



HCL3 SERIES

MAXIMUM POWER DENSITY



ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +180
- **Storage Temperature:** -55°C to +180
- **Temperature Rise:** See Performance Curves
- **Dielectric Withstanding Voltage:** 500 V_{RMS}
- **Different electrical values available upon request**

FEATURES

- **Terminations:** Tin-lead, Lead Free (RoHS), HMP required high temperature version
- **Moisture, Shock and Immersion Resistant**
- **Magnetically Shielded**

APPLICATIONS

- DC power choke
- Resonant inductor
- Input/Output filter
- Swinging inductor

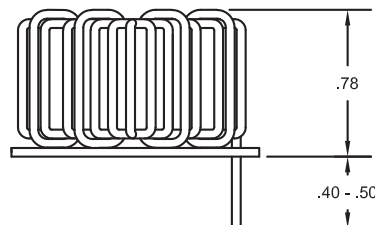
RoHS VERSION AVAILABLE

HI-RELIABILITY

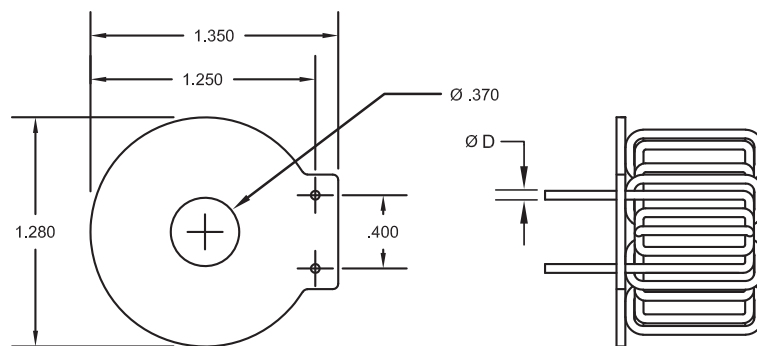
Inductance Range (mH)	DCR max (Ohms)	Current Rating (A)
0.027 - 17.0	0.006 - 2.8	1.7 - 50

ALL DIMENSIONS: INCHES

MARKINGS: LASER ETCH OR INK

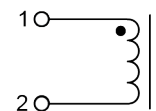


SIDE VIEW



BOTTOM VIEW

SIDE VIEW



SCHEMATIC

CUSTOM DESIGNS & MODIFICATIONS:

Other electrical configurations and performance characteristics are available in various sizes and package types

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DATA TABLE

Vanguard P/N	Inductance ±10% (mH)	Inc. Inductance (mH)	DCR max (Ohms)	Rated Current (ADC)	Lead Dimension "D"
HCL3-270	0.027	0.015	0.006	50	0.082
HCL3-430	0.043	0.031	0.015	35	0.065
HCL3-680	0.068	0.033	0.015	35	0.058
HCL3-101	0.10	0.067	0.02	22	0.058
HCL3-231	0.23	0.120	0.04	15	0.051
HCL3-611	0.65	0.380	0.11	9.9	0.041
HCL3-102	1.0	0.670	0.18	7.1	0.033
HCL3-182	1.8	1.3	0.45	4.5	0.026
HCL3-252	2.5	1.8	0.60	4.0	0.024
HCL3-502	5.0	3.5	1.0	3.0	0.021
HCL3-752	7.5	5.4	1.6	2.4	0.019
HCL3-103	10.0	6.7	1.8	2.2	0.019
HCL3-153	15.0	10.3	2.6	1.8	0.017
HCL3-173	17.0	11.3	2.8	1.7	0.017

1/ Inductance measured at 10 kHz, 0.1 V_{RMS}

2/ DCR measured at room temperature

3/ Incremental inductance is the approximate value that the inductance will drop when rated current is applied

4/ Maximum Weight: TBD

VE PART NUMBER
STRUCTURE KEYINDUCTANCE
(mH)

The first two digits are significant. The last digit specifies zeroes to follow:

102 = 1000 mH

EXAMPLE: HCL3-102KS-1-B

TOLERANCE
(%)

K	± 10
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TERMINATION

S	SnPb
R	Pure Tin

RELIABILITY

1	COTS/EM
7	Other

PACKAGING
(Default Bulk)

B	Bulk
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CUSTOM DESIGNS & MODIFICATIONS:

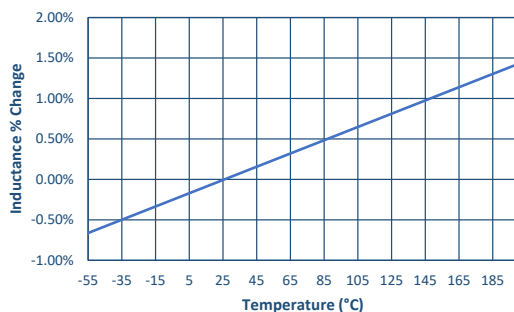
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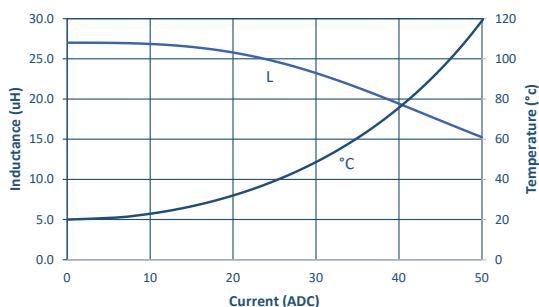




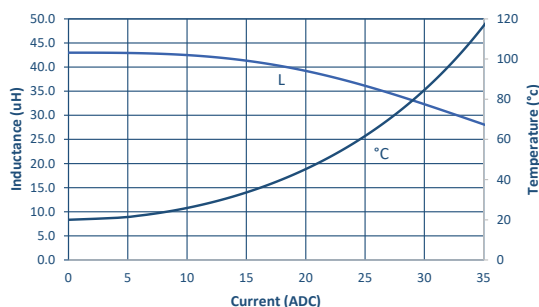
Inductance % Change Vs. Temperature



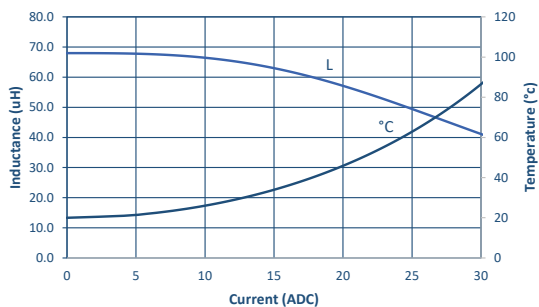
HCL3-270



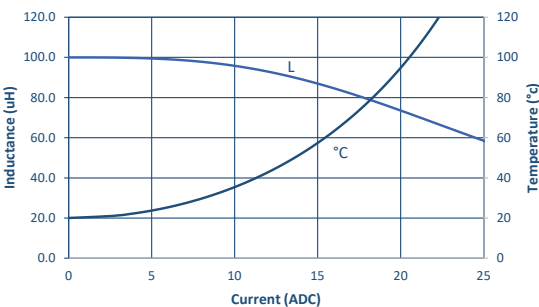
HCL3-430



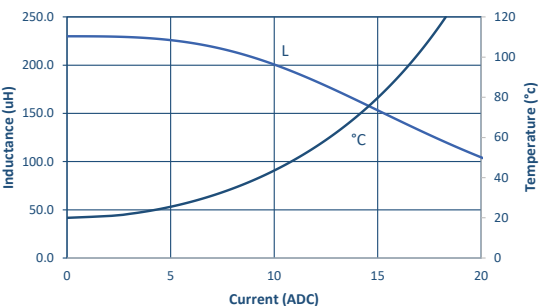
HCL3-680



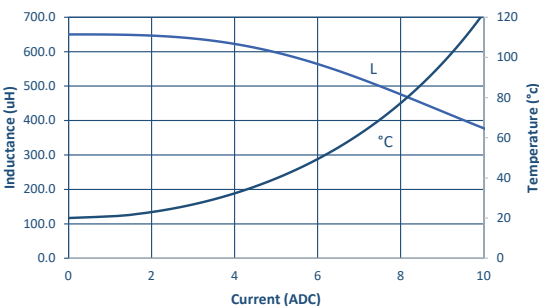
HCL3-101



HCL3-231



HCL3-611

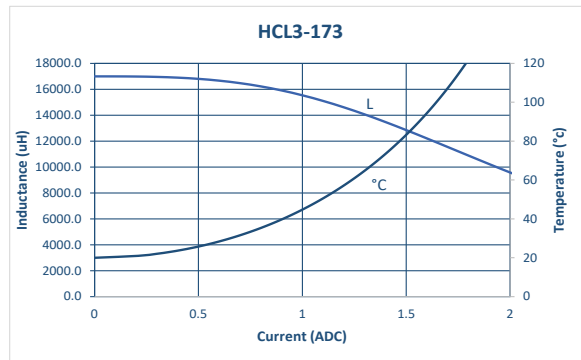
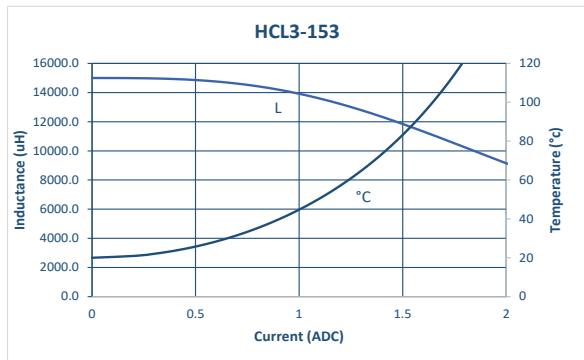
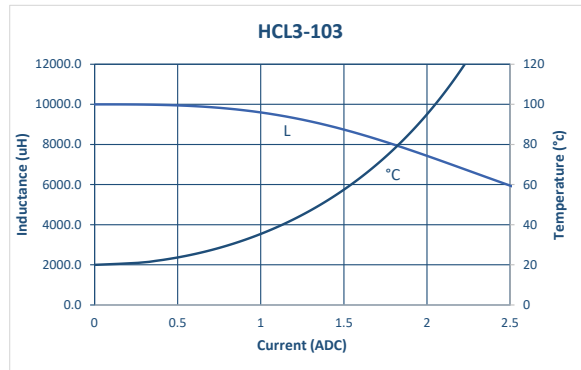
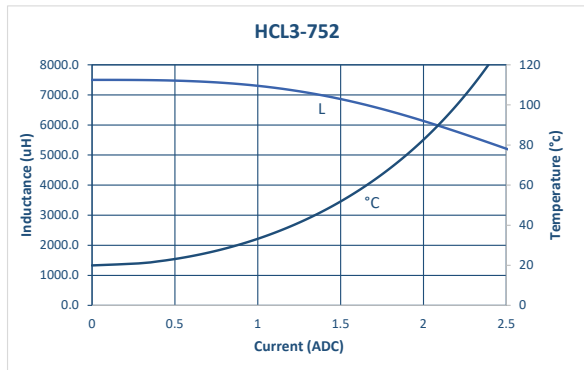
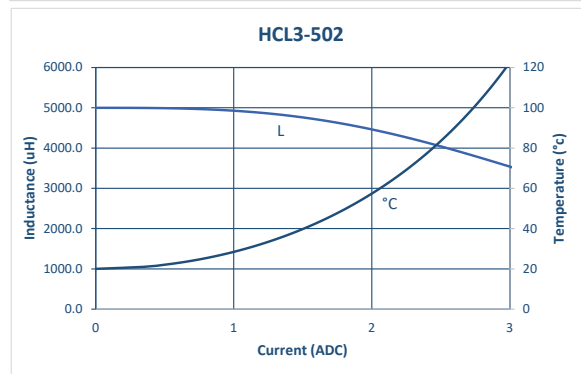
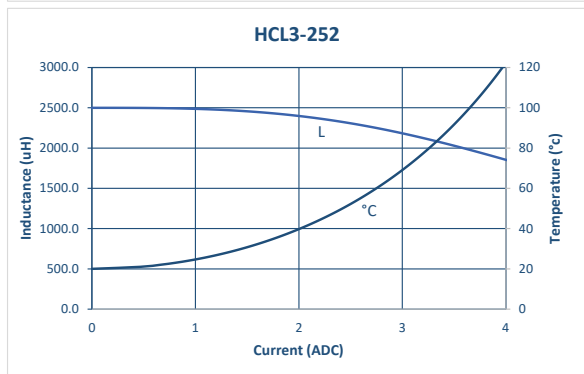
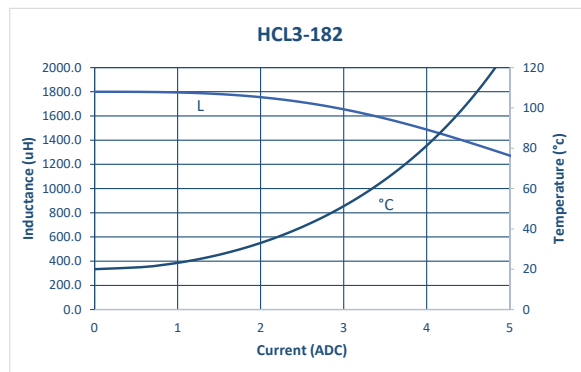
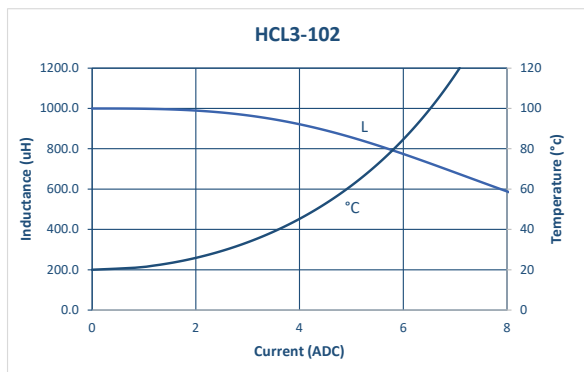


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