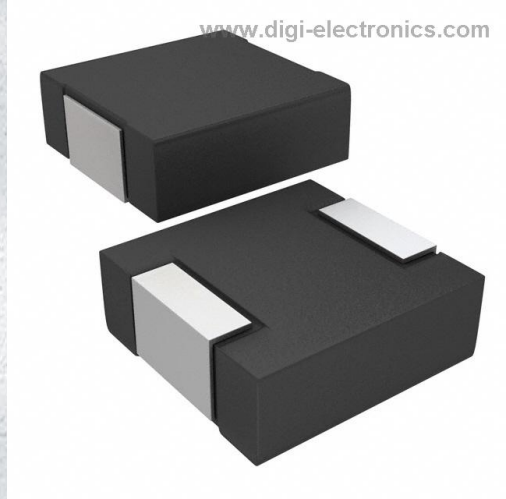
IHLP2020BZERR68M01 Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	IHLP2020BZERR68M01-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IHLP2020BZERR68M01
Description	FIXED IND 680NH 10A 12.4MOHM SMD
Detailed Description	680 nH Shielded Molded Inductor 10 A 12.4mOhm Max Nonstandard

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
IHLP2020BZERR68M01	Vishay Dale
Series:	Product Status:
IHLP-2020BZ-01	Active
Type:	Material - Core:
Molded	-
Inductance:	Tolerance:
680 nH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
10 A	15A
Shielding:	DC Resistance (DCR):
Shielded	12.4mOhm Max
Q @ Freq:	Frequency - Self Resonant:
-	77MHz
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)	0.079" (2.00mm)

Environmental & Export classification

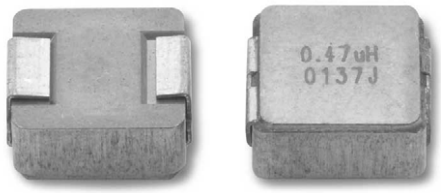
RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8504.50.4000	

VISHAY
www.vishay.com

IHLP-2020BZ-01

Vishay Dale

IHLP® Inductors, High Saturation Series



FEATURES

- Low profile inductor with excellent saturation for maximum ripple regulation and transient current control
- 5.18 mm x 5.18 mm x 2.0 mm SMD package
- Magnetically shielded construction
- Handles high transient current spikes without saturation
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

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

LINKS TO ADDITIONAL RESOURCES

Product Page | 3D Models | Calculators

APPLICATIONS

- DC/DC converters
- Power line noise suppression and filtering
- SSD modules, USB chargers

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) (2)	SRF TYP. (MHz)
IHLP2020BZERR10M01	0.10	3.6	3.9	17.0	45.0	239
IHLP2020BZERR22M01	0.22	4.9	5.2	15.0	22.0	145
IHLP2020BZERR33M01	0.33	7.6	8.2	12.0	25.0	125
IHLP2020BZERR47M01	0.47	8.9	9.4	11.5	21.0	98
IHLP2020BZERR68M01	0.68	11.2	12.4	10.0	15.0	77
IHLP2020BZER1R0M01	1.0	18.9	20.0	7.0	16.0	62
IHLP2020BZER2R2M01	2.2	45.6	50.1	4.2	9.5	39
IHLP2020BZER3R3M01	3.3	79.2	85.5	3.3	8.5	30
IHLP2020BZER4R7M01	4.7	108.0	116.6	2.8	5.0	28
IHLP2020BZER5R6M01	5.6	113.0	122.0	2.5	4.5	24
IHLP2020BZER6R8M01	6.8	139.0	150.0	2.4	4.3	21
IHLP2020BZER100M01	10	184.0	199.0	2.3	4.0	20

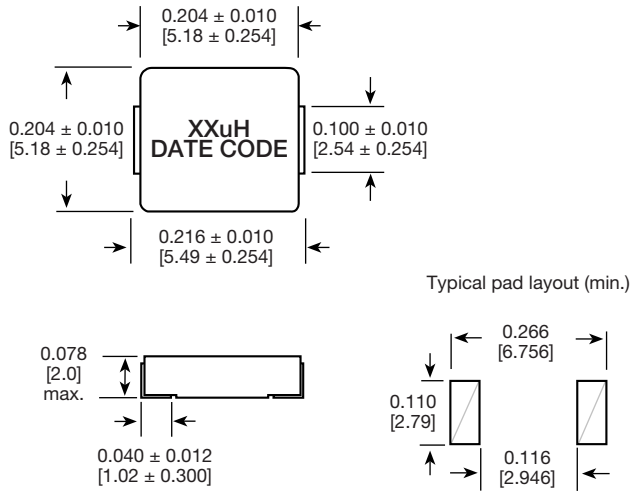
Notes

- 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, 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 L_0 to drop approximately 20 %

For technical questions, contact: magnetics@vishay.com

DIMENSIONS in inches [millimeters]



Notes

- Coplanarity of terminals: 0.004" = 0.1 mm max.
- Terminal standoff: the leads extend a minimum of 0.001" = 0.025 mm below the bottom surface of the part

DESCRIPTION

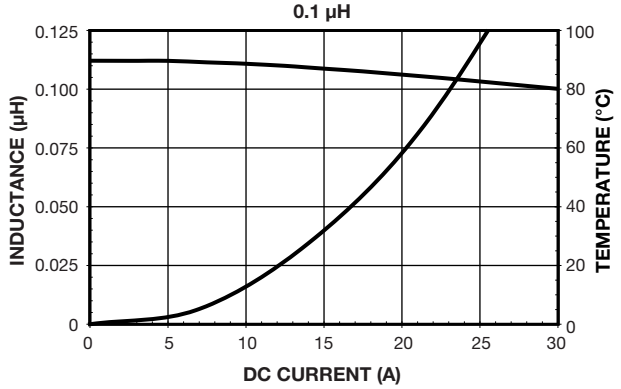
IHLP-2020BZ-01	3.3 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

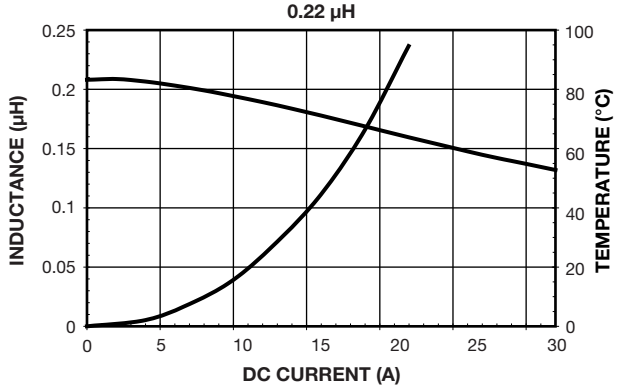
I H L P	2 0 2 0 B Z	E R	3 R 3	M	0 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	TOLERANCE	SERIES
		ER = tape and reel	**3R3** = 3.3 Ω	**M** = 20 %	

PERFORMANCE GRAPHS

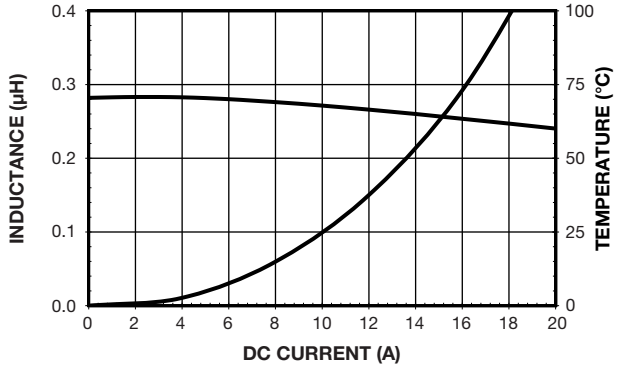
0.1 µH



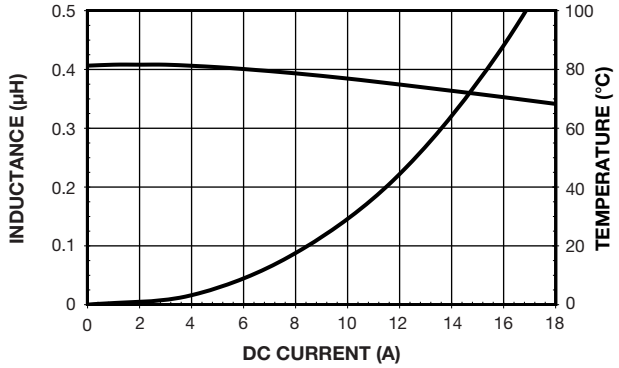
0.22 µH



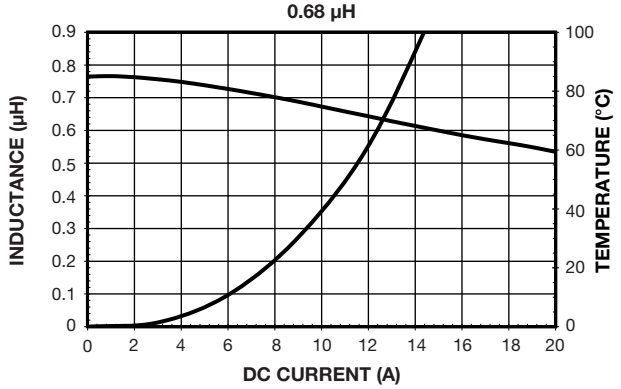
0.33 µH



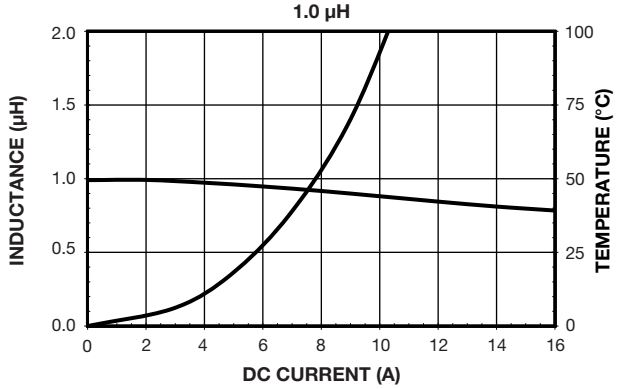
0.47 µH



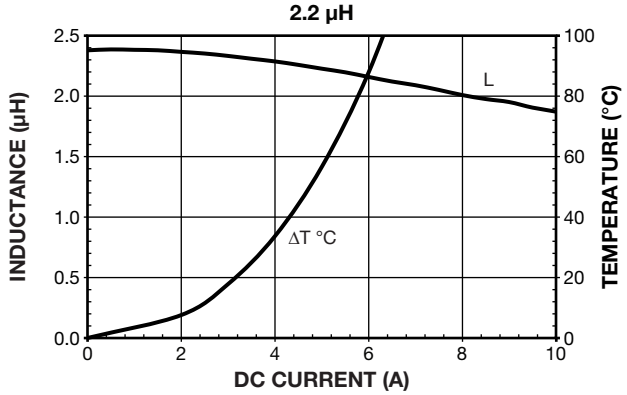
0.68 µH



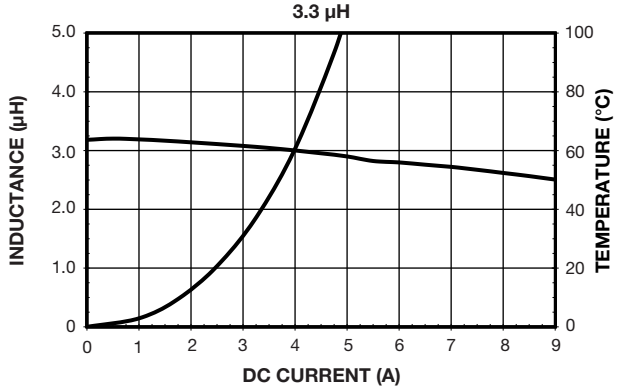
1.0 µH



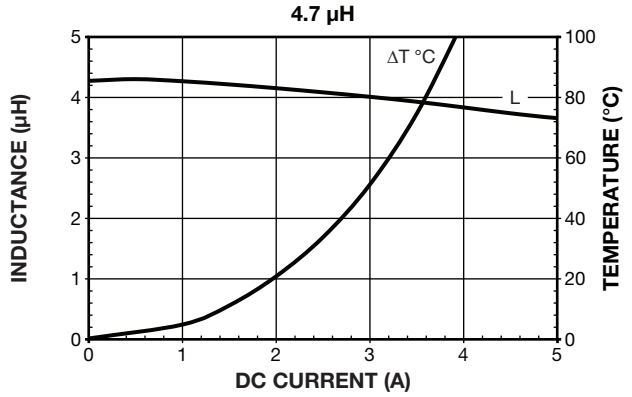
2.2 µH

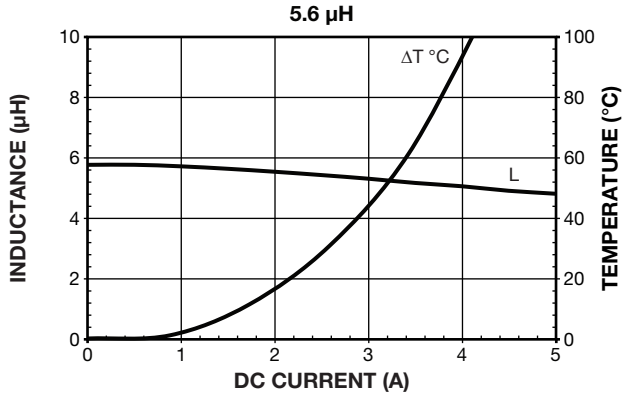


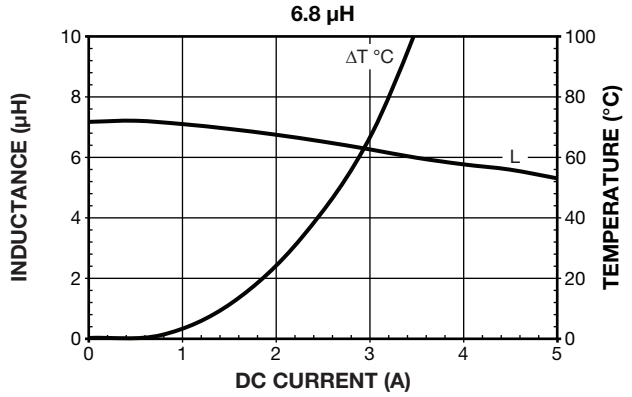
3.3 µH

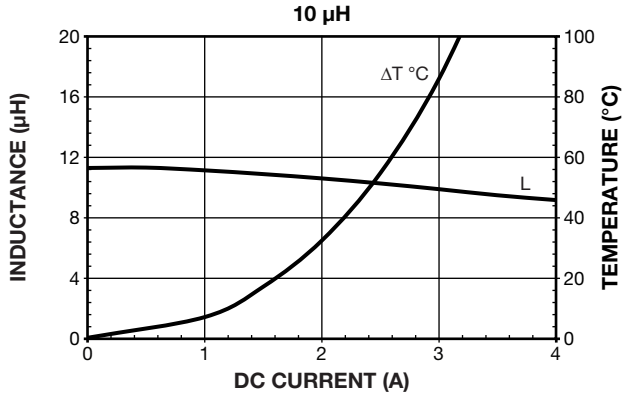


PERFORMANCE GRAPHS

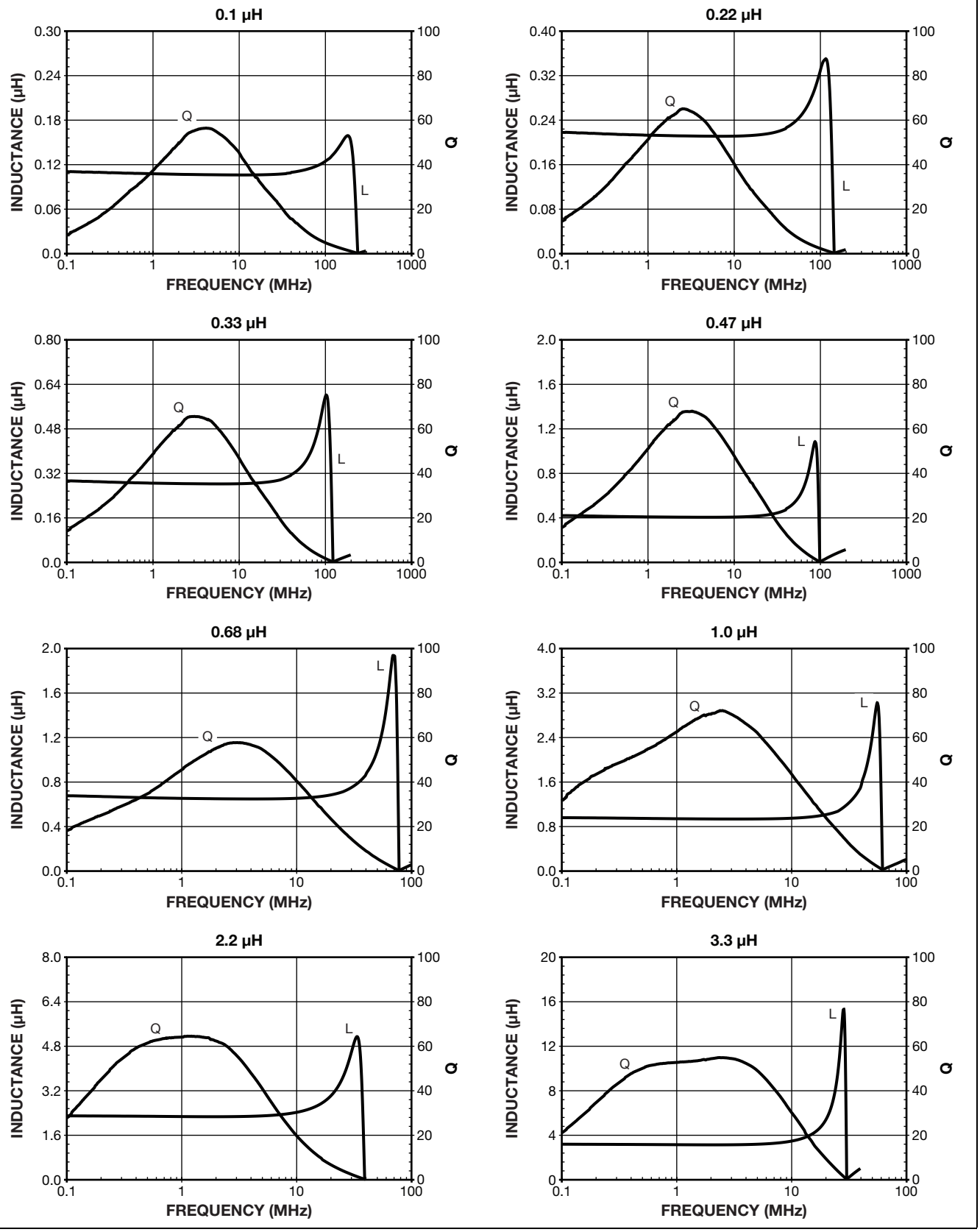




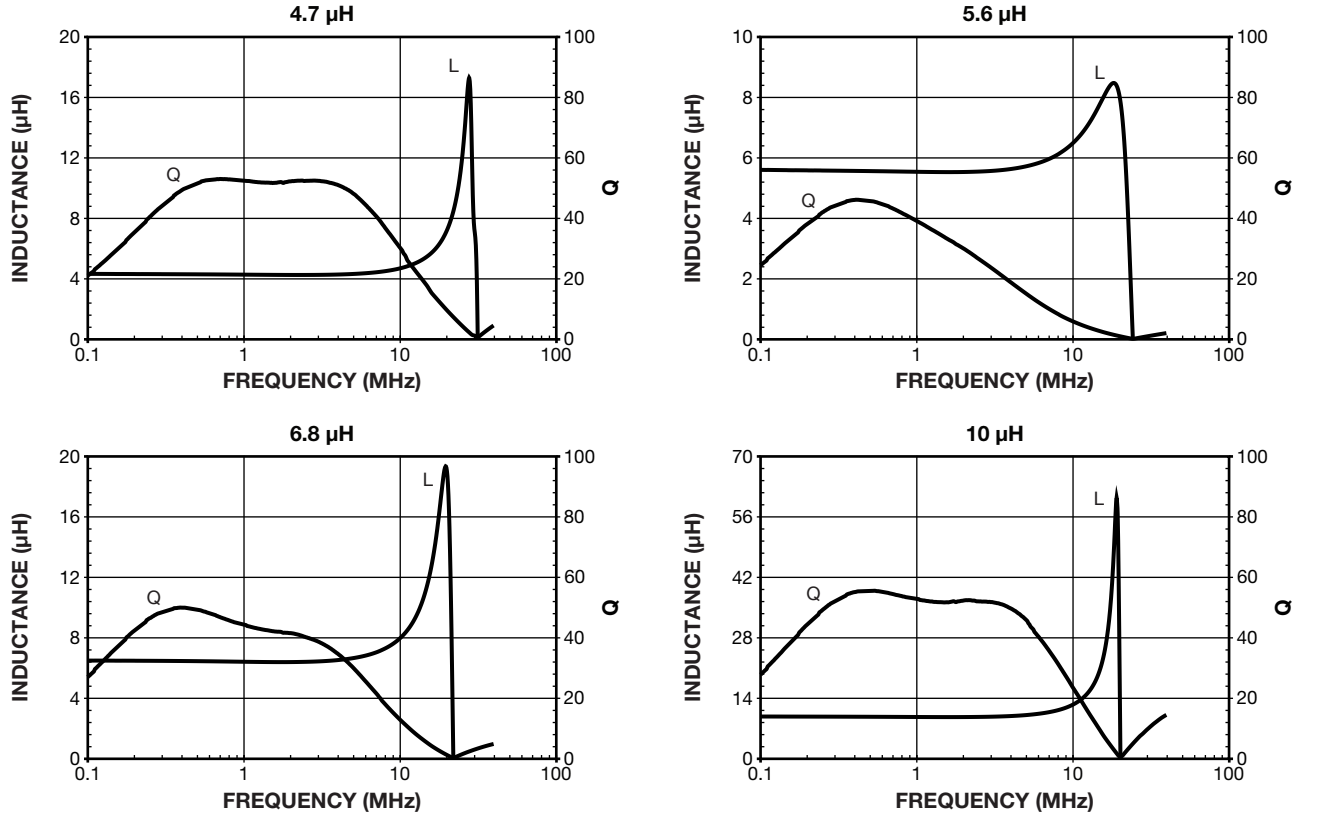




PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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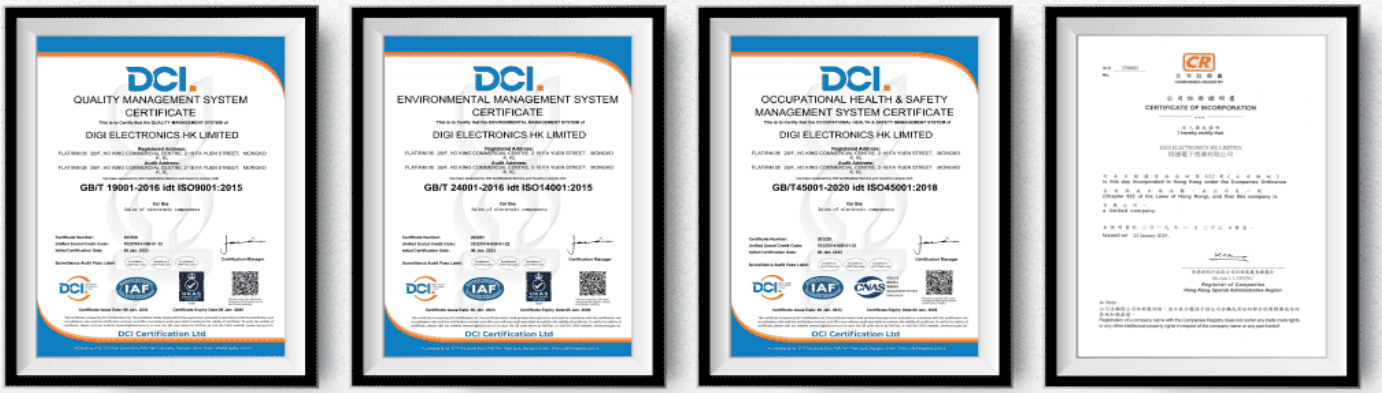

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