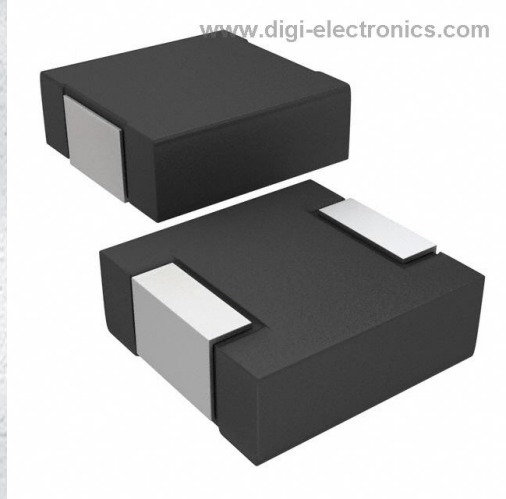
IHLM2525CZERR68M06 Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	IHLM2525CZERR68M06-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IHLM2525CZERR68M06
Description	FIXED IND 680NH 15.5A 5.2MOHM SM
Detailed Description	680 nH Shielded Inductor 15.5 A 5.2mOhm Nonstandard

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
IHLM2525CZERR68M06	Vishay Dale
Series:	Product Status:
IHLM-2525CZ-06	Active
Type:	Material - Core:
-	-
Inductance:	Tolerance:
680 nH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
15.5 A	25A
Shielding:	DC Resistance (DCR):
Shielded	5.2mOhm
Q @ Freq:	Frequency - Self Resonant:
-	-
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):
0.270" L x 0.255" W (6.86mm x 6.47mm)	0.118" (3.00mm)

Environmental & Export classification

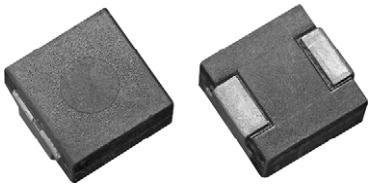
RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8504.50.4000	

VISHAY
www.vishay.com

IHLM-2525CZ-06

Vishay Dale

Low Profile, Power Inductors - DC Resistance Tolerance 10 % - Special Molding



ADDITIONAL RESOURCES

3D Models Design Tools

FEATURES

- Lowest molded height (3.0 mm) in this package footprint
- Shielded construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to SRF (see "Standard Electrical Specifications" table)
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Encapsulated body offers improved environmental protection and moisture resistance
- Higher dielectric withstanding voltage vs. IHLP
- Flame retardant encapsulant (UL 94 V-0)
- Corrosion resistant package
- 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

APPLICATIONS

- Tolerance DCR for current sense applications
- Improved current balance in phased power supplies
- Improved thermal management
- PDA / notebook / desktop / server and battery powered devices
- High current, low profile POL converters
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate arrays (FPGA)

STANDARD ELECTRICAL SPECIFICATIONS

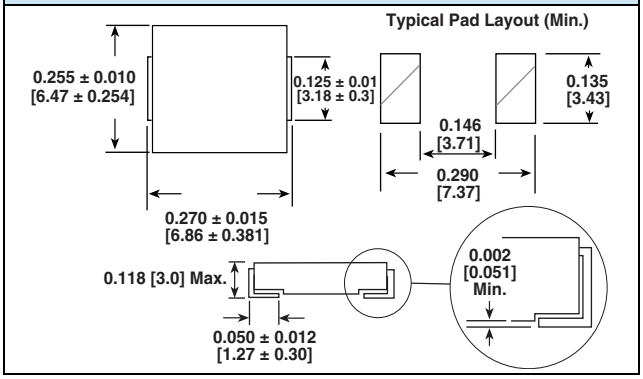
L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR ± 10 % AT 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A) (2)	SRF TYP. (MHz)
0.10	1.37	32.5	60	400
0.20	2.34	24	41	150
0.33	3.20	20	30	100
0.47	3.86	17.5	26	75
0.68	5.20	15.5	25	62
0.82	7.41	13	24	60
1.0	8.84	11	22	55
1.5	14.50	9	18	40
2.2	17.73	8	14	38
3.3	28.21	6	13.5	30
4.7	37.11	5.5	10	25
8.2	61.47	4	7.5	17
10	97.71	3	7.0	16

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

IHLM-2525CZ-06	1.0 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

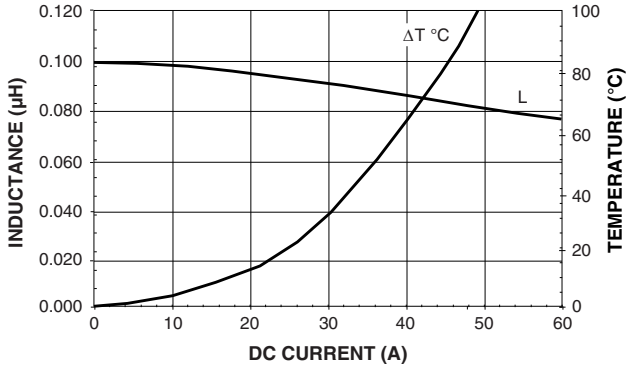
GLOBAL PART NUMBER

I	H	L	M	2	5	2	5	C	Z	E	R	1	R	0	M	0	6
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

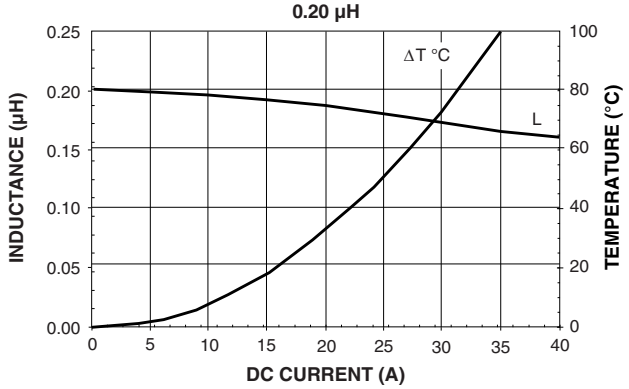
PATENT(S): www.vishay.com/patents
This Vishay product is protected by one or more United States and international patents.

PERFORMANCE GRAPHS

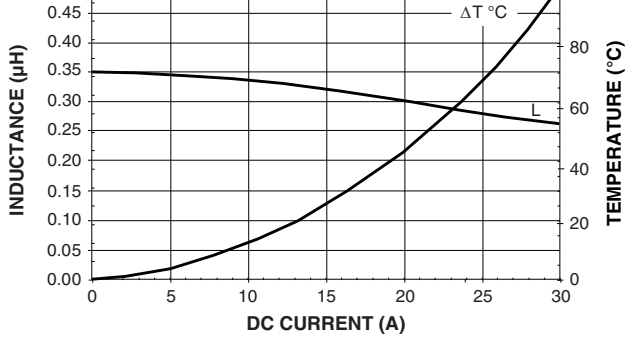
0.10 µH



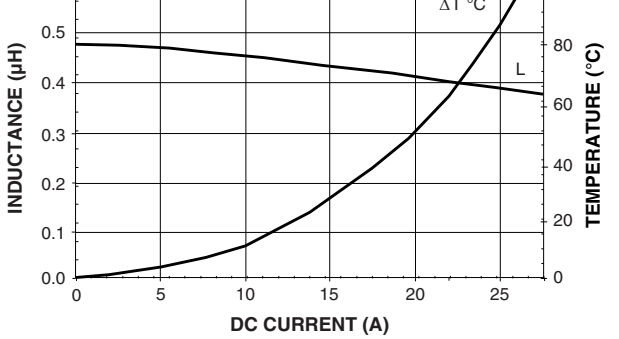
0.20 µH



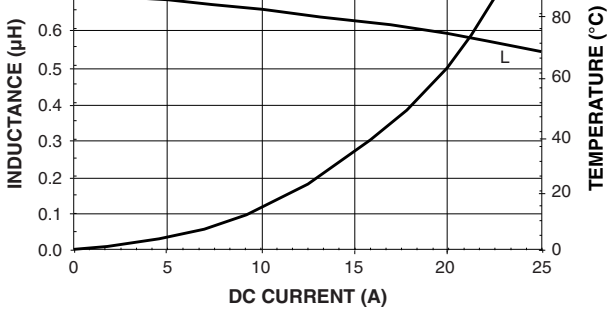
0.33 µH



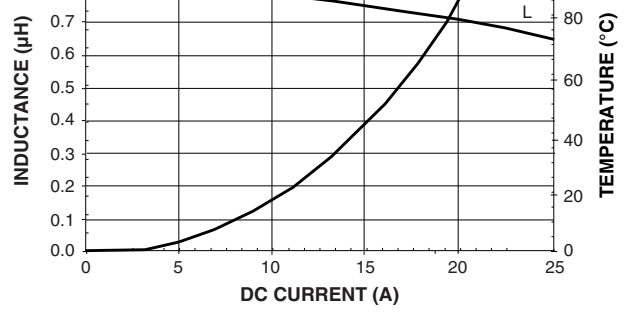
0.47 µH



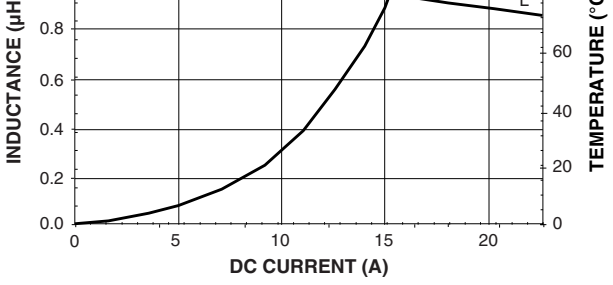
0.68 µH



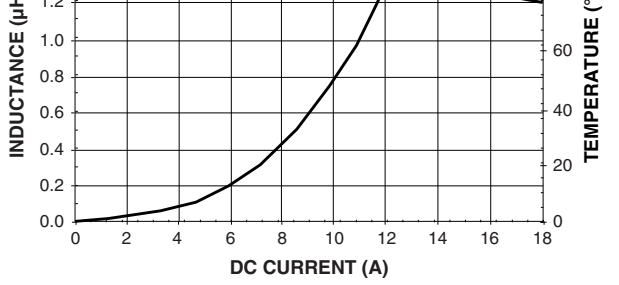
0.82 µH



1.00 µH

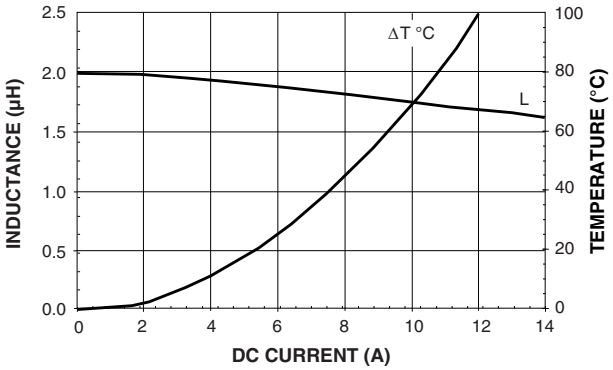


1.5 µH

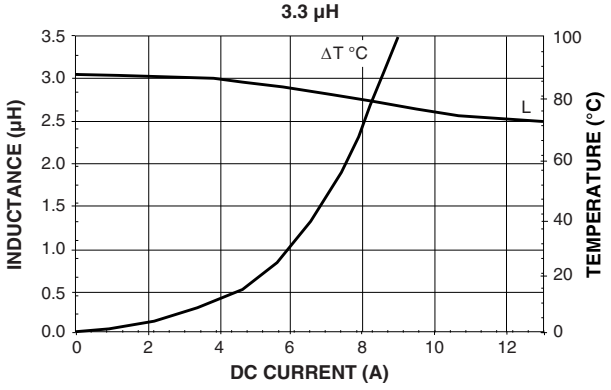


PERFORMANCE GRAPHS

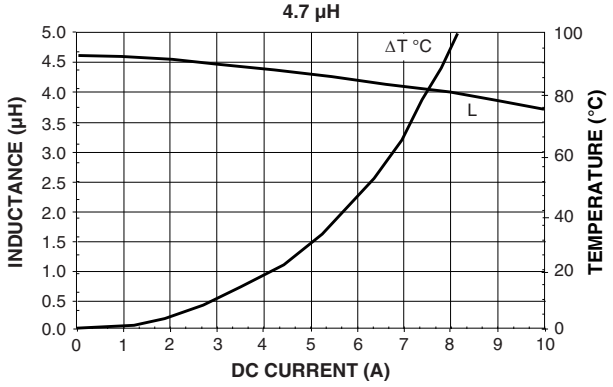
2.2 µH



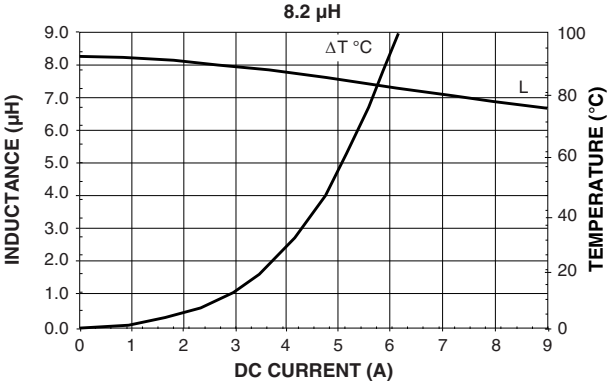
3.3 µH



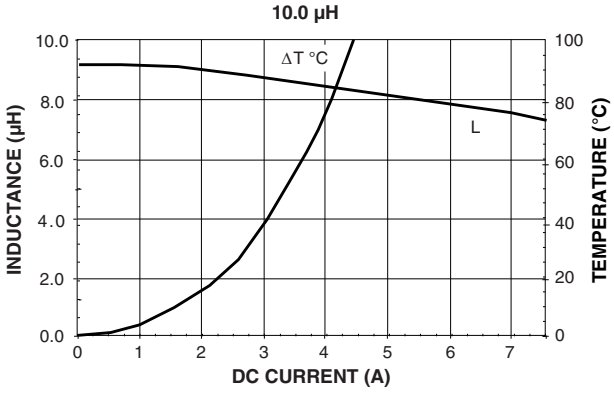
4.7 µH



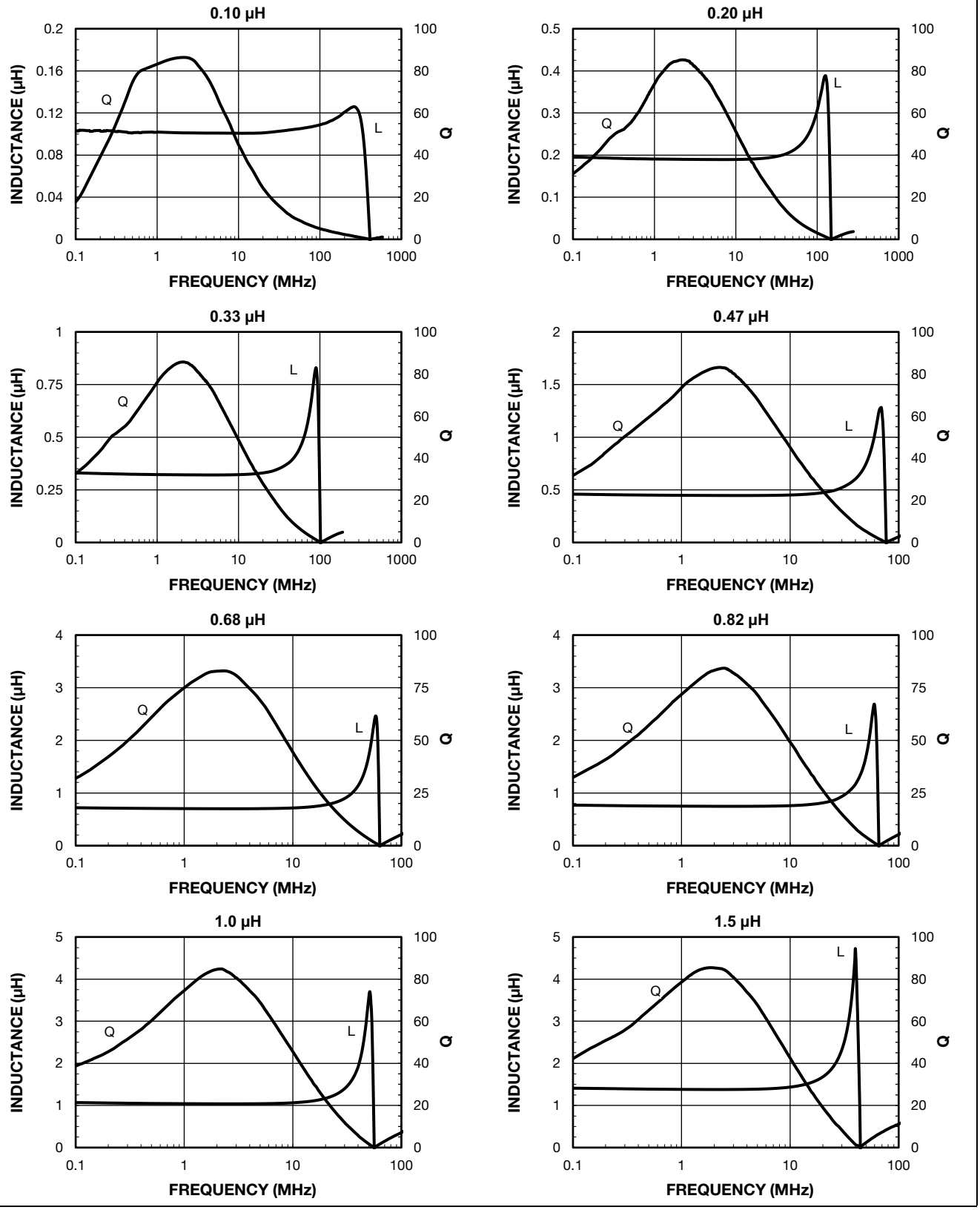
8.2 µH



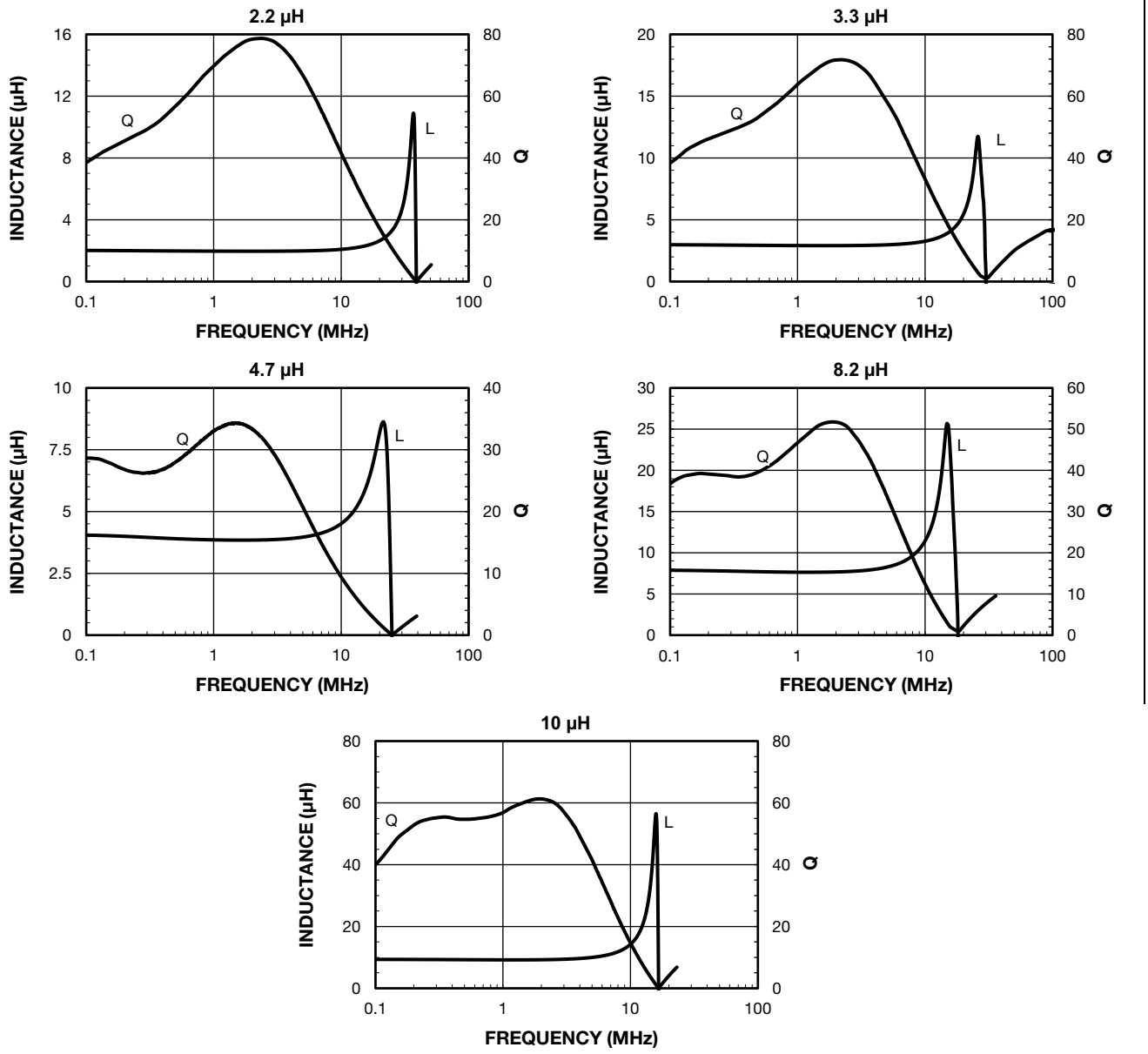
10.0 µH



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



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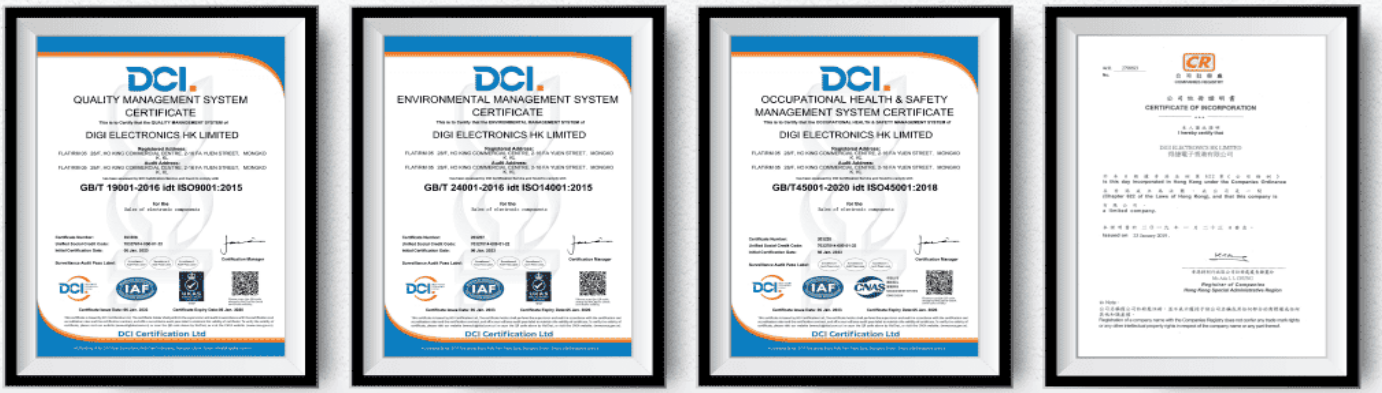

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