IHLP2020ABERR10M01 Datasheet

https://www.DiGi-Electronics.com

DiGi Electronics Part Number	IHLP2020ABERR10M01-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IHLP2020ABERR10M01
Description	FIXED IND 100NH 13.5A 4.6MOHM SM
Detailed Description	100 nH Shielded Molded Inductor 13.5 A 4.6mOhm Max Nonstandard

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
IHLP2020ABERR10M01	Vishay Dale
Series:	Product Status:
IHLP-2020AB-01	Active
Type:	Material - Core:
Molded	-
Inductance:	Tolerance:
100 nH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
13.5 A	35A
Shielding:	DC Resistance (DCR):
Shielded	4.6mOhm Max
Q @ Freq:	Frequency - Self Resonant:
-	256MHz
Ratings:	Operating Temperature:
-	-55°C ~ 125°C
Inductance Frequency - Test:	Mounting Type:
100 kHz	Surface Mount
Package / Case:	Supplier Device Package:
Nonstandard	-
Size / Dimension:	Height - Seated (Max):
0.216" L x 0.204" W (5.49mm x 5.18mm)	0.047" (1.20mm)

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8504.50.4000	

VISHAY

www.vishay.com

IHLP-2020AB-01

Vishay Dale

IHLP® Commercial Inductors, High Saturation Series

FEATURES

- Shielded construction
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Excellent temperature stability for inductance and saturation
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to SRF (see “Standard Electrical Specifications” table)
- 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)

DESIGN SUPPORT TOOLS click logo to get started

3D Models Available

Design Tools Available

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	4.32	4.60	13.5	35	256
0.47	18.2	19.2	6.5	18	108
1.0	44.3	46.5	4.4	10.2	64
2.2	73.6	77.3	3.4	6	47
3.3	98.4	103	2.8	5	33
4.7	159	168	2.2	4.4	30

Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +125 °C
- The part temperature (ambient + temp. rise) should not exceed 125 °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

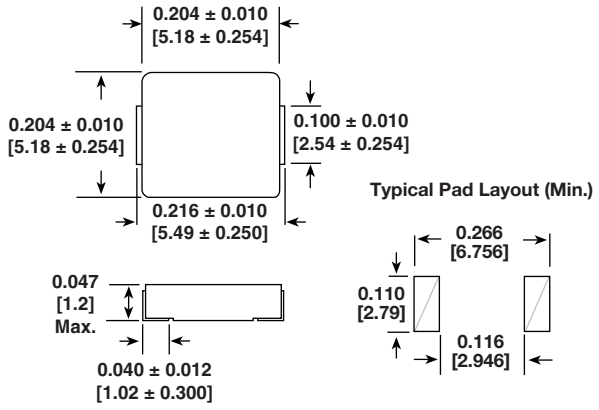
(1) DC current (A) that will cause an approximate ΔT of 40 °C

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

APPLICATIONS

- 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)

DIMENSIONS in inches [millimeters]



DESCRIPTION

IHLP-2020AB-01	4.7 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

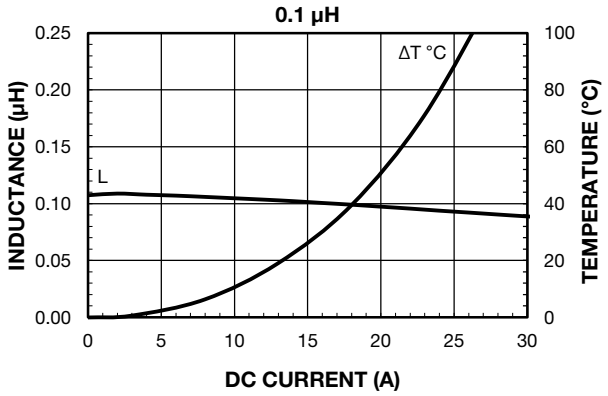
GLOBAL PART NUMBER

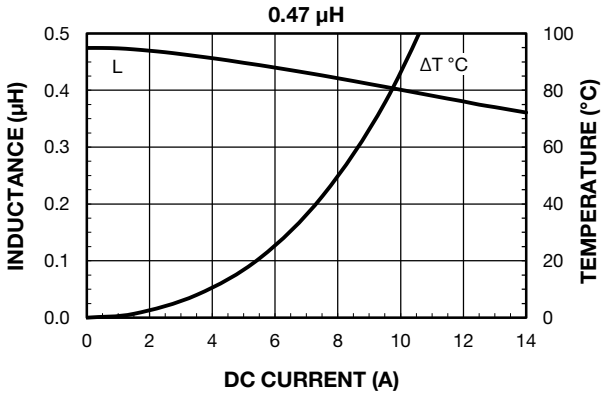
I	H	L	P	2	0	2	0	A	B	E	R	4	R	7	M	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

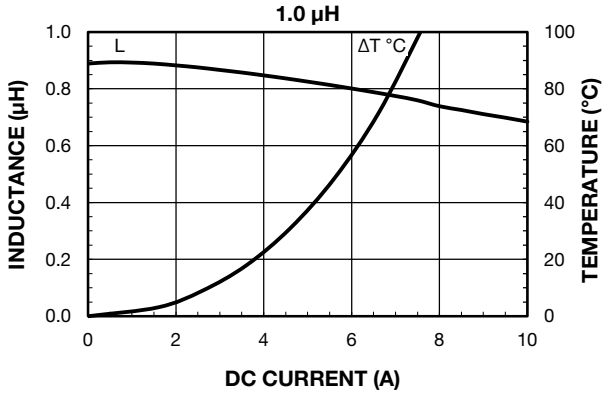
PATENT(S): www.vishay.com/patents

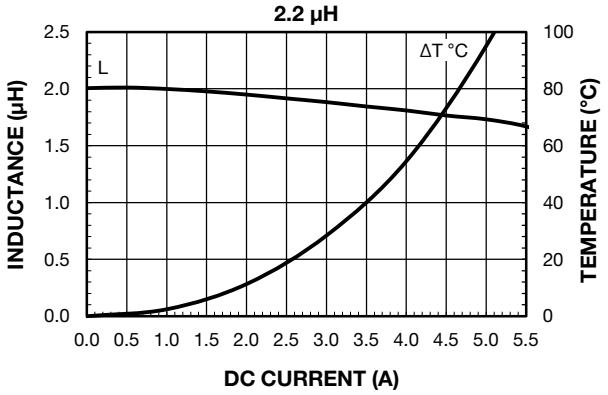
This Vishay product is protected by one or more United States and international patents.

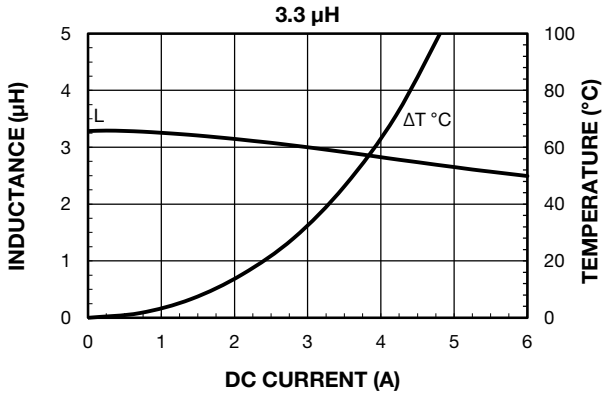
PERFORMANCE GRAPHS

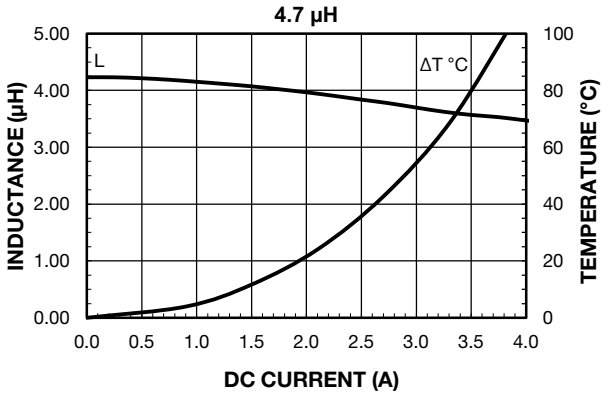




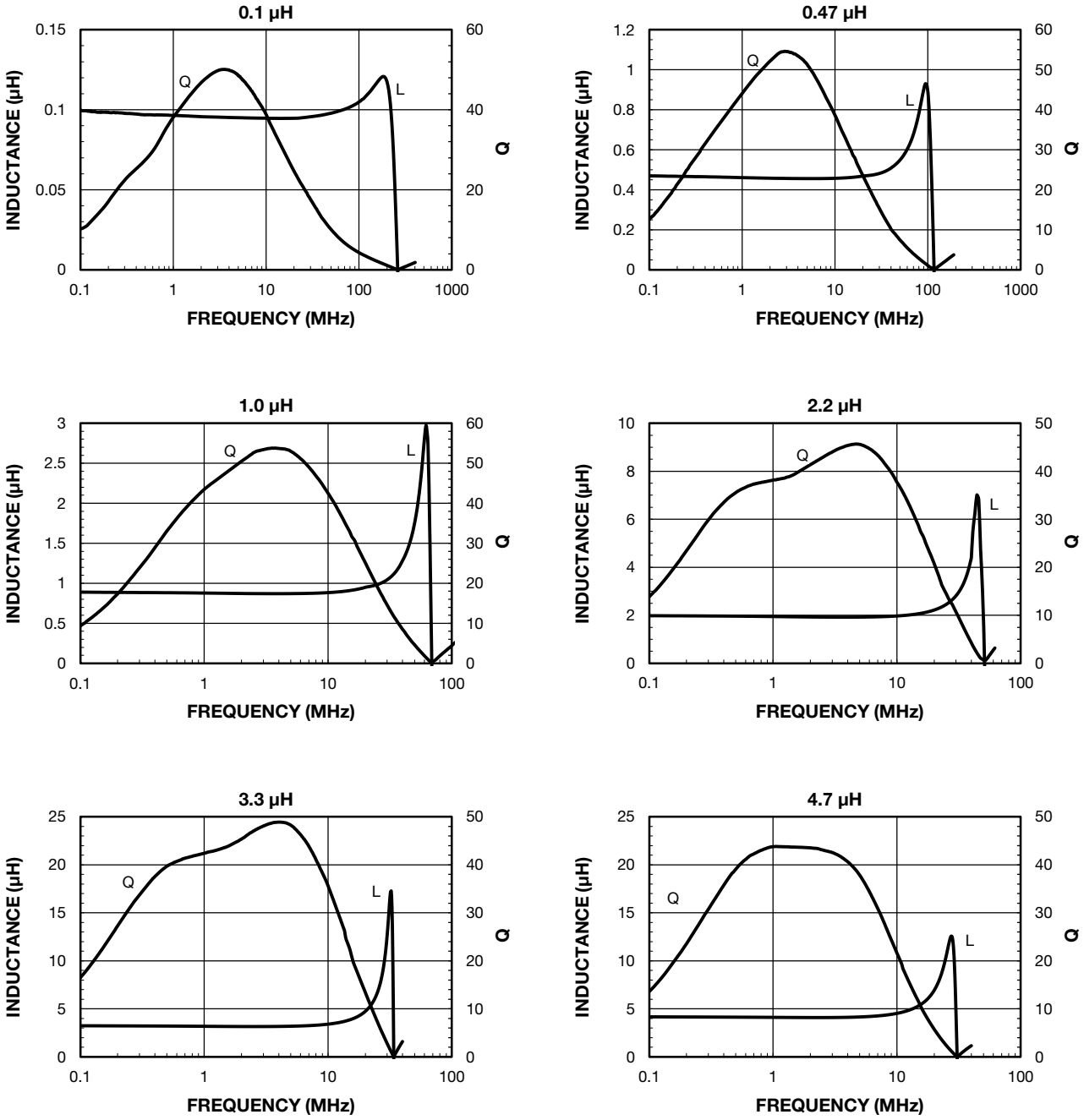








PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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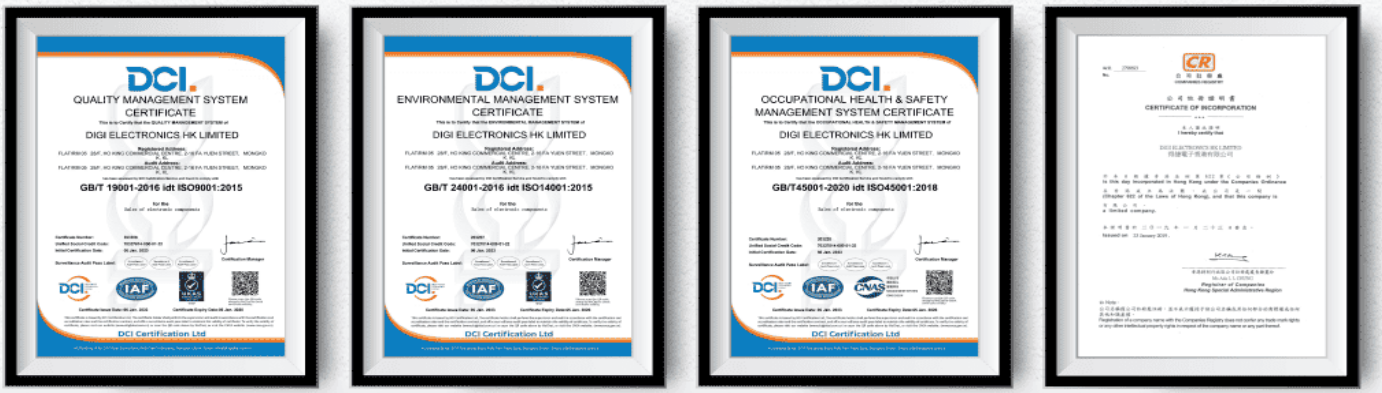

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