



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



FEATURES

- 19.10 mm x 19.10 mm x 10.0 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

RoHS
COMPLIANTHALOGEN
FREEGREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



Product Page



3D Models



Calculators

MECHANICAL SPECIFICATIONS

- Terminations: copper base / nickel underlayer / pure matte tin plating
- Weight: 20.840 g

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

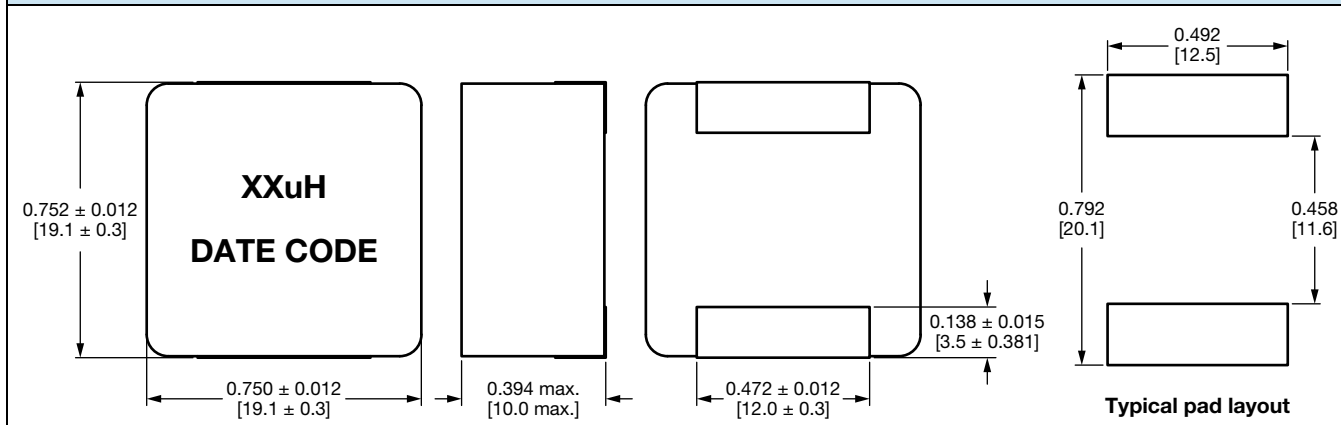
PART NUMBER	L ₀ INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR 25 °C (mΩ)		HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾		SRF TYP. (MHz)
		TYP.	MAX.		20 % DROP	30 % DROP	
IHLP7575JZEK3R3M3A	3.3	1.7	1.9	38.0	30.1	42.7	14
IHLP7575JZEK4R7M3A	4.7	2.3	2.7	36.0	27.7	40.0	11.5
IHLP7575JZEK5R6M3A	5.6	3	3.3	29.4	26.9	38.8	9.4
IHLP7575JZEK8R2M3A	8.2	3.7	4.2	27.1	22.8	32.9	7.5
IHLP7575JZEK220M3A	22	11.6	12.8	17.4	9.6	13.4	4.5

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
 - 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 L₀ to drop approximately 20 % and 30 %



DIMENSIONS in inches [millimeters]



DESCRIPTION

IHLP-7575JZ-3A	3.3 μH	± 20 %	EK	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I H L P	7 5 7 5 J Z	E K	3 R 3	M	3 A
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EK = tape and reel	3R3 = 3.3 μ H	M = ± 20 %	

PACKAGE CODE OPTIONS

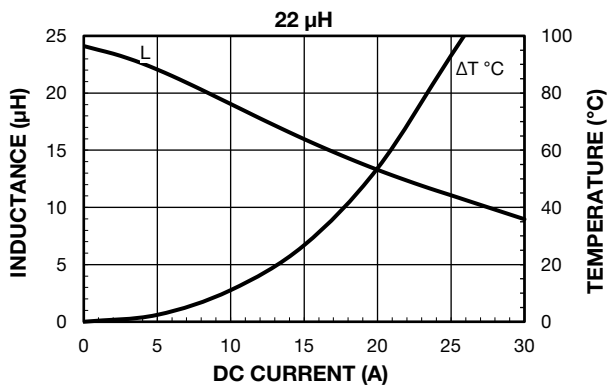
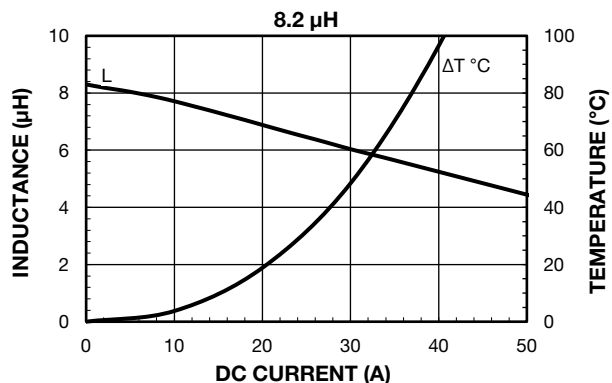
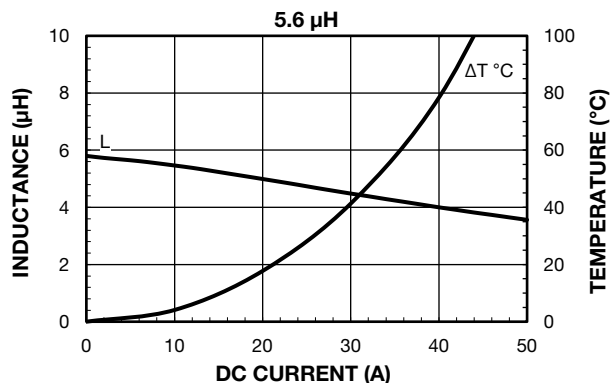
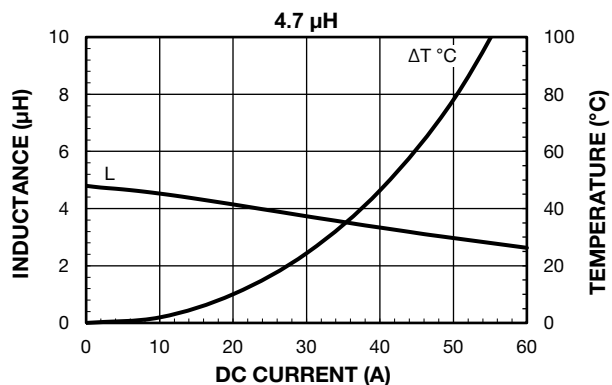
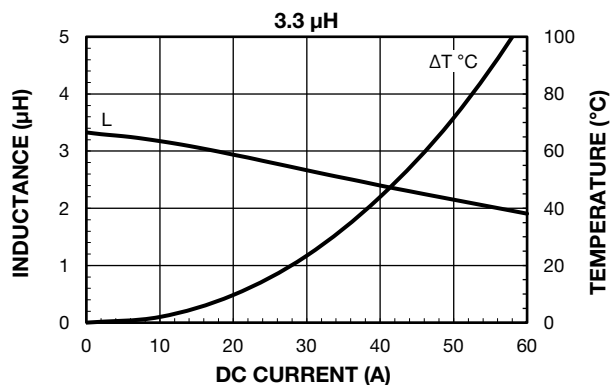
EK = tape and reel packaging (170 pcs on 13-inch reel)

Note

- For additional packaging details see [“Packaging Methods”](#)

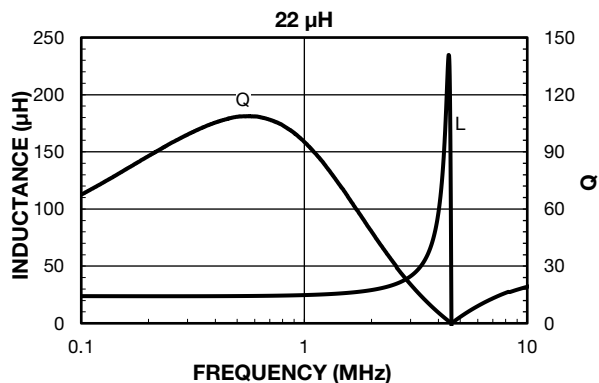
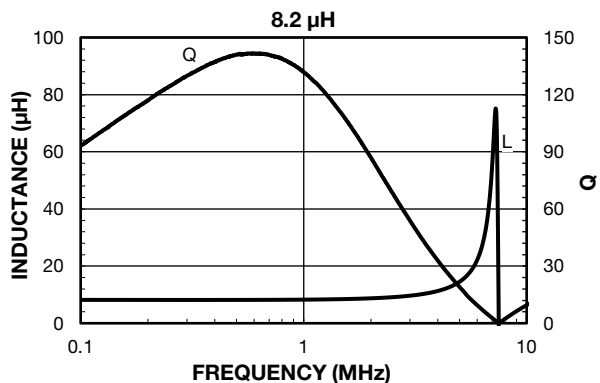
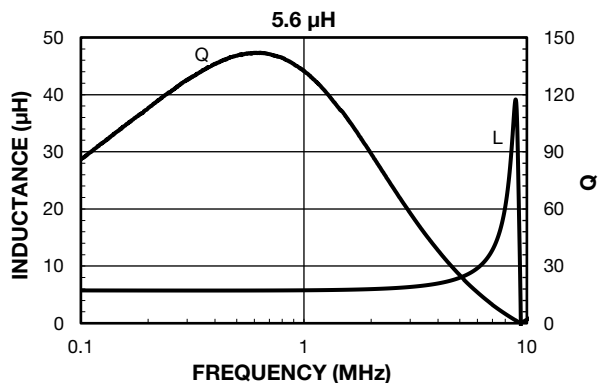
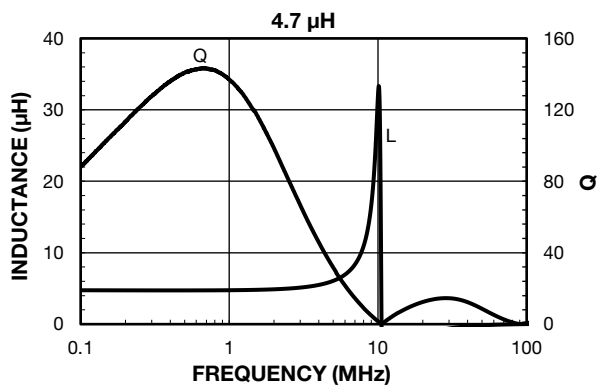
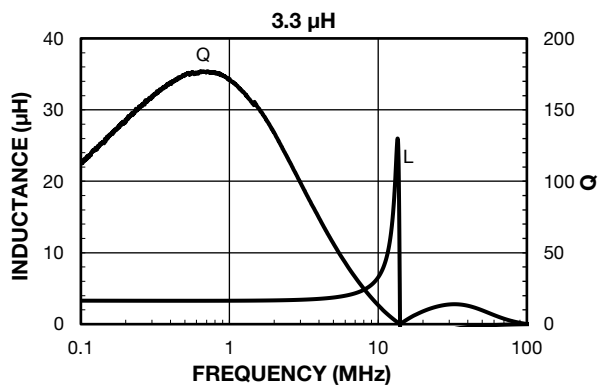


PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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