IHLP2525CZER5R6M8A Datasheet

https://www.DiGi-Electronics.com

DiGi Electronics Part Number	IHLP2525CZER5R6M8A-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IHLP2525CZER5R6M8A
Description	FIXED IND 5.6UH 5.3A 45.6MOHM SM
Detailed Description	5.6 µH Shielded Molded Inductor 5.3 A 45.6mOhm Max Nonstandard

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
IHLP2525CZER5R6M8A	Vishay Dale
Series:	Product Status:
IHLP-2525CZ-8A	Active
Type:	Material - Core:
Molded	-
Inductance:	Tolerance:
5.6 µH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
5.3 A	4.8A
Shielding:	DC Resistance (DCR):
Shielded	45.6mOhm Max
Q @ Freq:	Frequency - Self Resonant:
-	23MHz
Ratings:	Operating Temperature:
AEC-Q200	-55°C ~ 180°C
Inductance Frequency - Test:	Mounting Type:
100 kHz	Surface Mount
Package / Case:	Supplier Device Package:
Nonstandard	-
Size / Dimension:	Height - Seated (Max):
0.270" L x 0.255" W (6.86mm x 6.47mm)	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-2525CZ-8A

Vishay Dale

IHLP® Automotive Inductors, High Temperature (180 °C) Series

LINKS TO ADDITIONAL RESOURCES

Calculators

FEATURES

- High temperature, up to 180 °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 up to 10 times the current rating, depending on the duration
- Ultra low buzz noise, due to composite construction
- AEC-Q200 qualified
- IHLP design; PATENT(S): www.vishay.com/patents
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE GRADE

Pb-free

RoHS COMPLIANT

HALOGEN FREE GREEN (5-2008)

APPLICATIONS

- Brushless DC motor for auto EGR (exhaust gas recycle) pump
- ADAS (advanced driver-assistance systems)
- Body electronics
  - -LED lighting
  - -Infotainment / driver information
  - -Mirror / window / door soft close control
- EMI filter up to 180 °C
- Storage inductors for GaN switched-mode power supply applications

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)
0.33	3.25	3.48	22.0	16.0	112
0.47	3.87	4.14	20.0	14.0	79.6
0.68	5.38	5.76	16.5	17.0	62.8
0.82	6.75	7.22	13.8	16.8	72.9
1.0	7.90	8.45	12.0	13.0	59.1
1.5	12.3	13.2	10.6	11.6	45.9
2.2	17.10	18.30	8.1	10.8	34.3
3.3	26.50	28.40	6.8	8.3	28.3
4.7	35.90	38.40	5.6	5.6	25.5
5.6	42.60	45.60	5.3	4.8	23.0
6.8	53.80	57.60	4.4	4.4	16.0
10	71.90	76.90	4.0	2.9	13.9
15	98.9	105.9	3.7	2.8	10.4
22	163.0	174.0	2.8	2.2	8.76

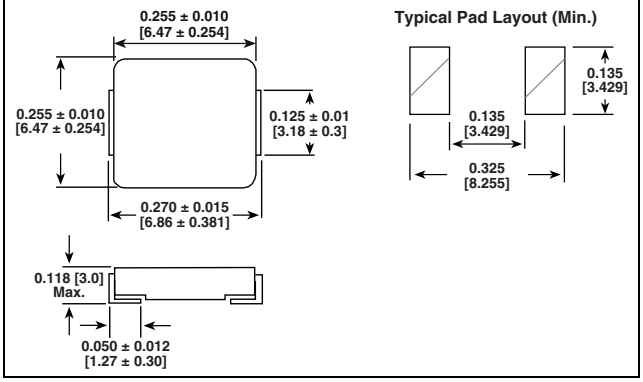
Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +180 °C
- The part temperature (ambient + temp. rise) should not exceed 180 °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

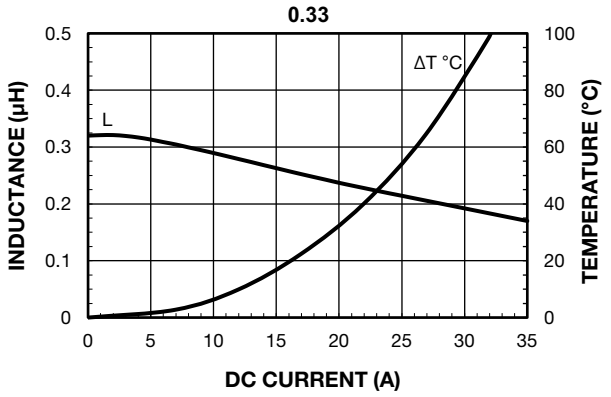
IHLP-2525CZ-8A	22 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

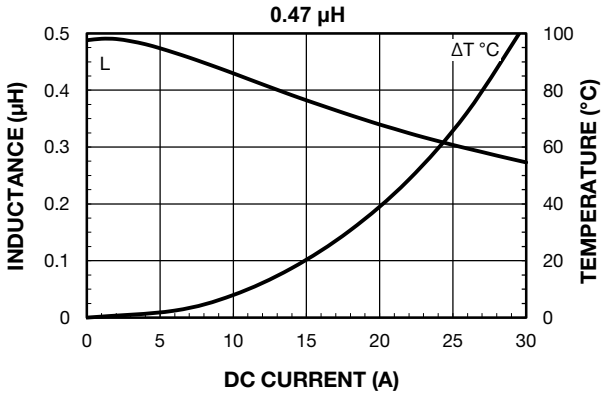
GLOBAL PART NUMBER

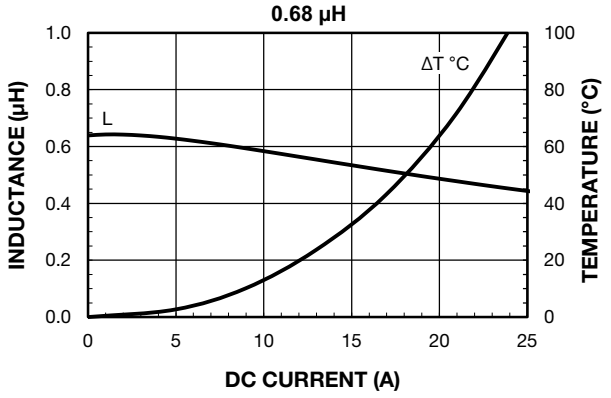
I	H	L	P	2	5	2	5	C	Z	E	R	2	2	0	M	8	A
MODEL				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

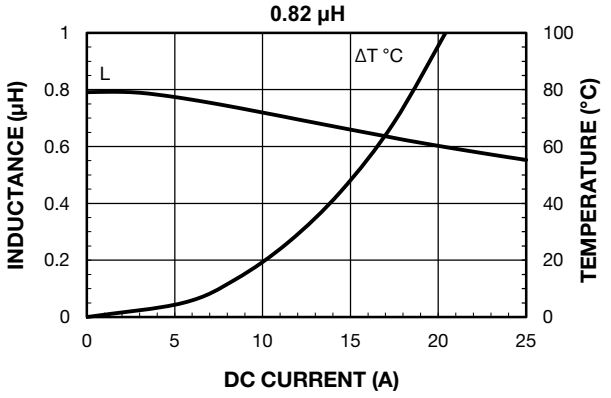
PATENT(S): www.vishay.com/patents
This Vishay product is protected by one or more United States and international patents.

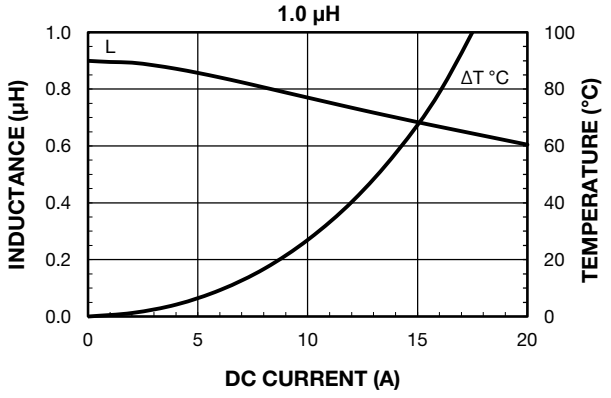
PERFORMANCE GRAPHS

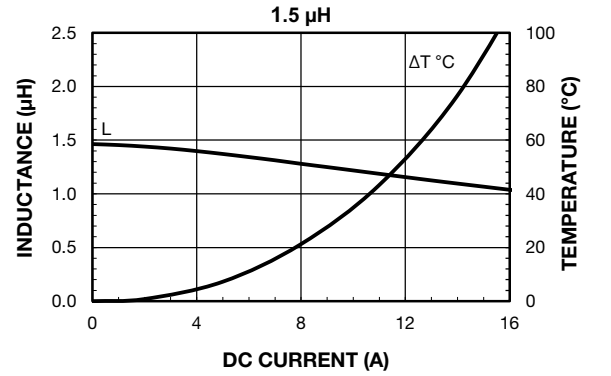


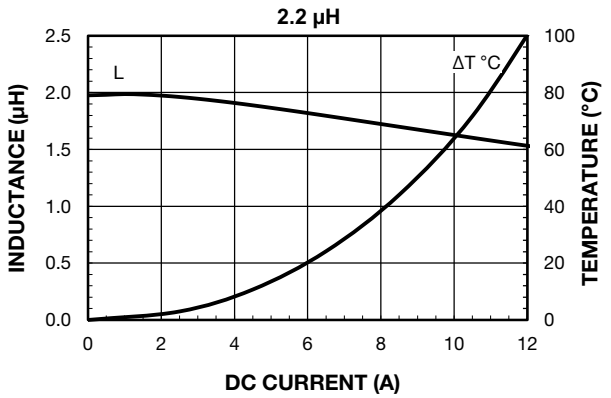


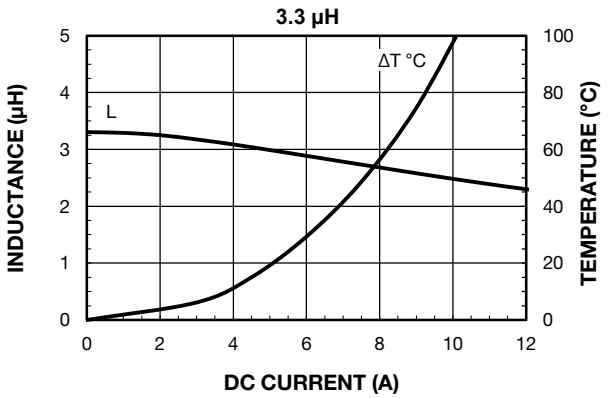












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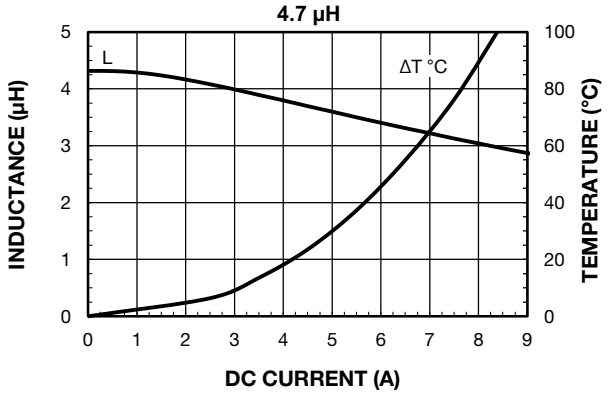
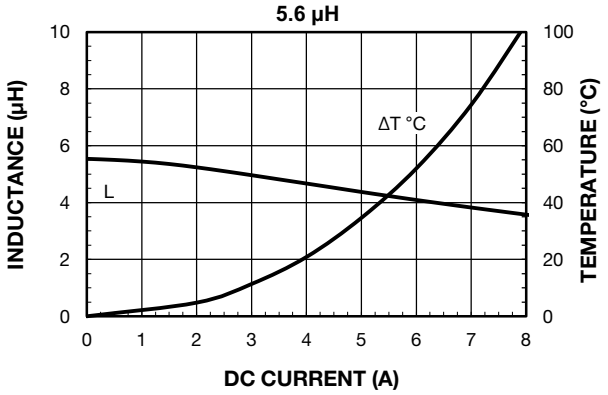
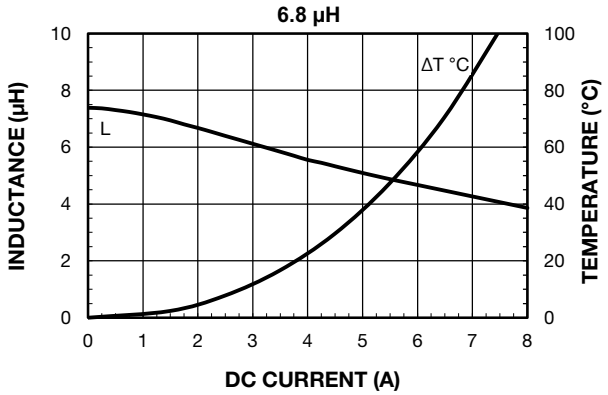
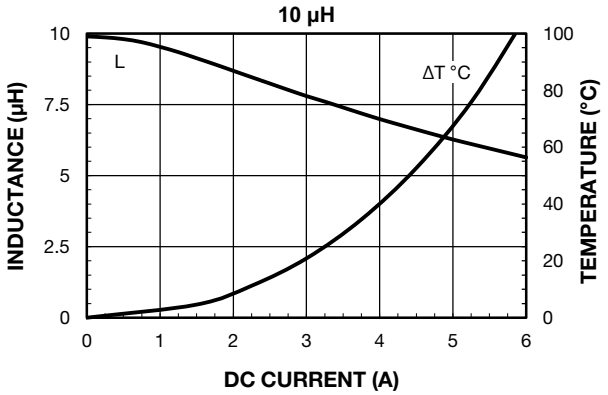
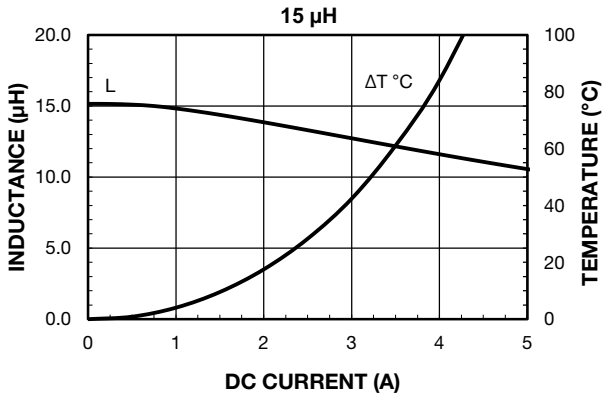
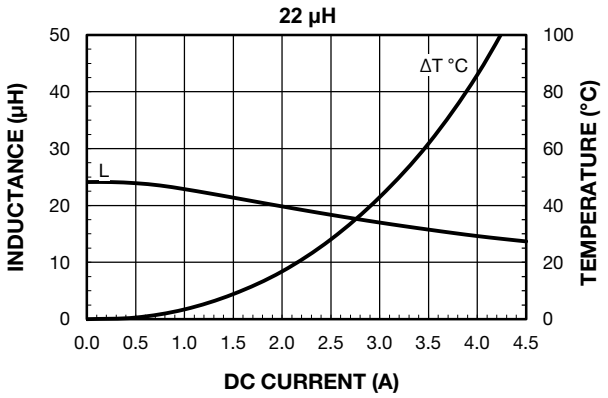




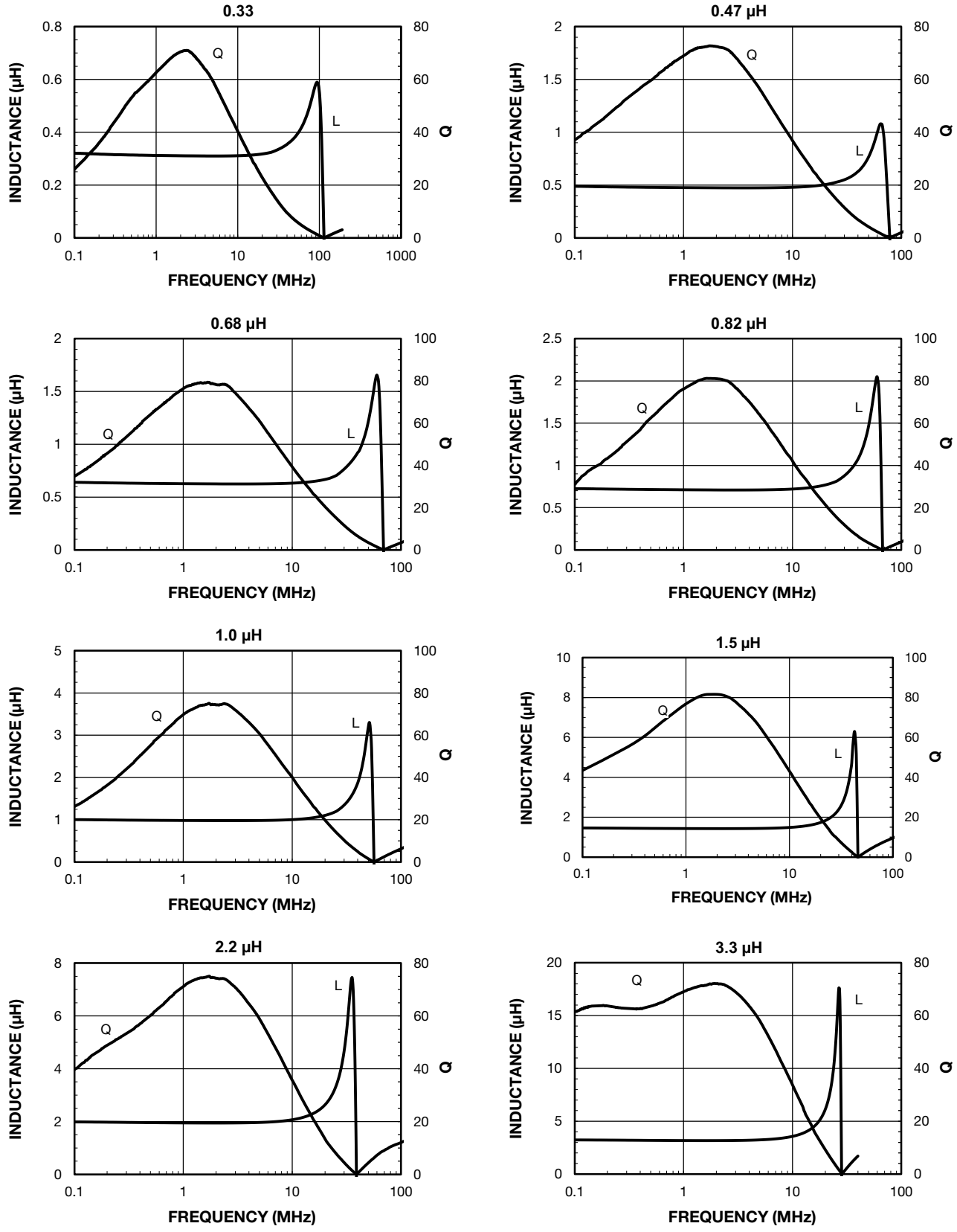








PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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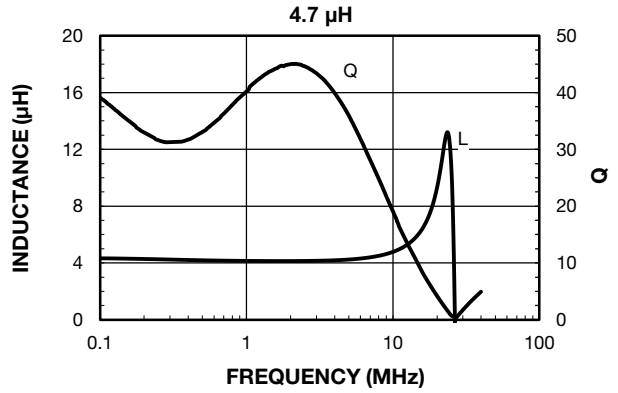

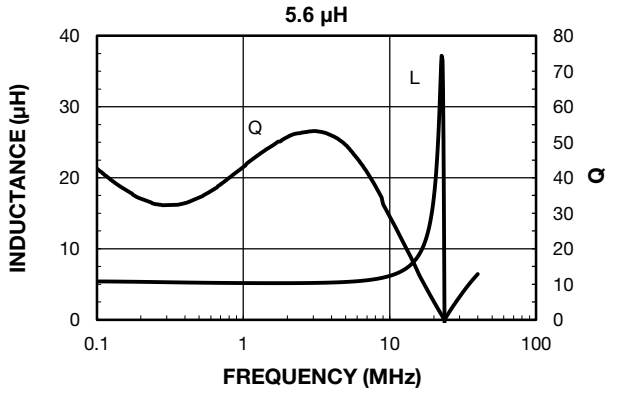

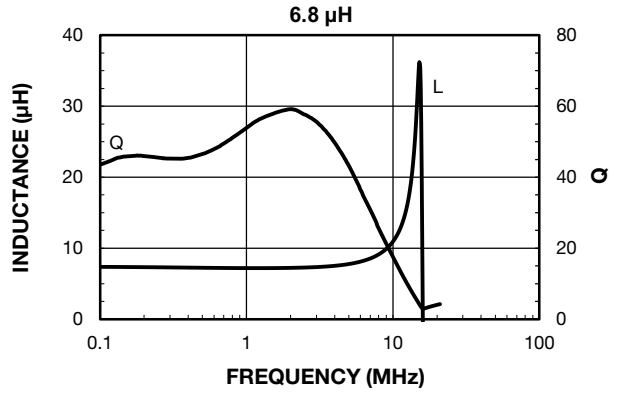

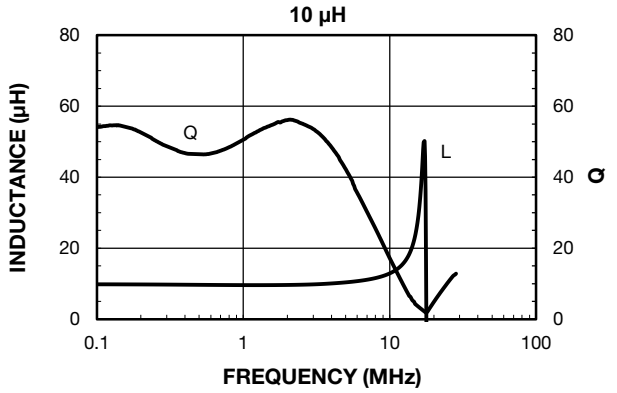

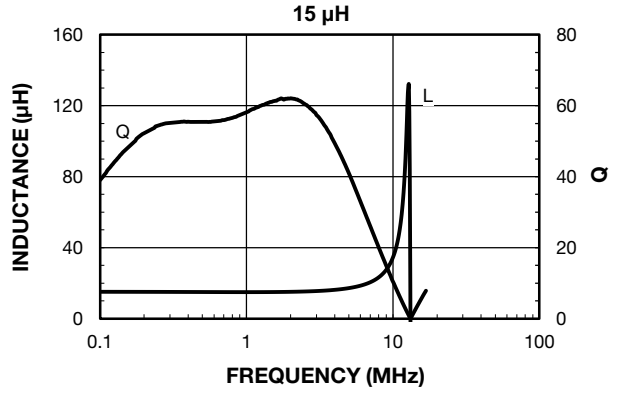

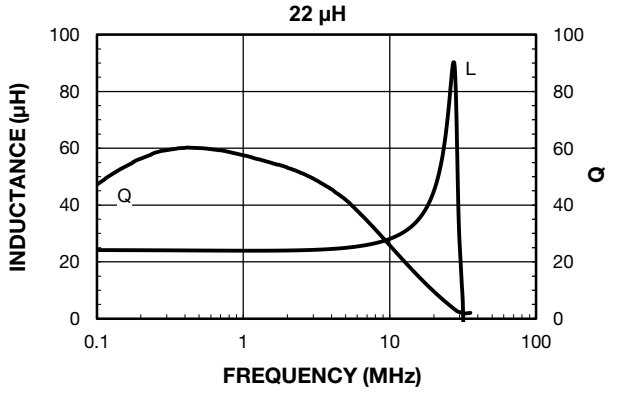

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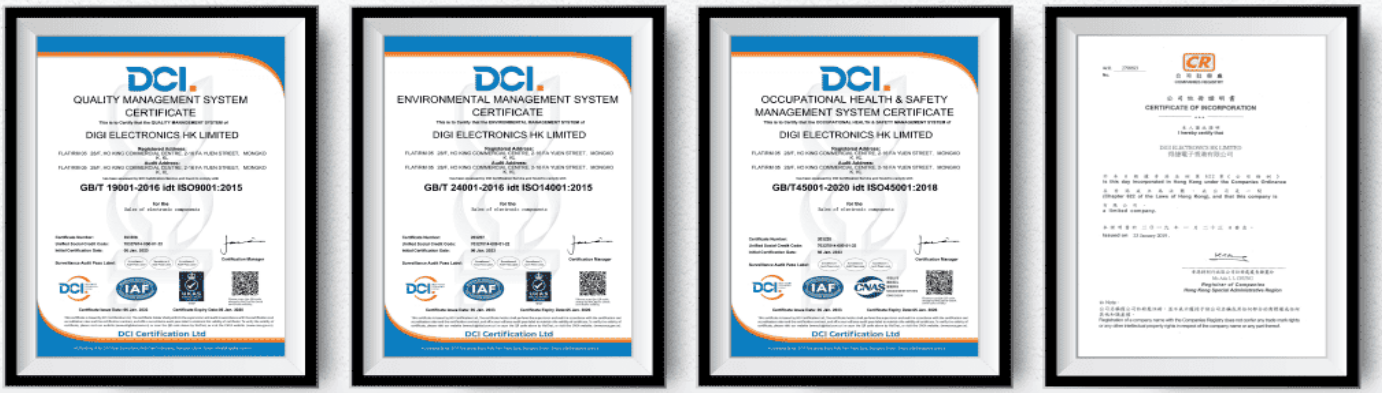

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