IHLP3232CZER1R0M01 Datasheet

DiGi Electronics Part Number	IHLP3232CZER1R0M01-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IHLP3232CZER1R0M01
Description	FIXED IND 1UH 13.7A 8.35MOHM SMD
Detailed Description	1 µH Shielded Molded Inductor 13.7 A 8.35mOhm Max Nonstandard

https://www.DiGi-Electronics.com

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
IHLP3232CZER1R0M01	Vishay Dale
Series:	Product Status:
IHLP-3232CZ-01	Active
Type:	Material - Core:
Molded	-
Inductance:	Tolerance:
1 µH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
13.7 A	29A
Shielding:	DC Resistance (DCR):
Shielded	8.35mOhm Max
Q @ Freq:	Frequency - Self Resonant:
-	51MHz
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):
0.340" L x 0.322" W (8.64mm x 8.18mm)	0.118" (3.00mm)

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-3232CZ-01

Vishay Dale

IHLP® Commercial Inductors, High Saturation Series

DESIGN SUPPORT TOOLS AVAILABLE

3D Models Design Tools

FEATURES

- Shielded construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- Operating temperature up to 125 °C
- Lowest DCR/µH, in this package size
- 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 device
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)

STANDARD ELECTRICAL SPECIFICATIONS

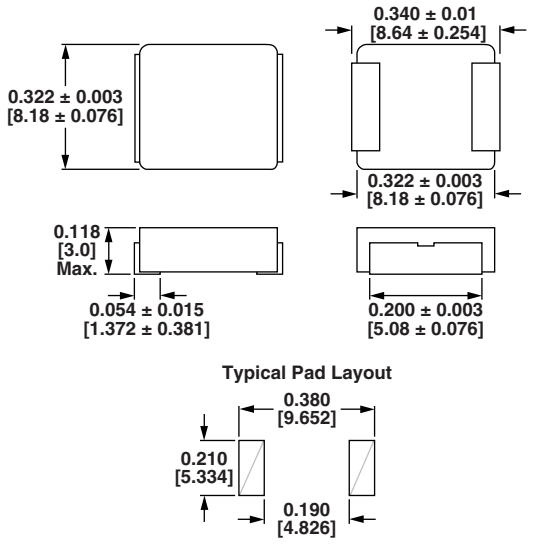
L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A) (2)	SRF TYP. (MHz)
0.22	1.60	1.71	32.0	43.0	104
0.33	2.40	2.57	25.0	32.0	101
0.47	3.11	3.33	21.5	35.0	77
1.0	7.80	8.35	13.7	29.0	51
1.5	12.40	13.30	11.0	24.0	42
2.2	19.00	20.30	9.0	21.0	30
3.3	25.60	27.40	7.2	12.0	27
4.7	32.00	34.20	6.6	10.5	25
5.6	34.70	37.20	6.3	10.0	21
6.8	46.10	49.30	5.3	9.5	19
8.2	55.40	59.30	4.8	9.5	16
10.0	66.50	71.20	4.7	8.2	15

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) = 75 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-3232CZ-01	4.7 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

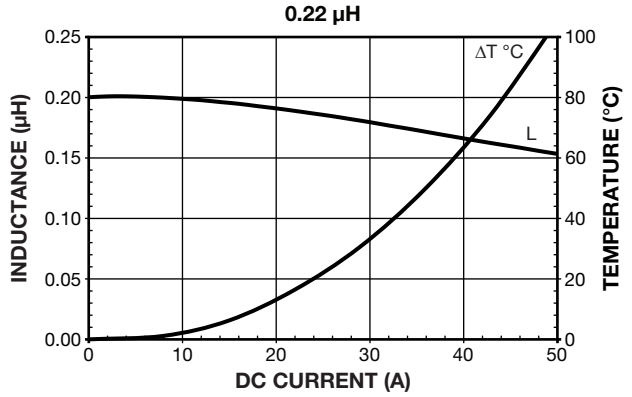
GLOBAL PART NUMBER

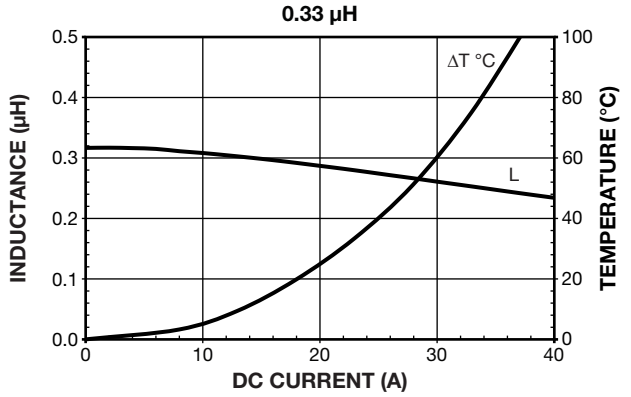
I	H	L	P	3	2	3	2	C	Z	E	R	4	R	7	M	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

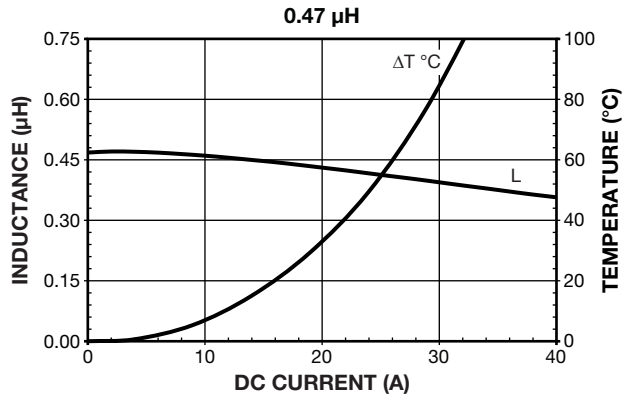
PATENT(S): www.vishay.com/patents
This Vishay product is protected by one or more United States and international patents.

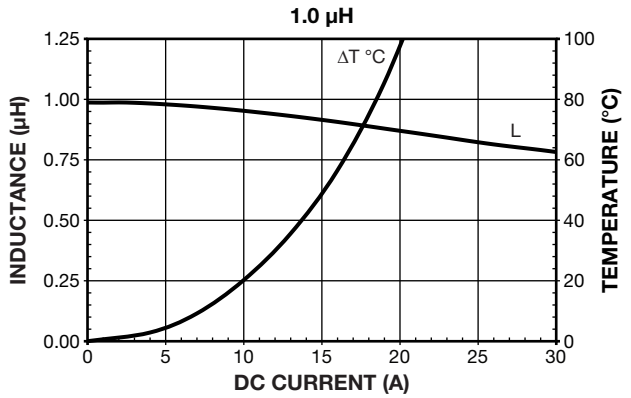
For technical questions, contact: magnetics@vishay.com

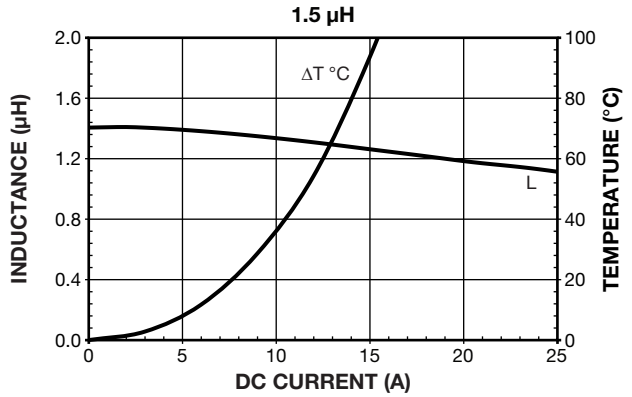
PERFORMANCE GRAPHS

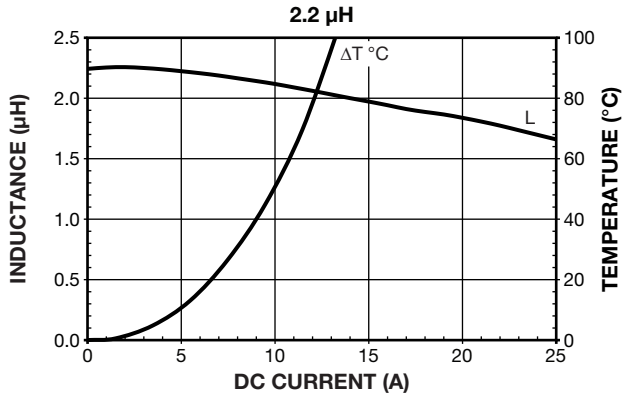


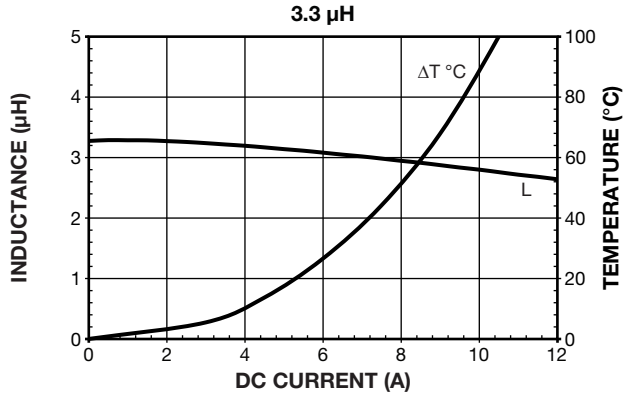


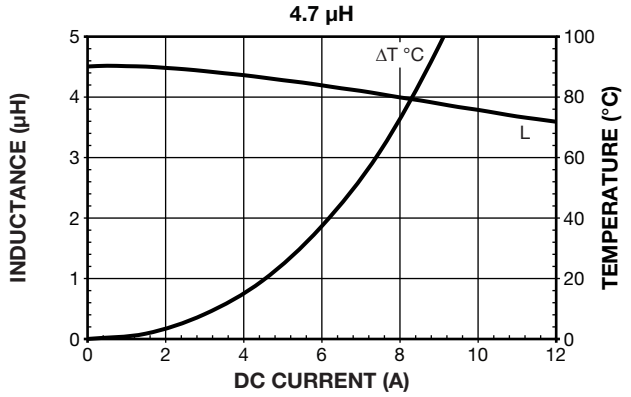












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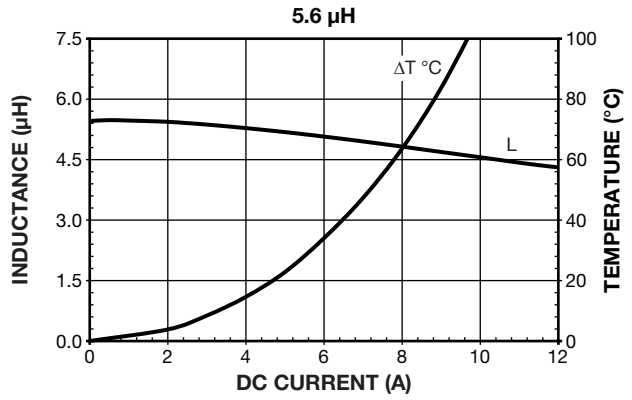
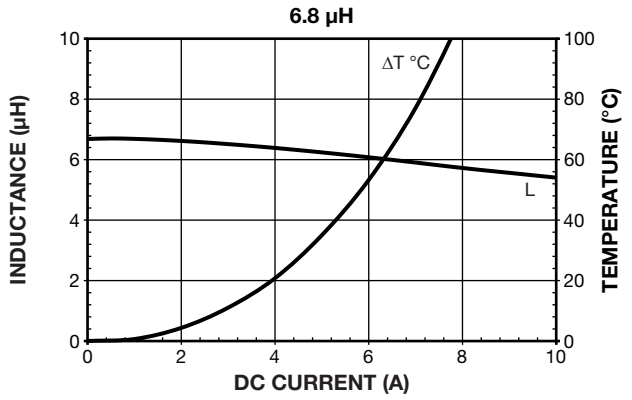
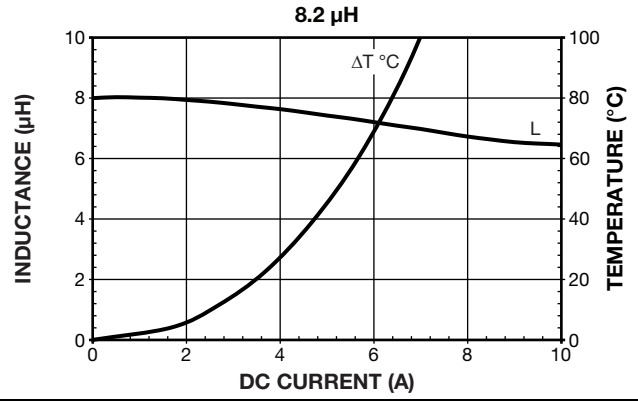
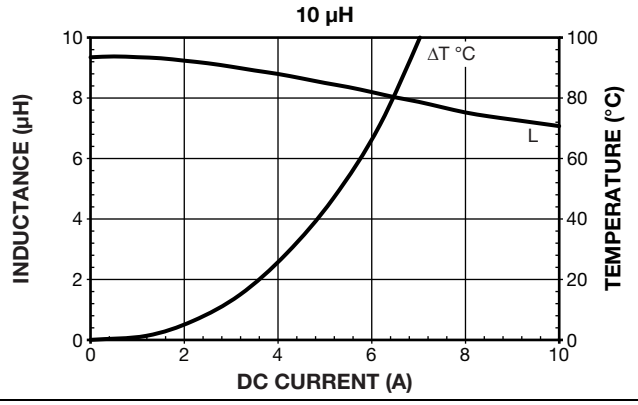


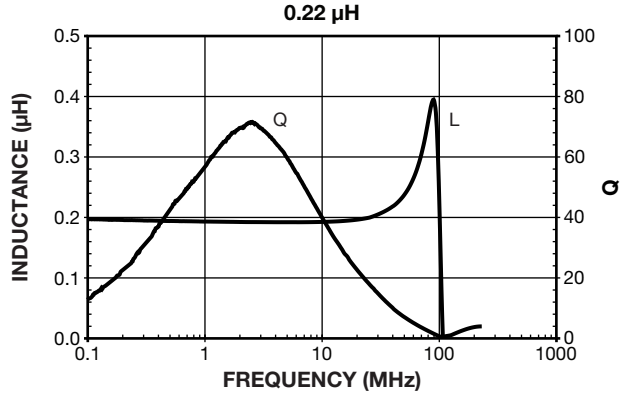




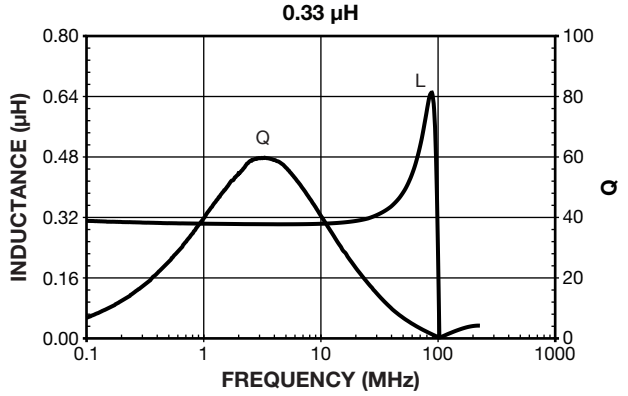


PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY

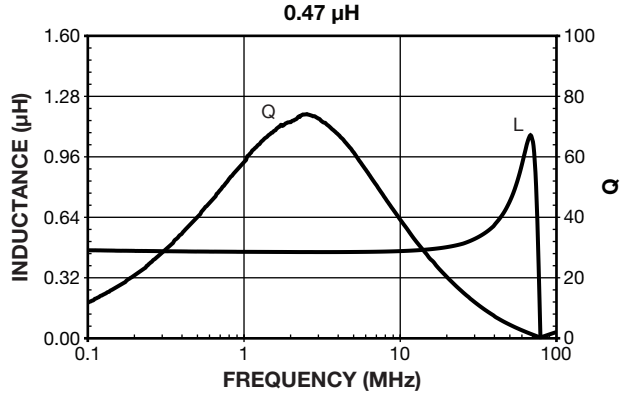
0.22 µH



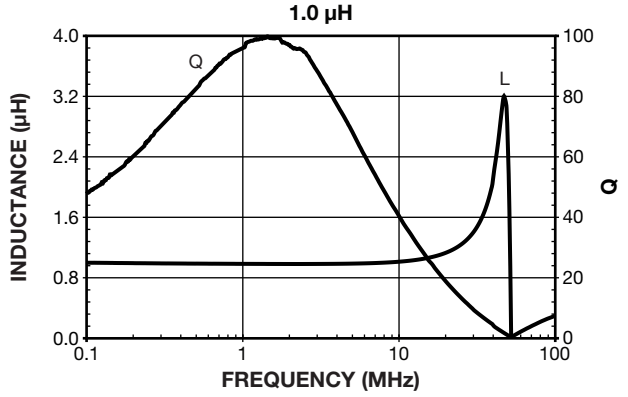
0.33 µH



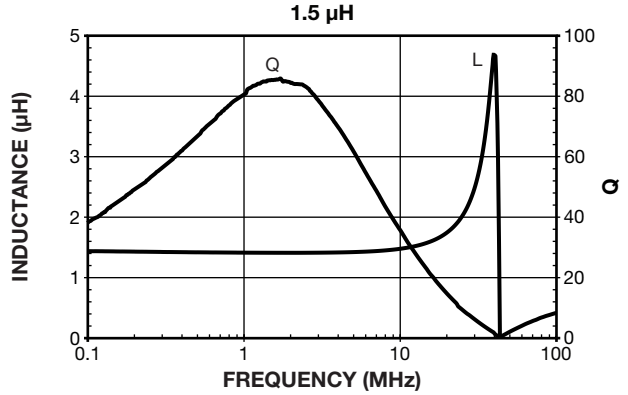
0.47 µH



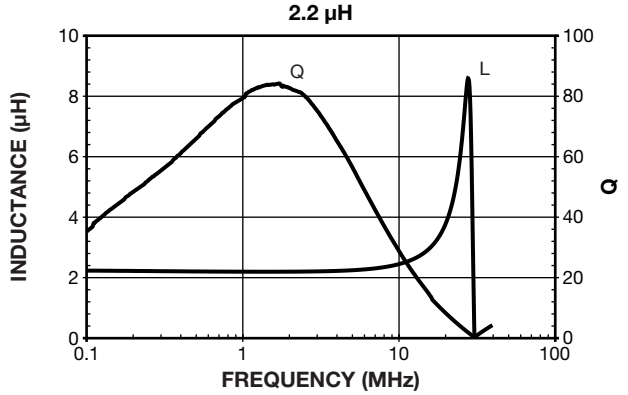
1.0 µH



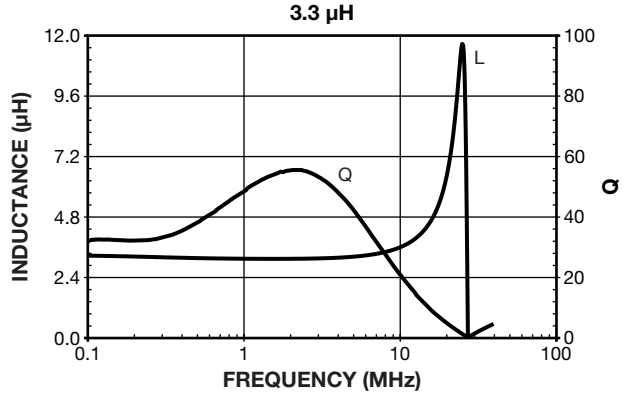
1.5 µH



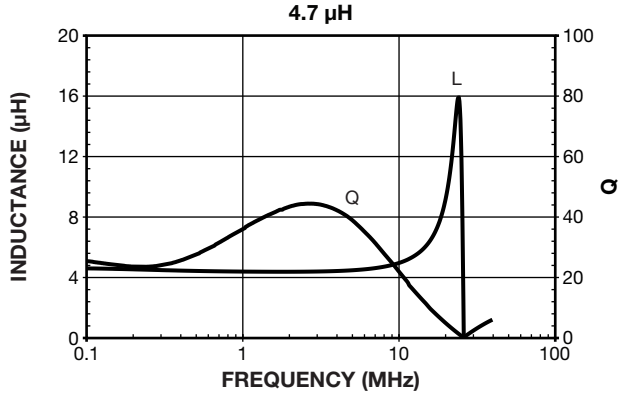
2.2 µH



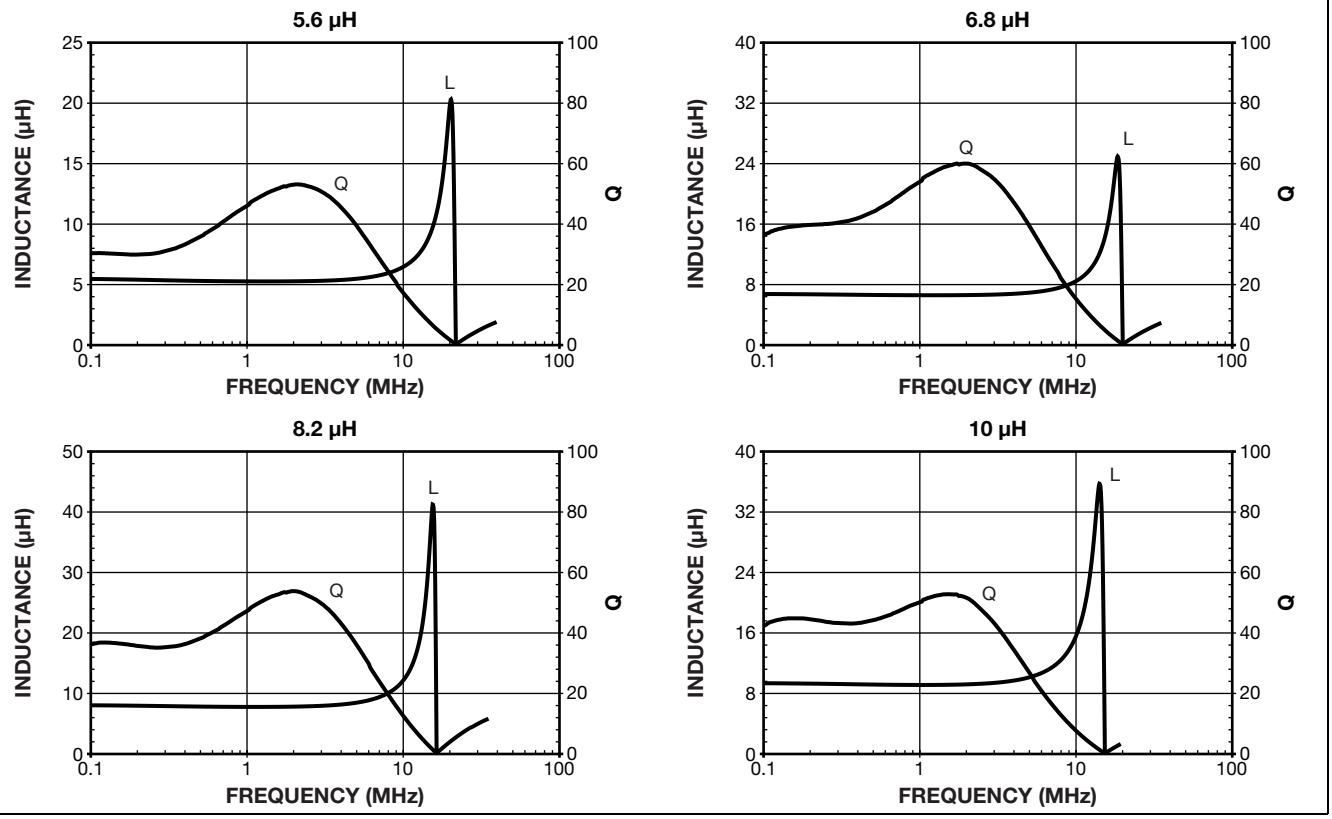
3.3 µH



4.7 µH



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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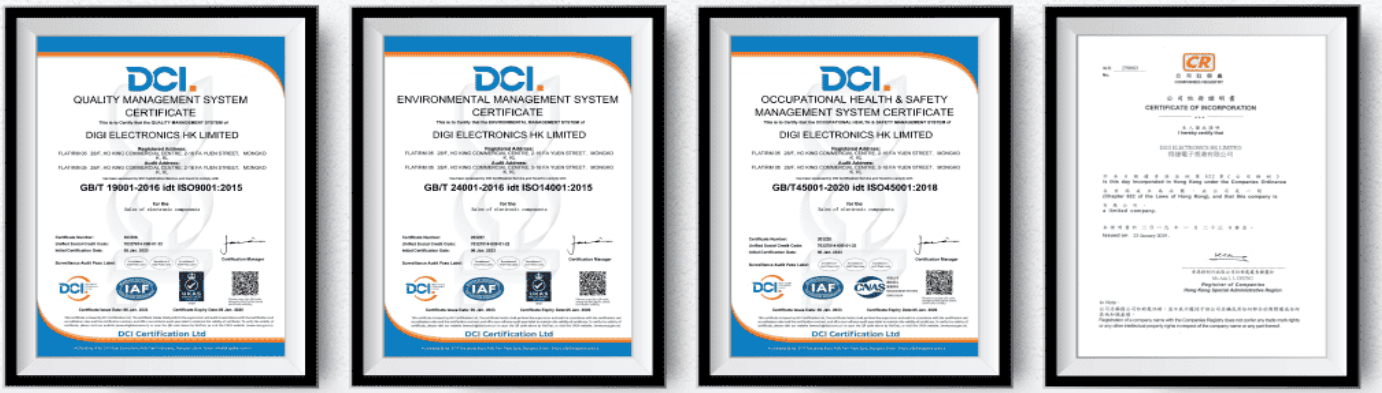

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