

Vishay Dale

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



LINKS TO ADDITIONAL RESOURCES



lels <u>Calculators</u>

STANDARD ELECTRICAL SPECIFICATIONS

L ₀ INDUCTANCE ± 20 % AT 100 kHz,	DCR TYP.	DCR MAX.		SATURATION CURRENT DC TYP.		SRF
0.25 V, 0 A (μH)	25 °C (mΩ)	25 °C (mΩ)	DC TYP. (A) ⁽¹⁾	(A) ⁽²⁾	(A) ⁽³⁾	TYP. (MHz)
0.56	1.02	1.09	61	70	101	50.0
1.0	1.25	1.34	55	56	81	31.5
1.5	1.51	1.62	48	44	63	23.0
3.3	3.12	3.34	36	28	41	12.3
8.2	7.23	7.74	20.7	23.1	33	8.7
10	9.31	9.96	18.7	21.6	31.1	8.4
33	25.2	27.0	10.2	9.9	14.3	4.4

Notes

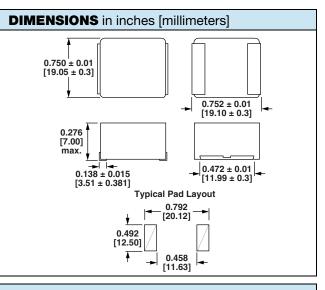
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- $^{(1)}\,$ DC current (A) that will cause an approximate ΔT of 40 $^{\circ}C$
- ⁽²⁾ DC current (A) that will cause L_0 to drop approximately 20 %
- $^{(3)}$ DC current (A) that will cause L_0 to drop approximately 30 %

FEATURES

- High temperature, 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
- AEC-Q200 qualified
- IHLP design; PATENT(S): www.vishay.com/patents
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

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 blowers / HID lighting
- LED drivers



DESCRIPTION						
IHLP-7575GZ-5A	1.0 μH	± 20 %	ER	e3		
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC [®] LEAD (Pb)-FREE STANDARD		
GLOBAL PART	NUMBER					
I H L	P 7 5	7 5 G Z	E R 1	R 0 M	5 A	
PRODUCT FAM	ILY	SIZE	PACKAGE IN CODE	DUCTANCE TOL. VALUE	SERIES	
	iahay aam/natanta					

PATENT(S): <u>www.vishay.com/patents</u> This Vishay product is protected by one or more United States and international patents.

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RoHS COMPLIANT HALOGEN FREE GREEN (5-2008)

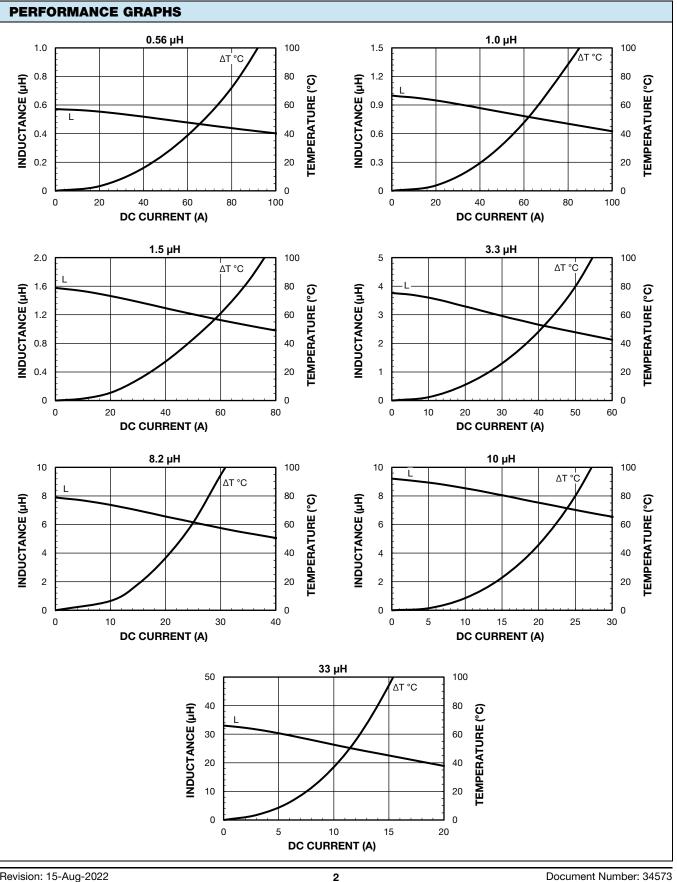
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¹ For technical questions, contact: <u>magnetics@vishay.com</u>



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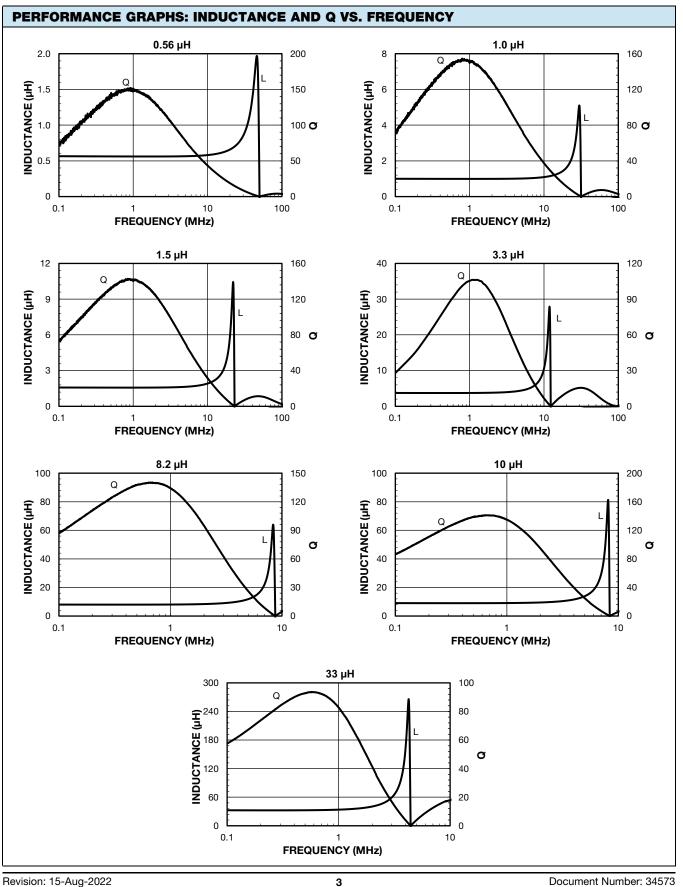
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