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IHLP-4040DZ-5A

Vishay Dale

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



LINKS TO ADDITIONAL RESOURCES



FEATURES

- High temperature, up to 155 °C
- 10.8 mm x 10.2 mm x 4.0 mm SMD package
- Magnetically shielded construction
- Metal alloy core
- 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
- DC/DC converters for infotainment, navigation systems, lighting
- Noise suppression and filtering
- LED drivers

STANDARD ELECTRICAL SPECIFICATIONS										
	INDUCTANCE ± 20 % (μH)	DCR 25 °C (mΩ)		HEAT RATING CURRENT	SATUR CUR DC TY	SRF TYP.				
PART NUMBER	AT 0 Ä	TYP.	MAX.	DC TYP. (A) ⁽¹⁾	20 % DROP	30 % DROP	(MHz)			
IHLP4040DZERR47M5A	0.47	1.55	1.66	35.5	28.5	38.0	72.1			
IHLP4040DZERR68M5A	0.68	2.17	2.32	35.0	24.0	32.0	42.5			
IHLP4040DZER1R0M5A	1.0	2.87	3.07	23.5	24.0	32.0	37.2			
IHLP4040DZER1R5M5A	1.5	4.20	4.50	22.0	17.9	24.2	32			
IHLP4040DZER2R2M5A	2.2	8.15	8.76	15.0	12.0	16.2	30.1			
IHLP4040DZER3R3M5A	3.3	11	11.81	11.0	12.0	16.2	25.5			
IHLP4040DZER4R7M5A	4.7	14.3	15.32	9.8	9.2	12.4	20.1			
IHLP4040DZER5R6M5A	5.6	16.5	17.60	9.3	9.0	12.2	16.3			
IHLP4040DZER6R8M5A	6.8	20.9	22.36	8.0	9.0	12.2	16.3			
IHLP4040DZER100M5A	10	30.9	33.06	6.5	8.5	11.5	11.5			
IHLP4040DZER150M5A	15	47	50.29	5.1	7.7	10.4	10.4			
IHLP4040DZER220M5A	22	70.5	75.44	4.1	6.4	8.6	8.3			
IHLP4040DZER330M5A	33	110	117.7	3.7	4.2	5.7	5.79			
IHLP4040DZER470M5A	47	167	178	3.1	4.1	5.5	5.22			
IHLP4040DZER680M5A	68	240	252	2.4	3.5	4.7	4.02			

Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 0.25 V
- 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, PCB 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
- $^{(2)}\,$ DC current (A) that will cause L_0 to drop approximately 20 %

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

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

Revision: 19-Apr-2024

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Document Number: 34315

AUTOMOTIVE GRADE

> RoHS COMPLIANT HALOGEN FREE <u>GREEN</u> (5-2008)

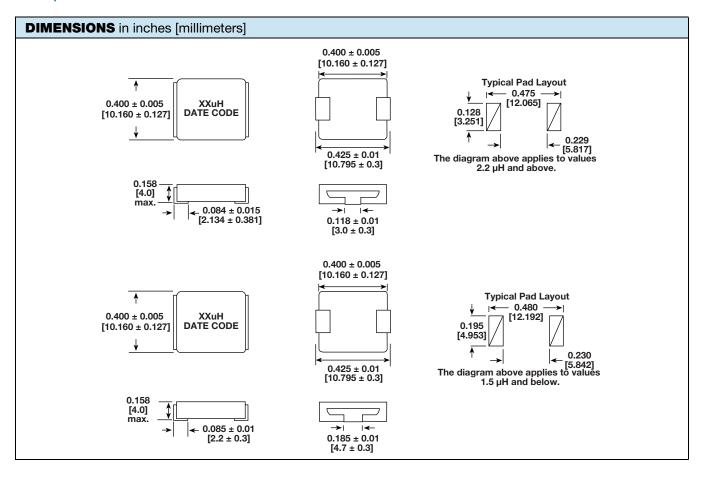
For Integrated EMI Shielding Upgrade to IHLE-4040DDEW-5A



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DESCRIPTION				
IHLP-4040DZ-5A	4.7 μH	± 20 %	TAPE AND REEL	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC [®] LEAD (Pb)-FREE STANDARD

LOBAL PAP	RL	NUM	BER														
і н і	_	Ρ	4	0	4	0	D	Z	E	R	4	R	7	L	м	5	A
PRODUCT F	AMI	LY			SI	ZE	ZE PACKAGE CODE			UCTAI VALUE	-		CTANCE RANCE	SEF	RIES		
									ER = tape	e and reel	4R	7 = 4.7	μH	M = :	± 20 %		

PACKAGE CODE OPTIONS
ER = tape and reel packaging (500 piece reel)
EK = tape and reel packaging (1000 piece reel)
EP = tape and reel packaging (1000 piece reel) + polarity marking

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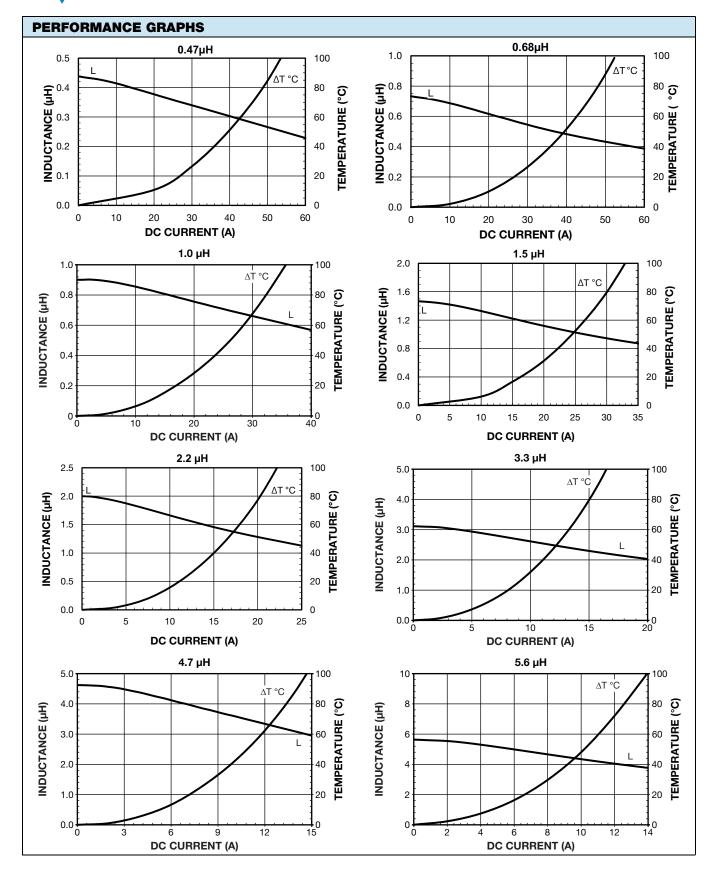
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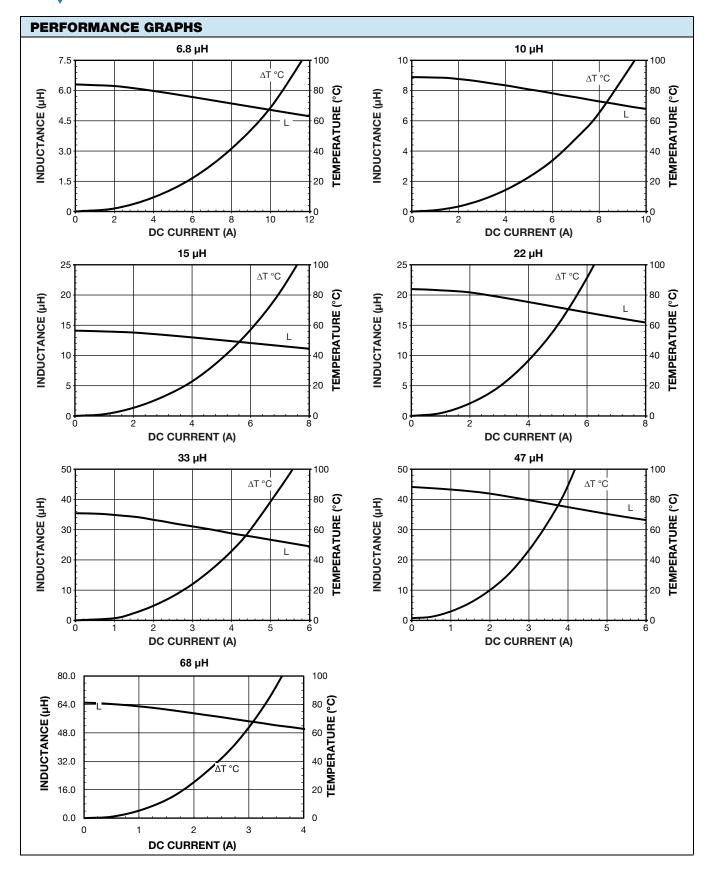
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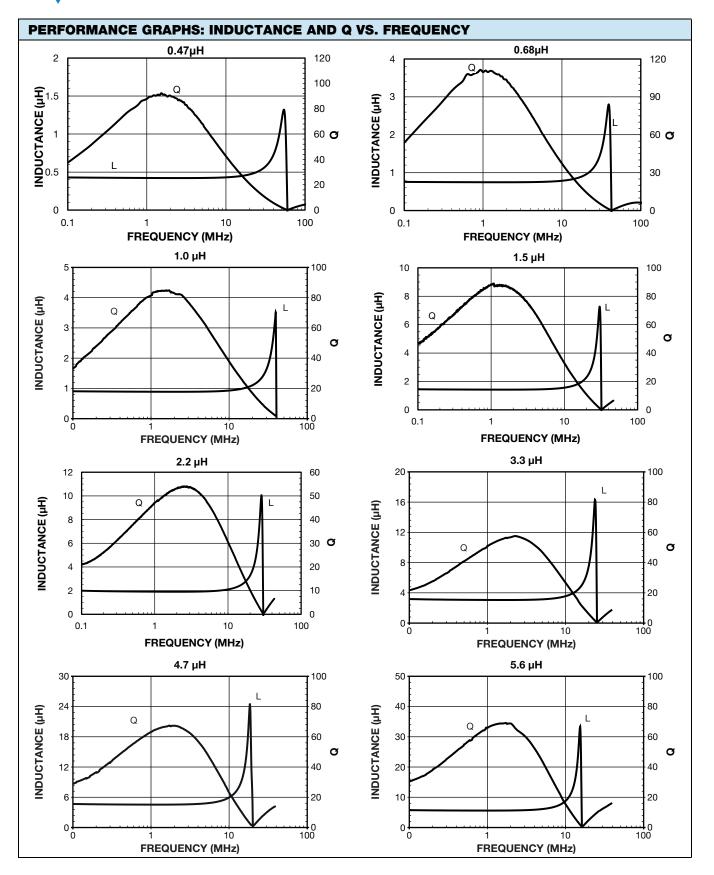
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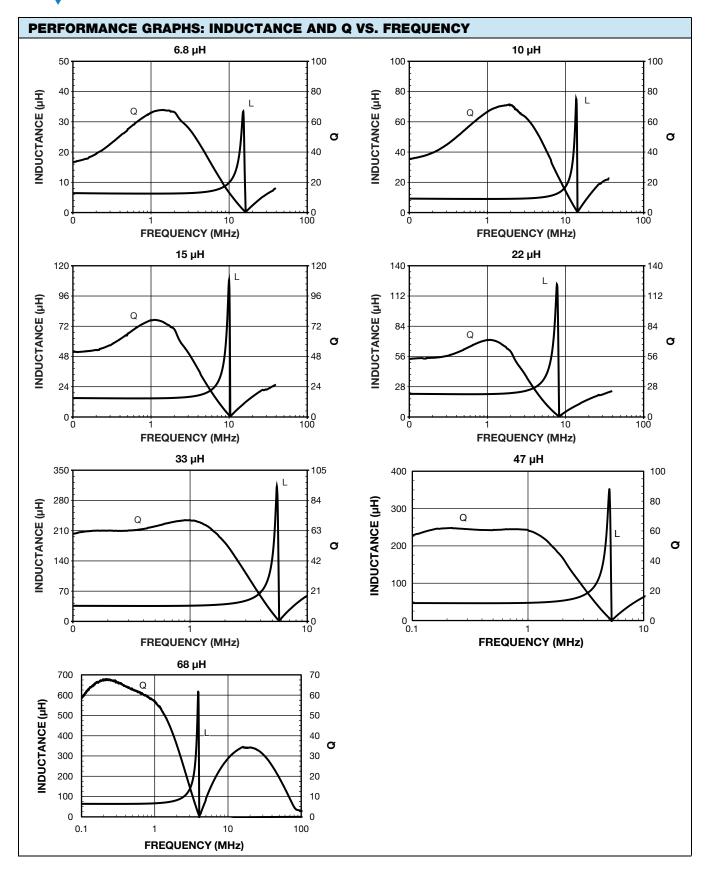
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