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Vishay Dale

IHLP[®] Automotive Inductors, High Saturation Series



DESIGN SUPPORT TOOLS AVAILABLE



D	
dels	Design Tools

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)			
0.10	8.60	9.20	10.50	19.21	475			
0.22	13.34	14.42	8.14	9.84	270			
0.47	35.90	37.97	4.81	7.25	140			
1.0	63.61	66.38	3.47	5.23	95			

Notes

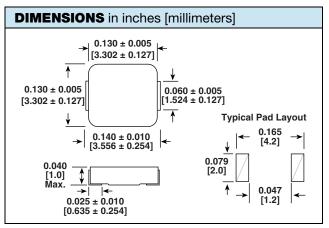
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +125 °C The part temperature (ambient + temp, rise) should not exceed
- 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions 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_0 to drop approximately 20 %

FEATURES

- Shielded construction
- Lowest DCR/µH, in this package size
- · Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- AEC-Q200 gualified
- IHLP design. PATENT(S): <u>www.vishay.com/patents</u>
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

- Engine and transmission control units
- Diesel injection drivers
- DC/DC converters for entertainment/navigation systems
- Noise suppression for motors: windshield wipers / power seats / power mirrors / heating and ventilation blower / **HID** lighting
- LED drivers



VALUE

DESCRIPTION	ł				
IHLP-1212AZ-A1	0.47 μH	± 20 %	EV	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC [®] LEAD (Pb)-FREE STANDARD	
GLOBAL PAR	T NUMBER				
I H L	P 1 2	1 2 A Z	E V R	4 7 M A 1	
PRODUCT FAM		SIZE	PACKAGE IN	DUCTANCE TOL. SERIES	

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

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

Revision: 29-May-2019

1 For technical questions, contact: magnetics@vishay.com Document Number: 34532

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CODE



RoHS

COMPLIANT HALOGEN

FREE

GREEN

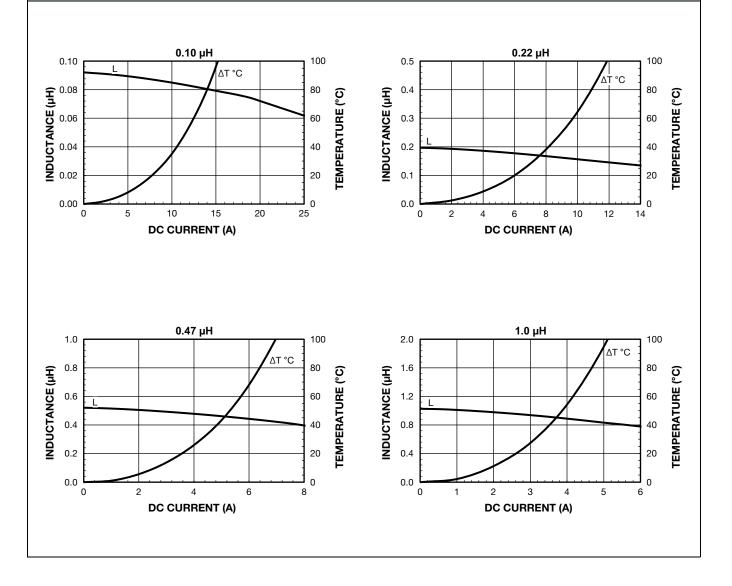
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PERFORMANCE GRAPHS



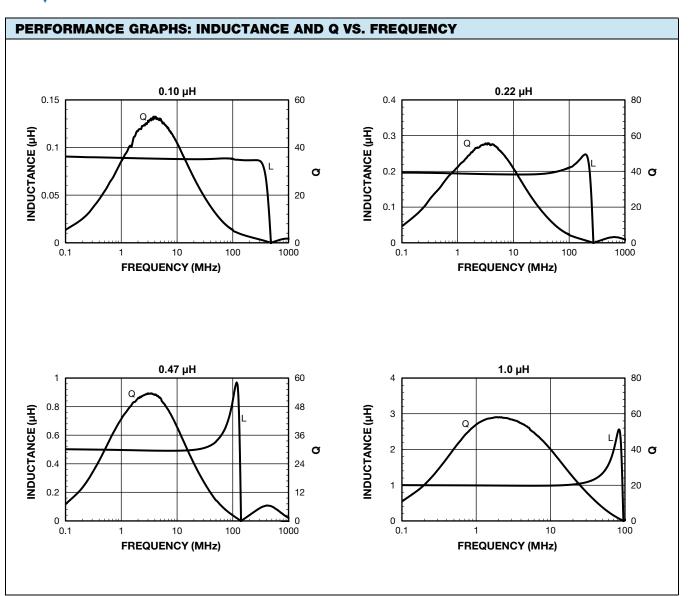
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