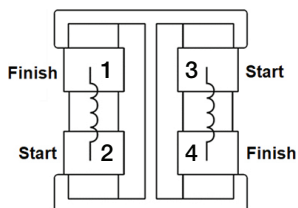
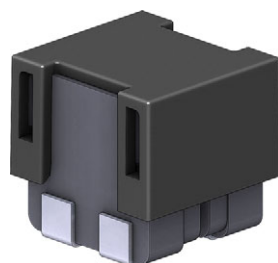


Automotive 2-in-1 Package, High Current, Dual Inductor, Linear Saturation Series for Reduced Signal Distortion



FEATURES

- 7.80 mm x 7.26 mm x 7.39 mm size
- Two inductors in one package saves board space and assembly time
- Improved linear magnetization of core material reduces formation of total harmonic distortion (THD)
- Inductors can be connected in series, parallel, or operated independently
- Magnetically shielded composite construction minimizes flux leakage compared to gapped ferrite inductors
- Optimized design realizes high quality sound and low signal distortion
- Low coupling for minimal cross-talk between inductors
- Handles high transient current spikes without saturation
- Ultra-low buzz noise, due to composite construction
- AEC-Q200 qualified
- **Patent pending**
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE
GRADE

RoHS
COMPLIANT

HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



Product Page



3D Models

APPLICATIONS

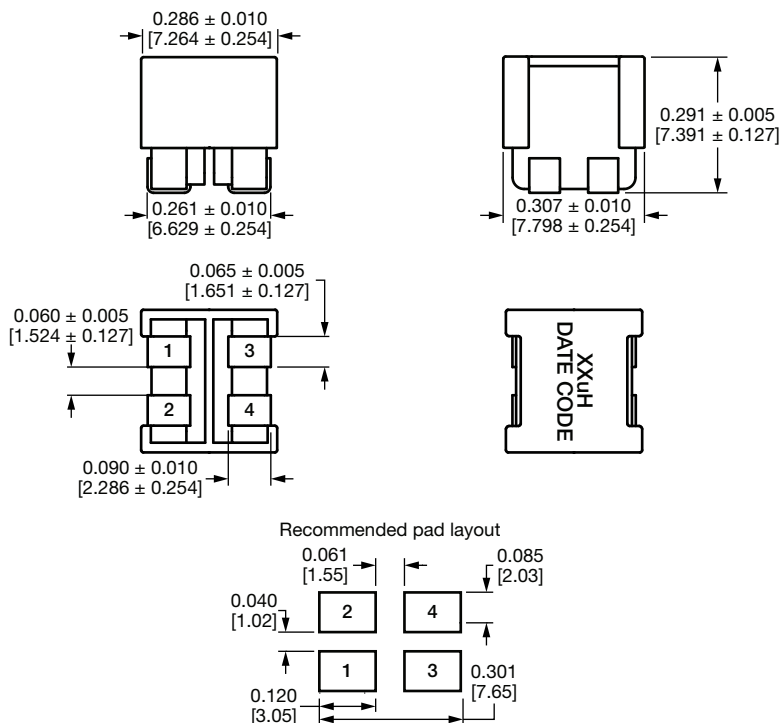
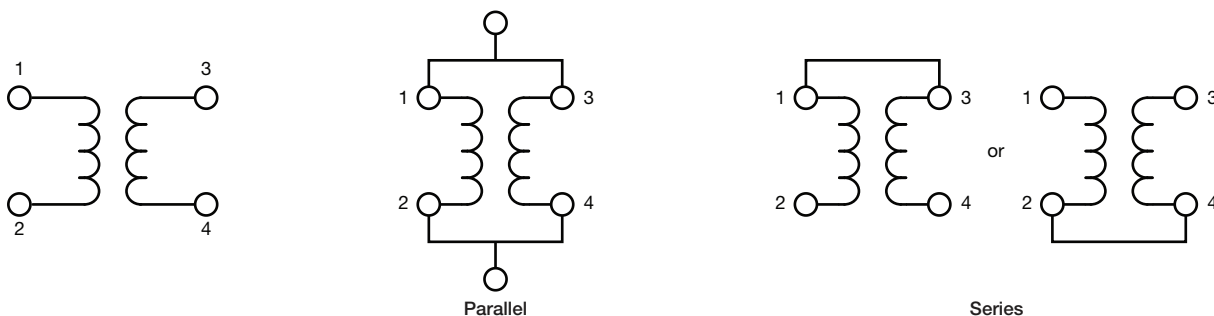
- Class D audio amplifiers
- Multi-phase converters

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	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)		SRF TYP. (MHz)
					20 % DROP ⁽²⁾	30 % DROP ⁽³⁾	
IHLD2525GGER3R3MA1	3.3	25	28.5	6.5	14.0	17.7	31
IHLD2525GGER4R7MA1	4.7	37	39.6	5.5	10.0	13.0	25
IHLD2525GGER5R6MA1	5.6	47	50.3	5.0	9.2	11.8	24.5
IHLD2525GGER100MA1	10	86	90.9	3.7	7.5	9.5	20.4
IHLD2525GGER150MA1	15	117	125	3.0	6.4	7.5	14.4

Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 0.25 V
- Electrical data is specified for a single coil; placing coils in series will double the DCR and inductance; placing coils in parallel will cut the DCR and inductance in half
- Operating temperature range -55 °C to +125 °C
- The part temperature (ambient + temp. rise) should not exceed the maximum rating 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) = 50 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 %
- ⁽³⁾ DC current (A) that will cause L₀ to drop approximately 30 %

DIMENSIONS in inches [millimeters]

SCHEMATICS

DESCRIPTION
IHLD2525GG-A1
MODEL

4.7 μ H
INDUCTANCE VALUE

ER
PACKAGE CODE

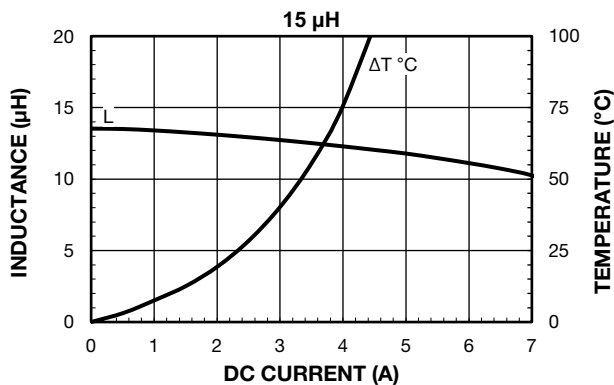
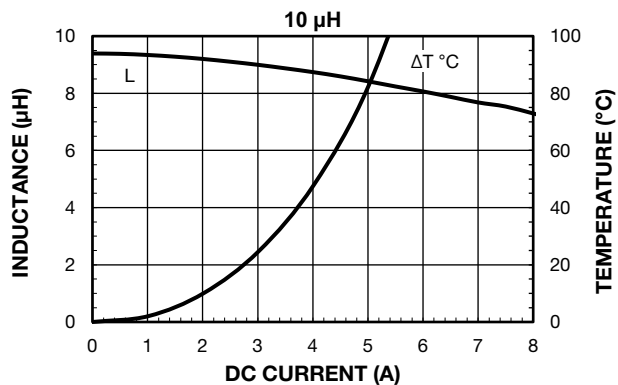
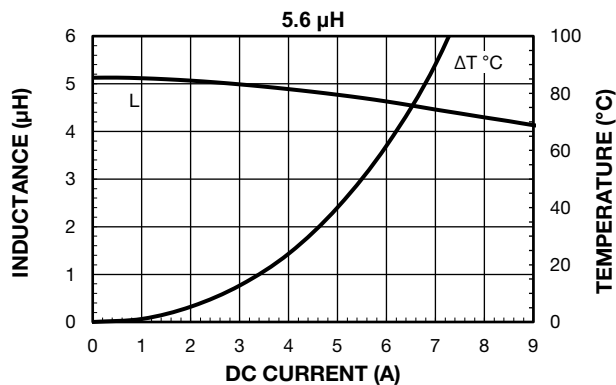
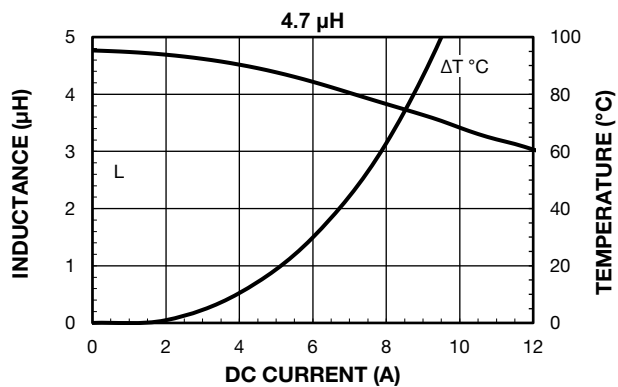
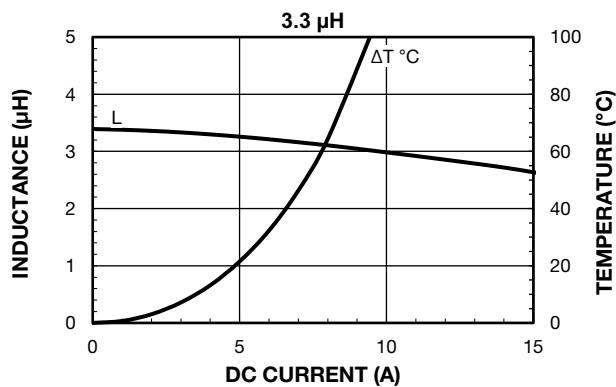
e3
JEDEC® LEAD (Pb)-FREE STANDARD

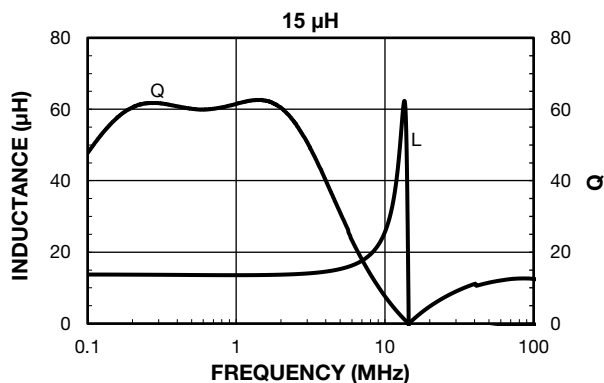
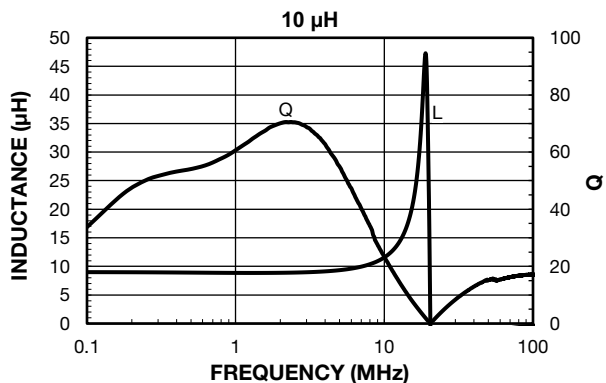
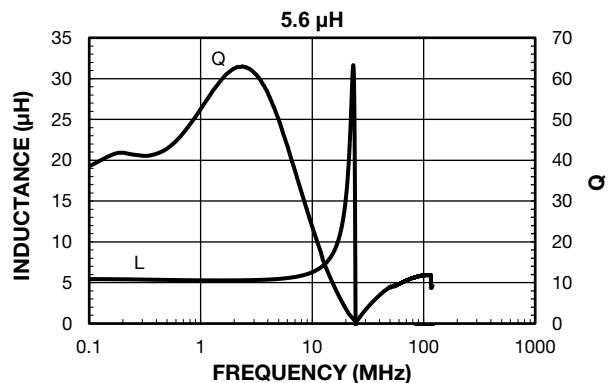
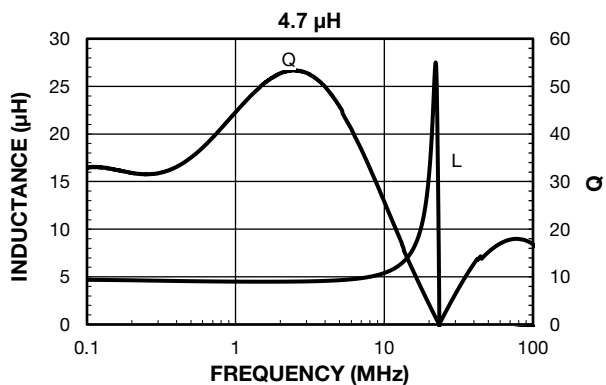
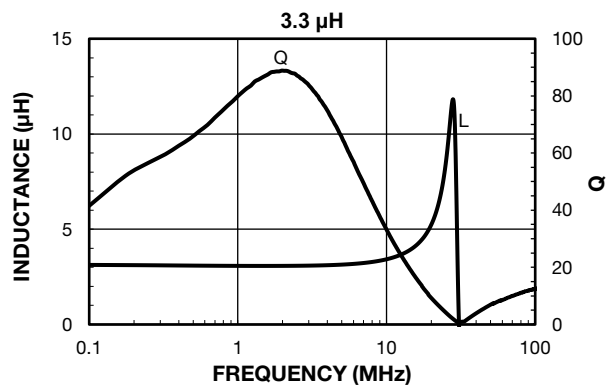
GLOBAL PART NUMBER

I H L D	2 5 2 5 G G	E R	4 R 7	M	A 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	TOLERANCE	SERIES
		ER = tape and reel	4R7 = 4.7 μ H	M = 20 %	



PERFORMANCE GRAPHS



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY




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