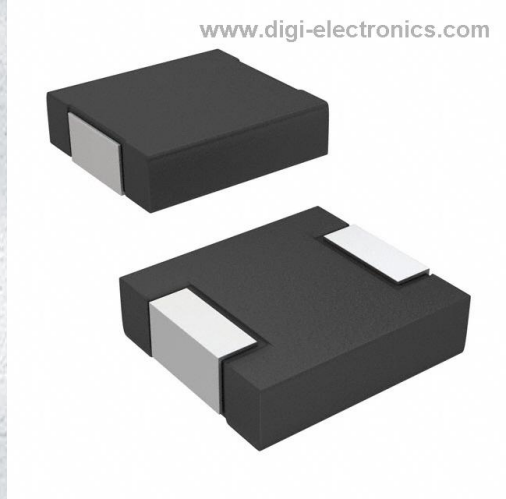
IHLP1616BZER4R7M51 Datasheet



DiGi Electronics Part Number	IHLP1616BZER4R7M51-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IHLP1616BZER4R7M51
Description	FIXED IND 4.7UH 3.2 A 110 MOHM H
Detailed Description	4.7 µH Shielded Molded Inductor 3.2 A 110mOhm Max Nonstandard

https://www.DiGi-Electronics.com

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
IHLP1616BZER4R7M51	Vishay Dale
Series:	Product Status:
IHLP-1616BZ-51	Active
Type:	Material - Core:
Molded	-
Inductance:	Tolerance:
4.7 µH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
3.2 A	1.8A
Shielding:	DC Resistance (DCR):
Shielded	110mOhm Max
Q @ Freq:	Frequency - Self Resonant:
-	28MHz
Ratings:	Operating Temperature:
-	-55°C ~ 155°C
Inductance Frequency - Test:	Features:
100 kHz	-
Mounting Type:	Package / Case:
Surface Mount	Nonstandard
Supplier Device Package:	Size / Dimension:
-	0.175" L x 0.160" W (4.45mm x 4.06mm)
Height - Seated (Max):	
0.079" (2.00mm)	

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8504.50.8000	

VISHAY
www.vishay.com

IHLP-1616BZ-51

Vishay Dale

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

DESIGN SUPPORT TOOLS click logo to get started

Design Tools Available

FEATURES

- High temperature, up to 155 °C
- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 MHz. Filter inductor applications up the SRF (see Standard Electrical Specifications table).
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- IHLP design. PATENT(S): www.vishay.com/patents
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE
GREEN (5-2008)

APPLICATIONS

- PDA / notebook / desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)

STANDARD ELECTRICAL SPECIFICATIONS

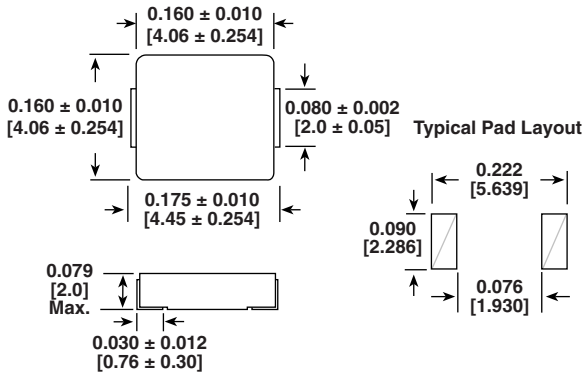
L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A) (2)	SRF TYP. (MHz)
0.10	4.0	4.2	17.3	19.0	320
0.22	7.0	7.5	12.6	12.0	171
0.47	12.2	13.1	9.3	6.9	103
0.68	17.5	18.8	7.6	6.8	100
1.0	25.6	27.4	6.2	4.8	63
2.2	63.7	65.0	3.8	4.0	37
3.3	77.7	83.1	3.5	3.0	30
4.7	102.0	110.0	3.2	1.8	28

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 %

DIMENSIONS in inches [millimeters]



DESCRIPTION

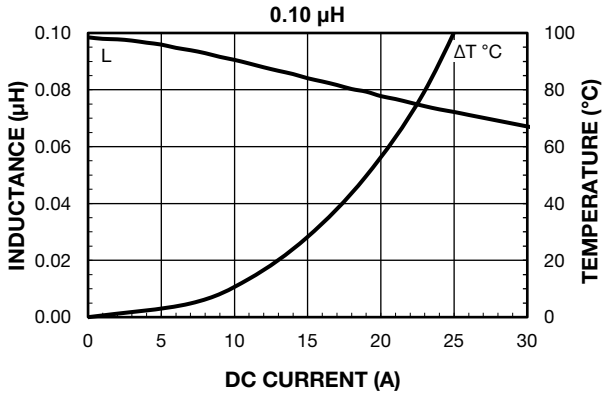
IHLP-1616BZ-51	3.3 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

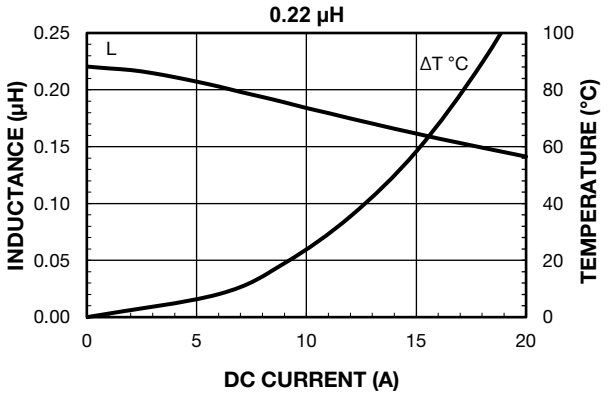
GLOBAL PART NUMBER

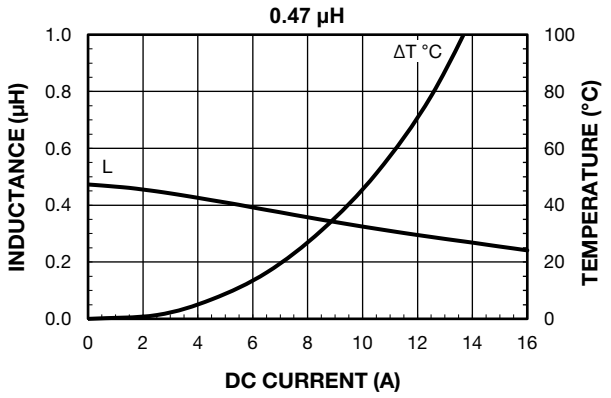
I	H	L	P	1	6	1	6	B	Z	E	R	3	R	3	M	5	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

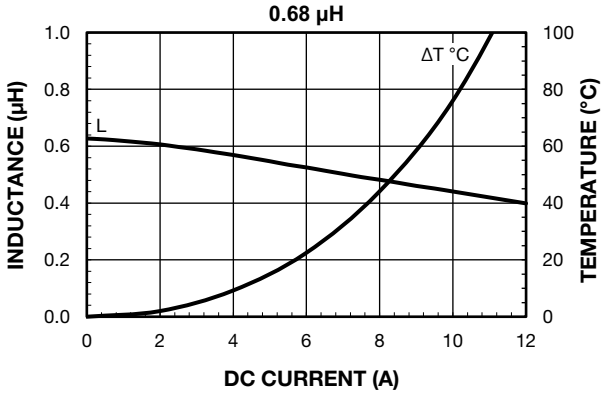
PATENT(S): www.vishay.com/patents
This Vishay product is protected by one or more United States and international patents.

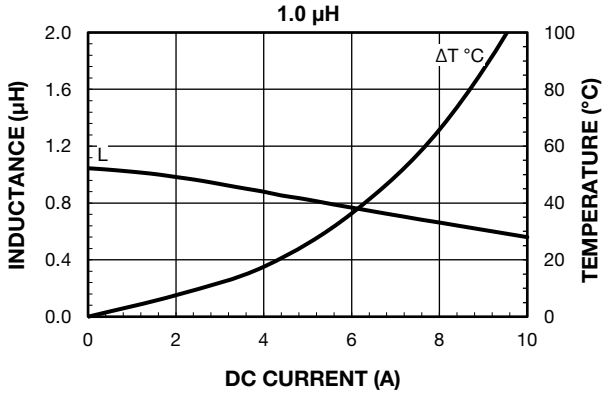
PERFORMANCE GRAPHS

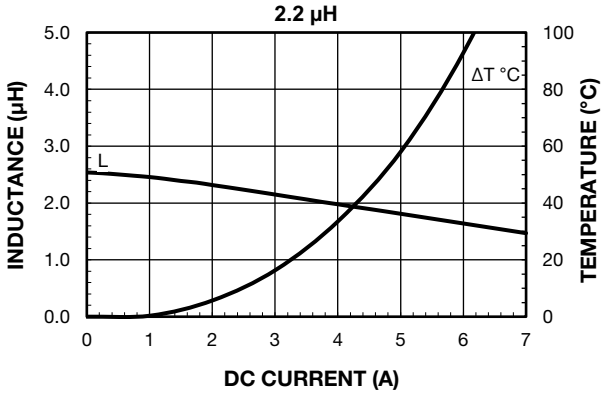


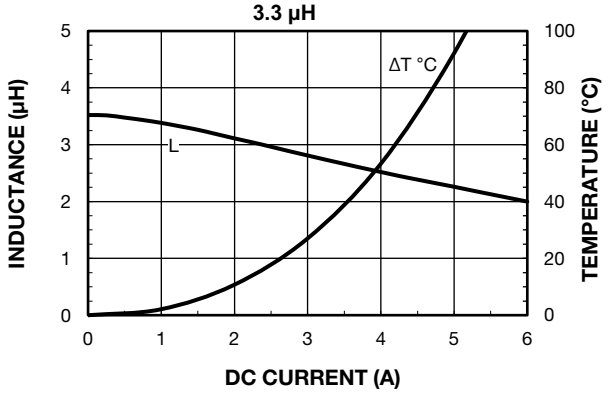


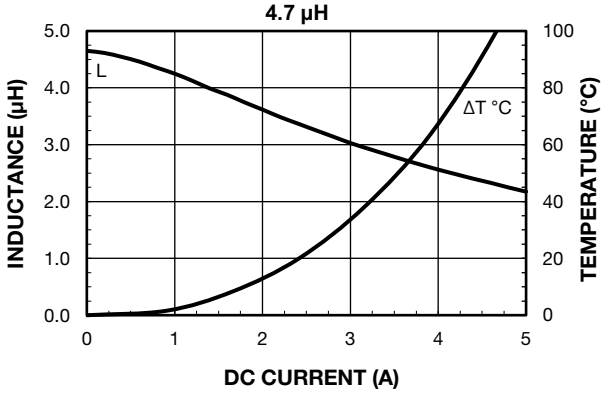




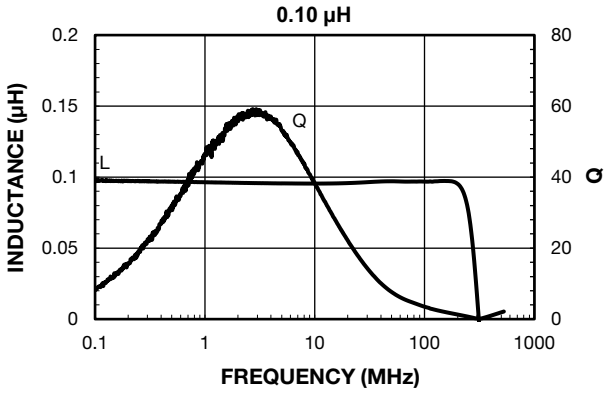


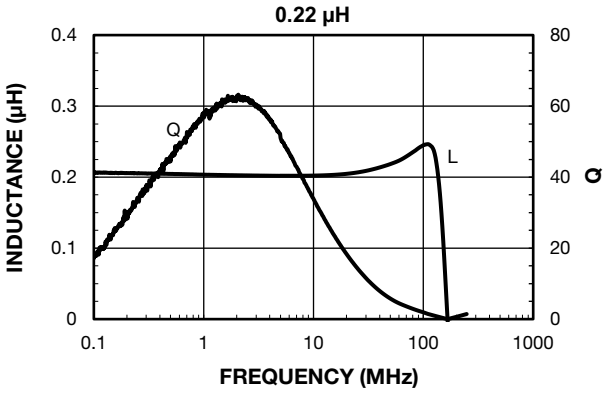


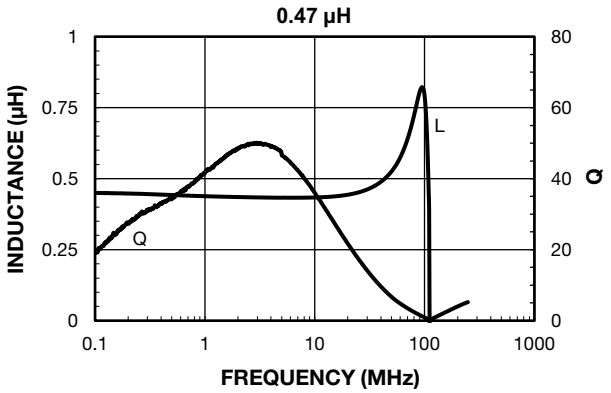


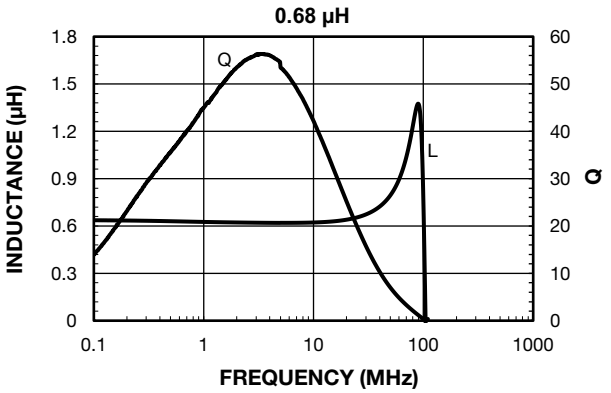


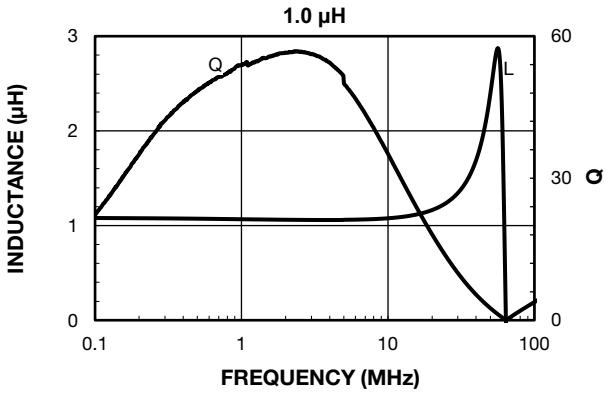
PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY

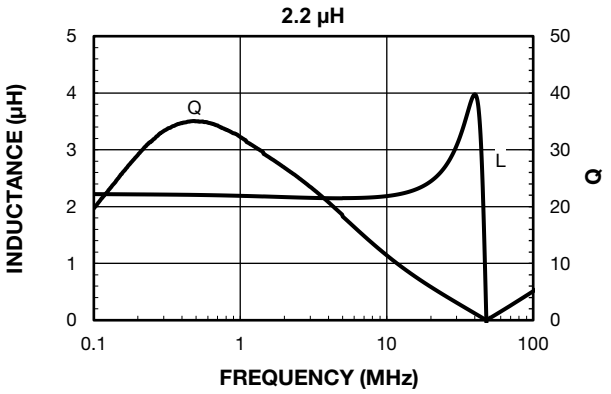


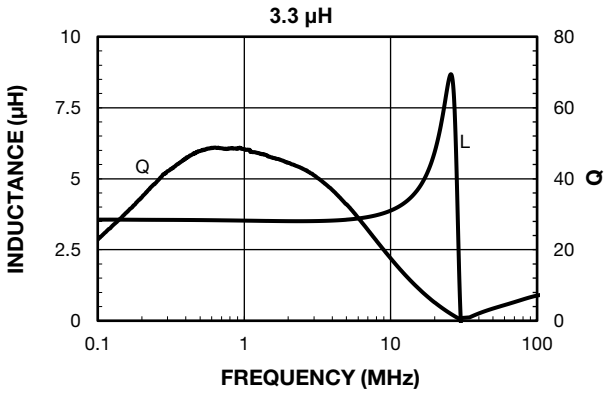


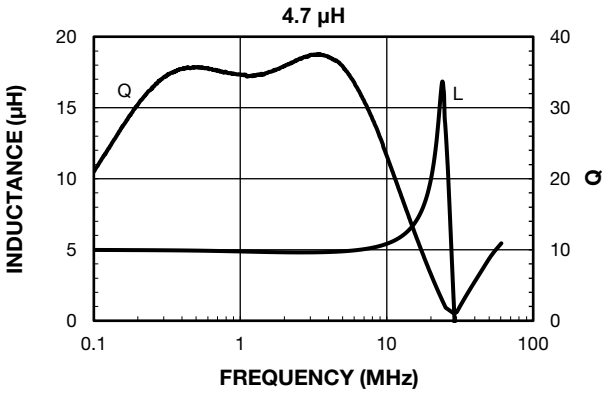












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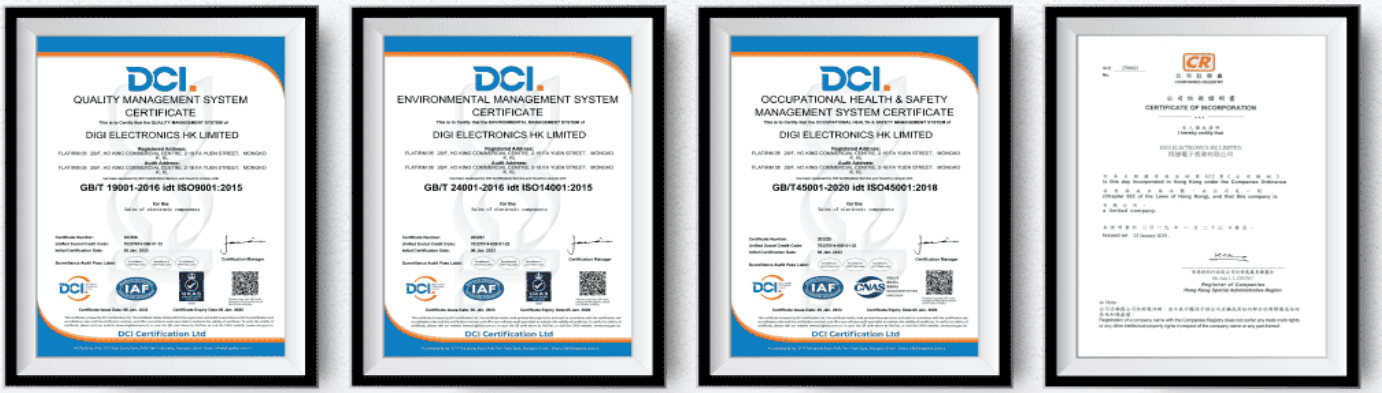

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