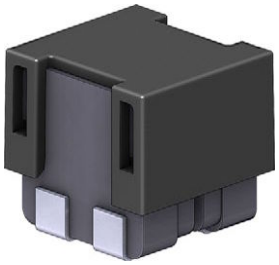
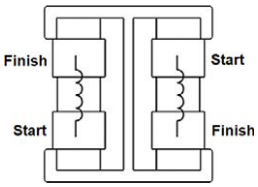
High Current Inductors





FEATURES

- Two inductors in one package
- High temperature, up to 155 °C
- Shielded construction
- Optimal design realizes high quality sound and low distortion
- Low coupling for minimal cross-talk between inductors
- Frequency range up to 1 MHz
- 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 www.vishay.com/doc?99912

AUTOMOTIVE GRADE

Pb-free

RoHS COMPLIANT

LINKS TO ADDITIONAL RESOURCES

3D Models

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)
1.0	7.06	7.77	13.0	12.3	56.7
4.7	35.7	38.20	5.4	4.2	26.7
10	62.0	66.34	4.1	3.6	16.6
15	89.5	95.80	3.2	3.0	15.1
22	154.0	164.80	2.2	2.5	10.9

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
- Rated operating voltage (across inductor) = 50 V

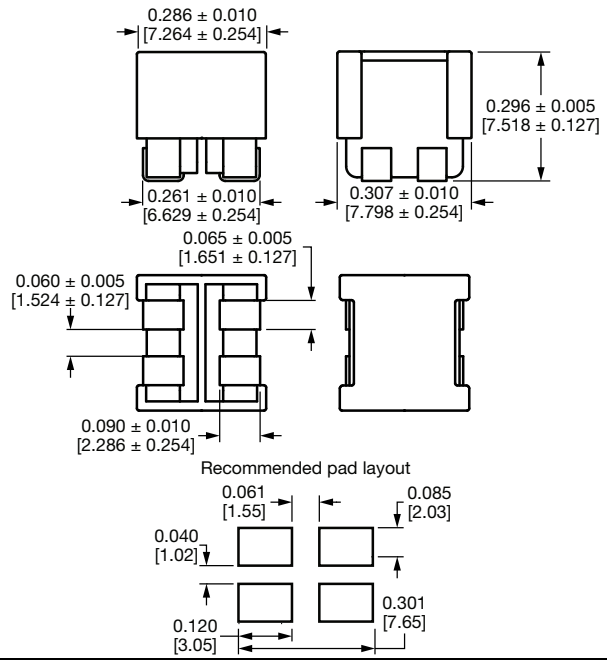
(1) DC current (A) that will cause an approximate ΔT of 40 °C

(2) DC current (A) that will cause L_0 to drop approximately 20 %

APPLICATIONS

- Class D audio amplifiers

DIMENSIONS in inches [millimeters]



DESCRIPTION

IHLD-2525GG-5A	22 µH	ER	e3
MODEL	INDUCTANCE VALUE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

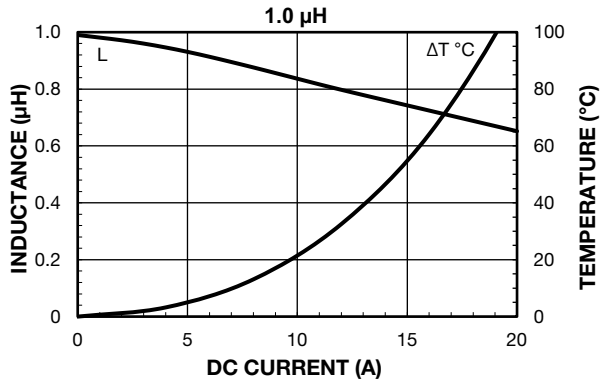
GLOBAL PART NUMBER

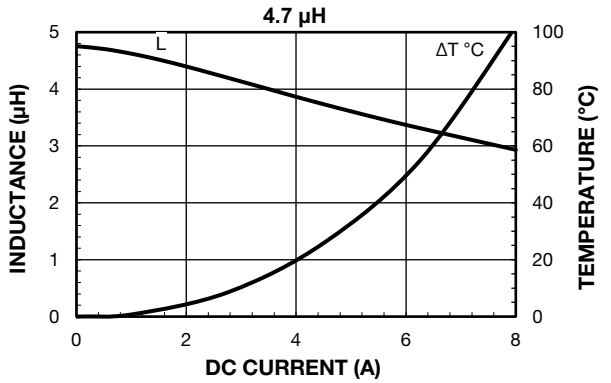
I	H	L	D	2	5	2	5	G	G	E	R	2	2	0	M	5	A
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

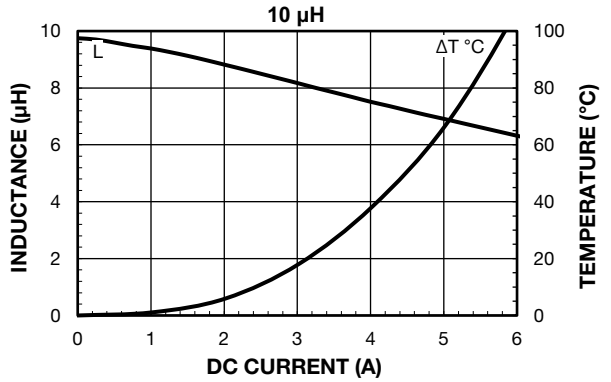
PATENT(S): www.vishay.com/patents
This Vishay product is protected by one or more United States and international patents.

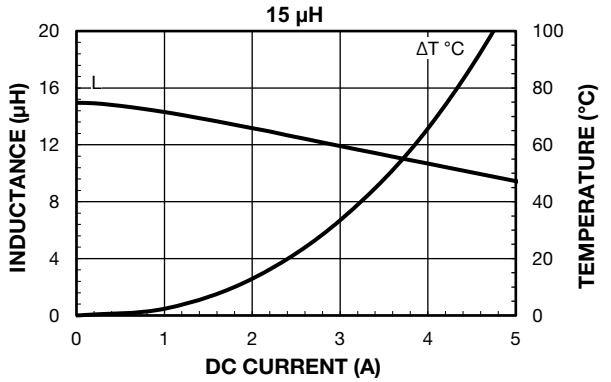
For technical questions, contact: magnetics@vishay.com

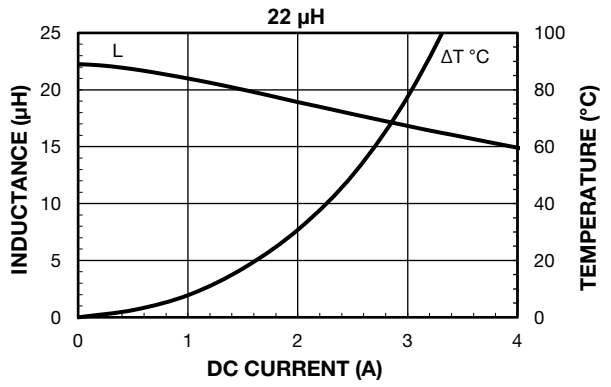
PERFORMANCE GRAPHS



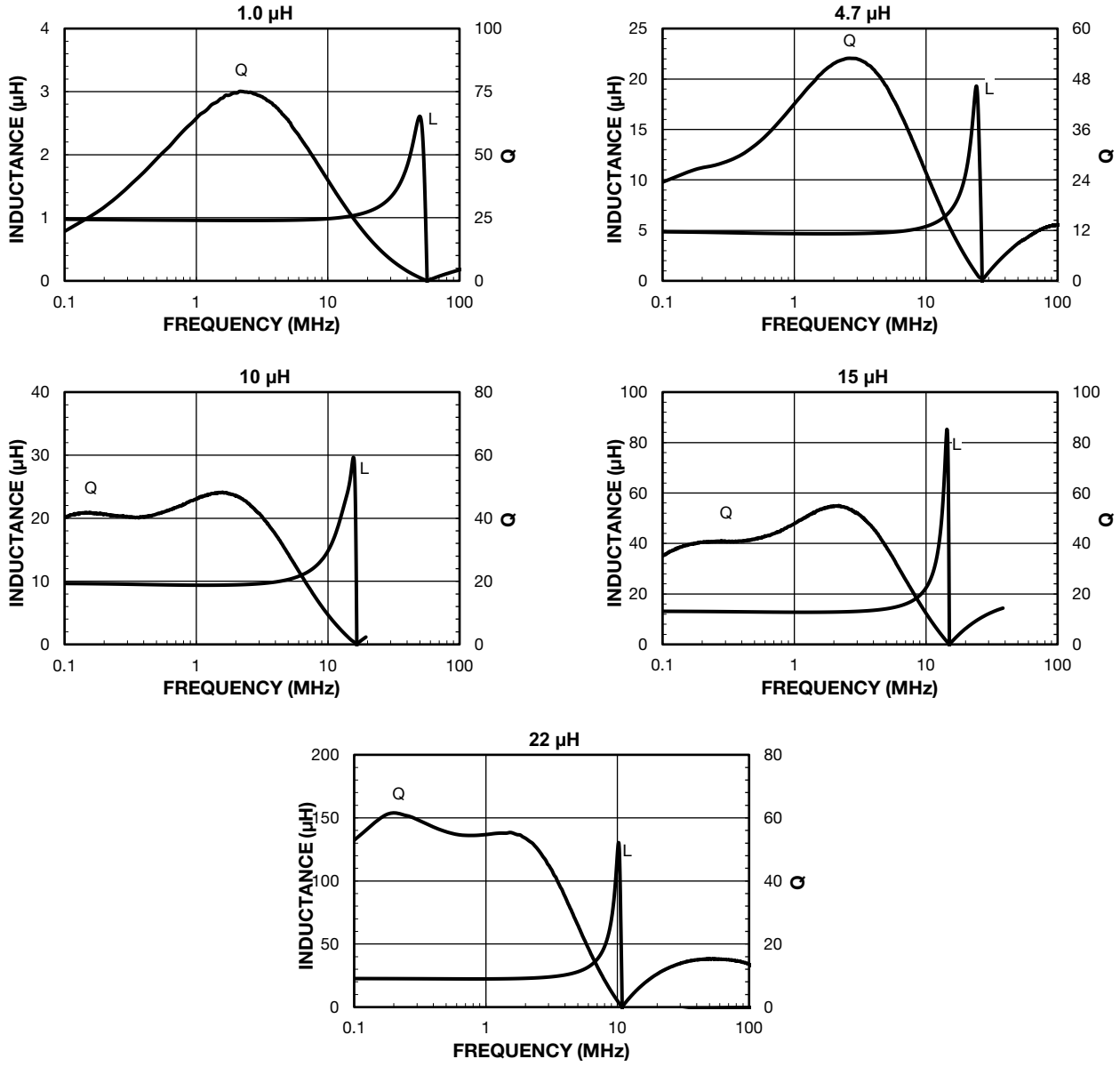








PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



INTERACTIVE 3D MODEL

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- To enable the 3D content, go to “Options” in the yellow popup bar and click on “Trust this document one time only”. Click then on the “?” box and the rotating part will be shown.
- For a long term solution, you can also do following:
  - Go to “Edit” → “Preferences” → “3D & Multimedia” → and mark “Enable playing of 3D content” → confirm with “OK”

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