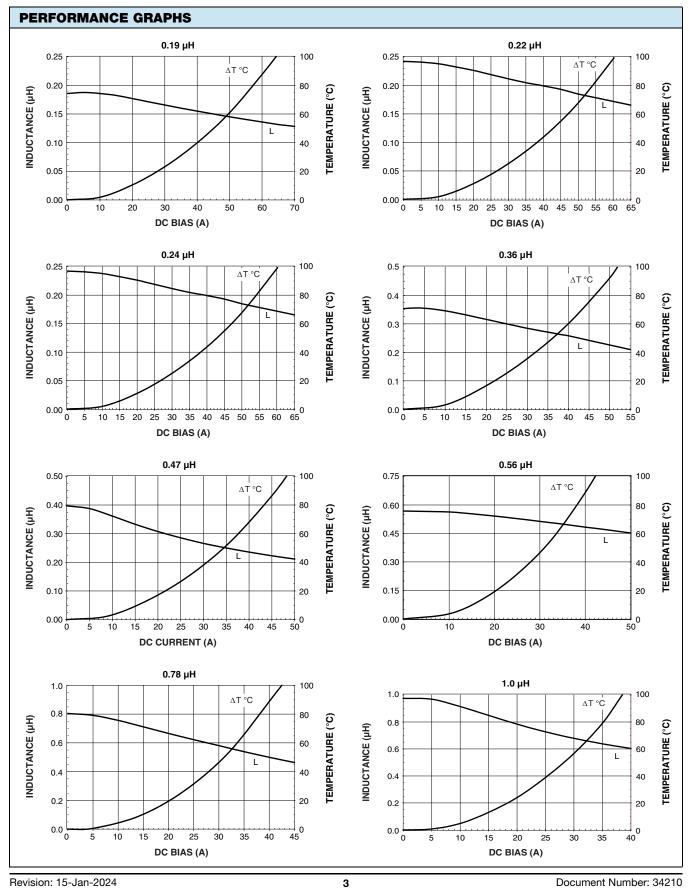
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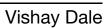


DESCRIPTION			
IHLP-4040DZ-1L	2.0 μΗ	± 20 %	RZ
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE

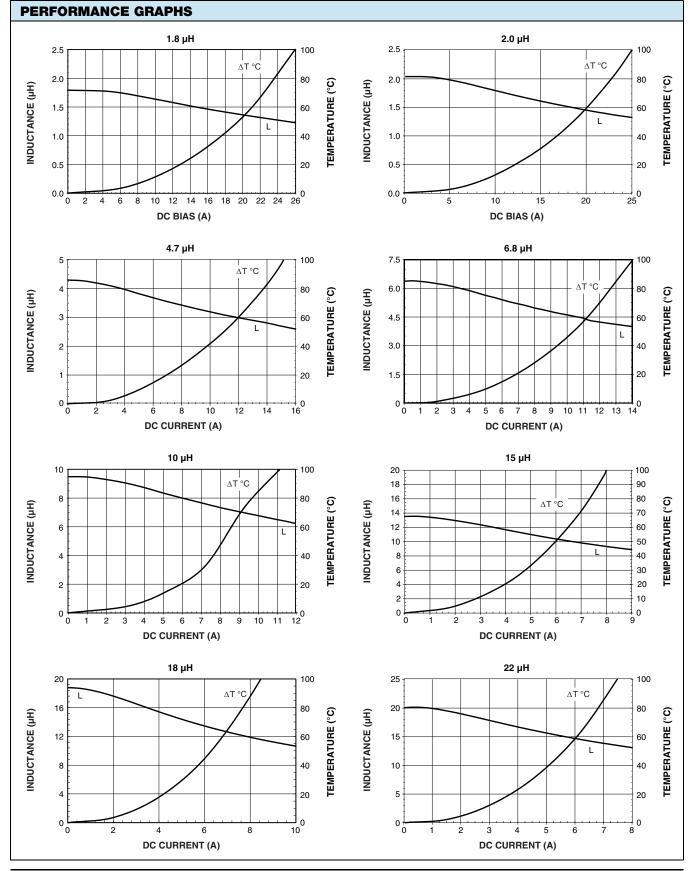






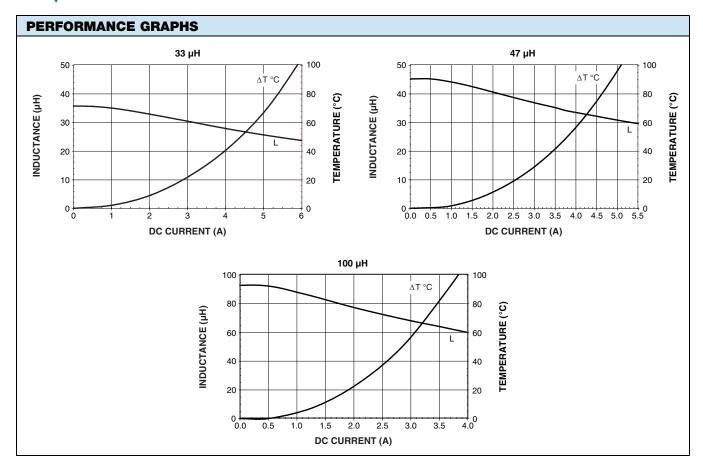








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