



## HCL 1 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<sub>RMS</sub>
- **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

#### CUSTOM DESIGNS & MODIFICATIONS:

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

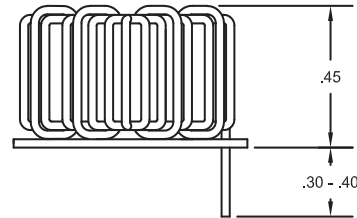
### RoHS VERSION AVAILABLE

### HI-RELIABILITY

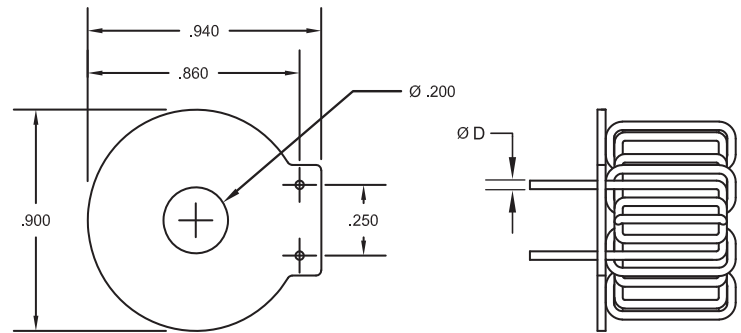
Inductance Range	DCR max (Ohms)	Current Rating (A)
14 uH - 2.50 mH	0.010 - 1.72	2.0 - 30

ALL DIMENSIONS: INCHES

MARKINGS: LASER ETCH OR INK

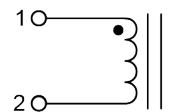


SIDE VIEW



BOTTOM VIEW

SIDE VIEW



SCHEMATIC





### DATA TABLE

Vanguard P/N	Inductance ±10%	Inc. Inductance (uH)	DCR max (Ohms)	Rated Current (ADC)	Lead Dimension "D"
HCL1-140	14 uH	9.2	0.010	30	0.052
HCL1-500	50 uH	31	0.017	15	0.046
HCL1-111	110 uH	71	0.05	9.5	0.037
HCL1-201	200 uH	126	0.15	8.3	0.033
HCL1-391	390 uH	265	0.16	4.5	0.026
HCL1-591	590 uH	446	0.28	4.0	0.021
HCL1-751	750 uH	541	1.28	3.7	0.021
HCL1-102	1.00 mH	748	1.28	3.1	0.019
HCL1-182	1.85 mH	1346	0.83	2.4	0.017
HCL1-222	2.20 mH	1540	0.72	2.3	0.017
HCL1-252	2.50 mH	1873	1.72	2.0	0.015

1/ Inductance measured at 10 kHz, 0.1 V<sub>RMS</sub>

2/ DCR measured at room temperature

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

4/ Maximum Weight: TBD

### VE PART NUMBER STRUCTURE KEY

#### INDUCTANCE (uH)

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

140 = 14 uH

### EXAMPLE: HCL1-140KS-1-B

#### TOLERANCE (%)

K	± 10
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#### TERMINATION

S	SnPb
R	Pure Tin

#### RELIABILITY

1	COTS/EM
7	Other

#### PACKAGING (Default Bulk)

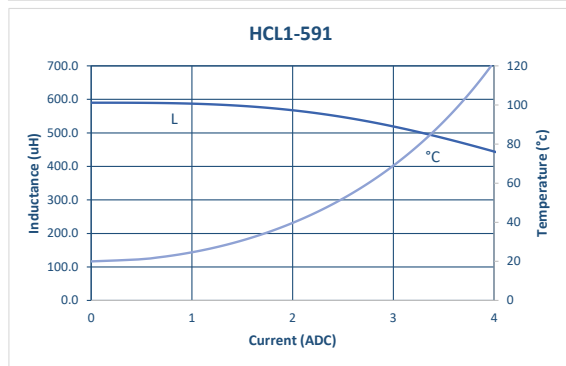
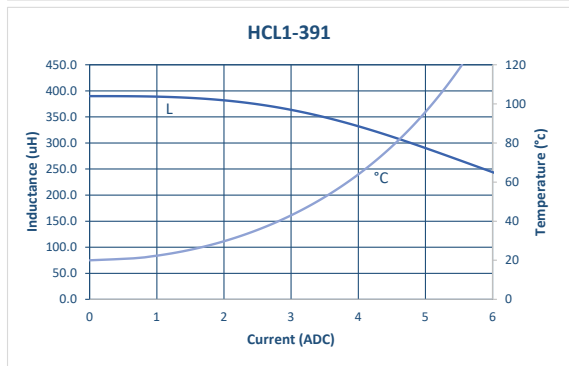
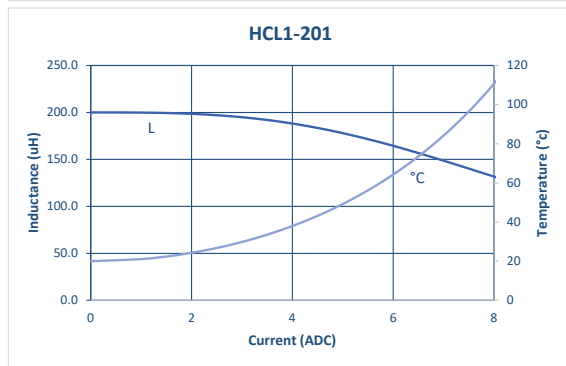
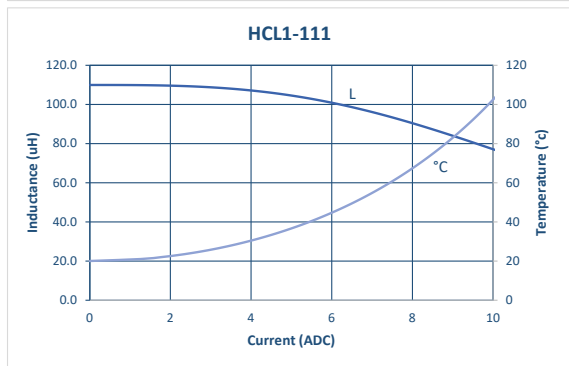
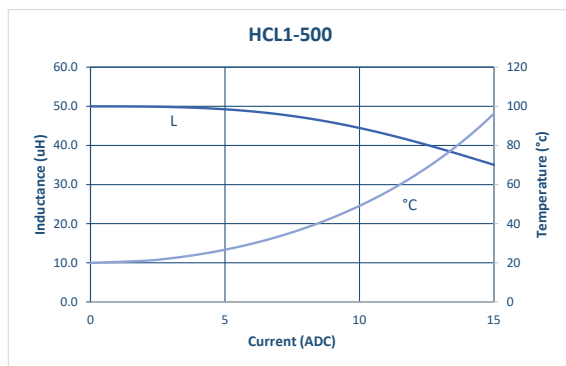
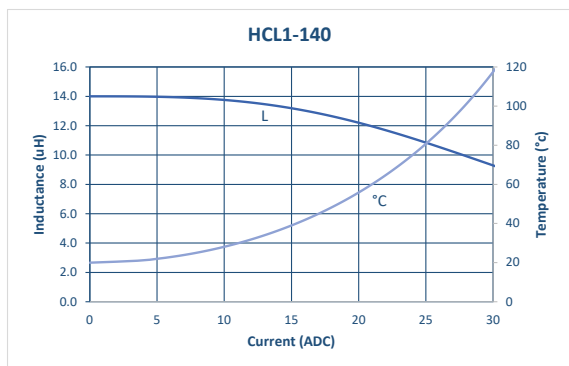
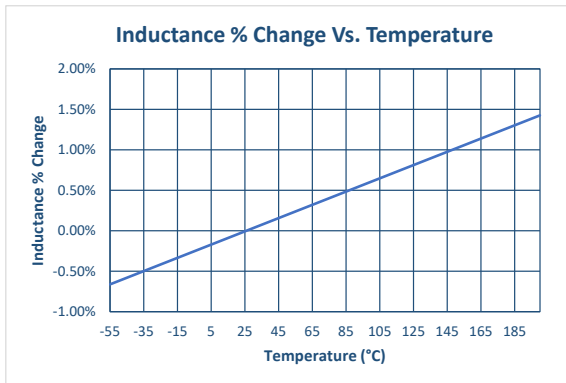
B	Bulk
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### CUSTOM DESIGNS & MODIFICATIONS:

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

HCL1 SERIES



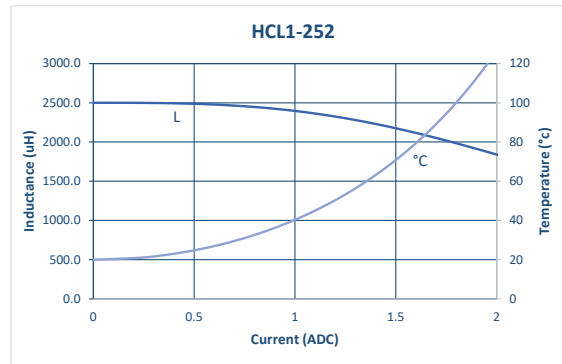
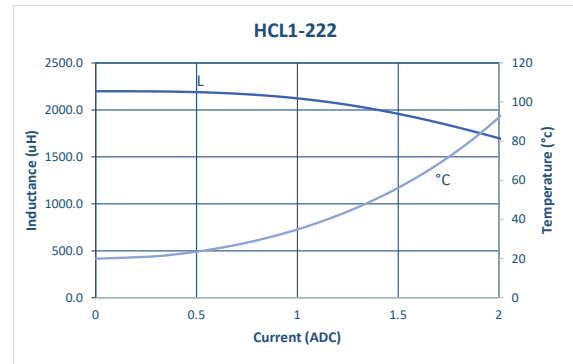
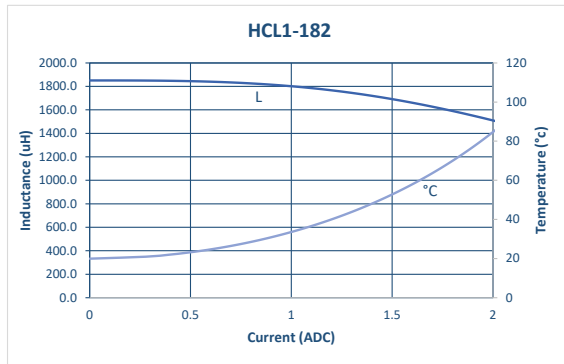
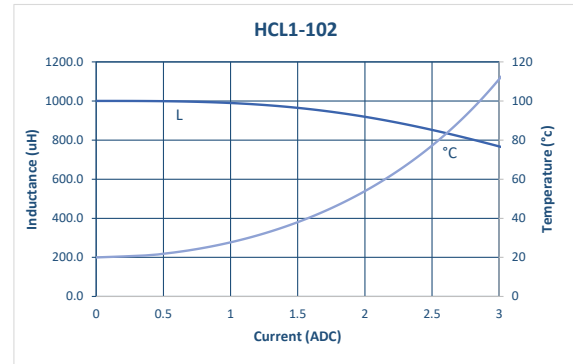
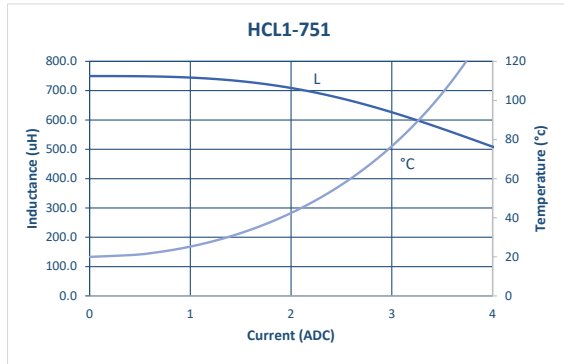


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