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Vishay Dale

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





### **LINKS TO ADDITIONAL RESOURCES**







#### **FEATURES**

- 19.10 mm x 19.05 mm x 7.0 mm size
- High temperature up to 155 °C
- · Magnetically shielded iron alloy construction
- Handles high transient current spikes without saturation
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

#### AUTOMOTIVE GRADE



ROHS
COMPLIANT
HALOGEN
FREE
GREEN

<u>(5-2008)</u>

# **APPLICATIONS**

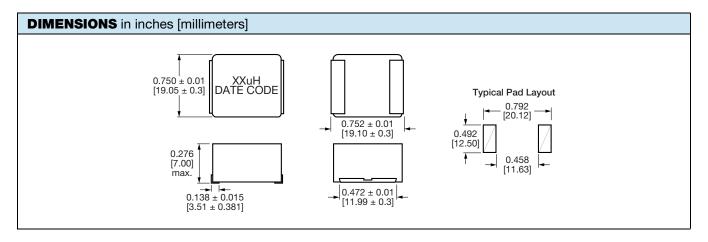
- · Engine and transmission control units
- DC/DC converters for infotainment, navigation systems, lighting
- · Noise suppression and filtering
- LED drivers
- 5G telecommunications equipment

STANDARD ELECTRICAL SPECIFICATIONS							
	L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A	DCR TYP. 25 °C	DCR MAX. 25 °C	HEAT RATING CURRENT DC TYP.	SATURATION CURRENT DC TYP.		SRF TYP.
PART NUMBER	(μΗ)	$(m\Omega)$	$(m\Omega)$	(A) <sup>(1)</sup>	(A) <sup>(2)</sup>	(A) <sup>(3)</sup>	(MHz)
IHLP7575GZERR56M5A	0.56	1.02	1.09	61	70	101	50.0
IHLP7575GZER1R0M5A	1.0	1.25	1.34	55	56	81	31.5
IHLP7575GZER1R5M5A	1.5	1.51	1.62	48	44	63	23.0
IHLP7575GZER3R3M5A	3.3	3.12	3.34	36	28	41	12.3
IHLP7575GZER8R2M5A	8.2	7.23	7.74	20.7	23.1	33	8.7
IHLP7575GZER100M5A	10	9.31	9.96	18.7	21.6	31.1	8.4
IHLP7575GZER330M5A	33	25.2	27.0	10.2	9.9	14.3	4.4

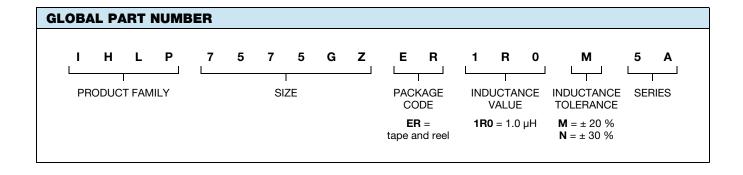
## Notes

- 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, PCB 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  $\Delta T$  of 40 °C
- (2) DC current (A) that will cause L<sub>0</sub> to drop approximately 20 %
- (3) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %

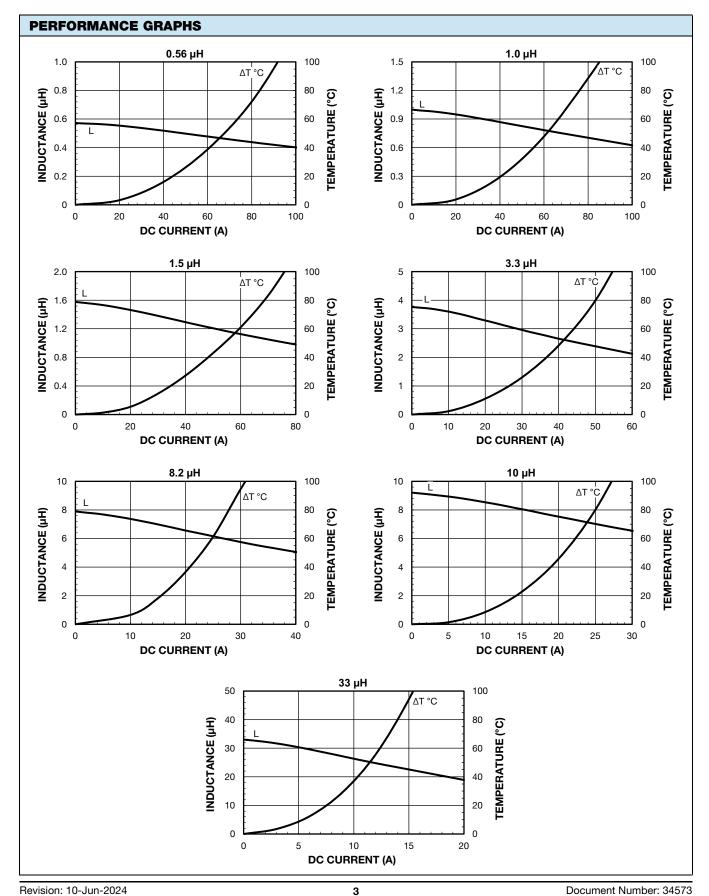
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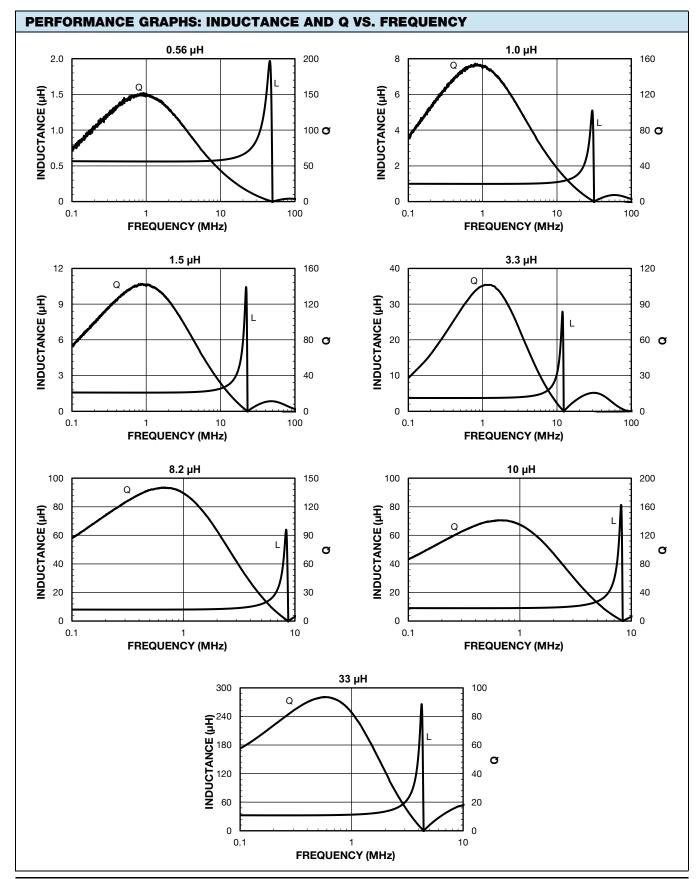
# DESCRIPTION IHLP-7575GZ-5A 1.0 μH ± 20 % ER e3 MODEL INDUCTANCE VALUE INDUCTANCE TOLERANCE PACKAGE CODE JEDEC® LEAD (Pb)-FREE STANDARD















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