SHCL2 SERIES

MAXIMUM POWER DENSITY

AS9100 D CERTIFIED
ISO 9001 CERTIFIED
ITAR COMPLIANT

ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** −55°C to +180°C
- **Storage Temperature:** −55°C to +180°C
- **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**
- Built to meet **MIL-STD-981** specifications
- **NASA outgassing compliant per ASTM E595** (TML <1%, CVCM <0.1%)

APPLICATIONS

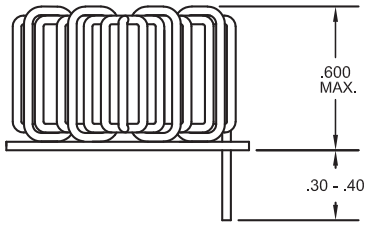
- DC power choke
- Resonant inductor
- Input/Ouput filter
- Swinging inductor

ALL PARTS AVAILABLE AS CLASS S OR CLASS B — MIL-STD-981

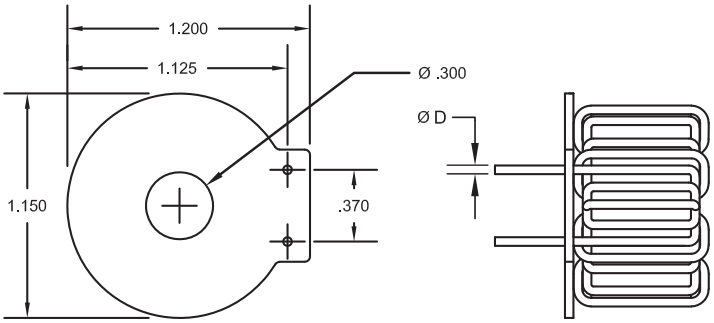
Inductance Range (mH)	DCR max (Ohms)	Current Rating (A)
0.025 - 16.0	0.011 - 4.5	1.4 - 27.6

ALL DIMENSIONS: INCHES

MARKINGS: LASER ETCH OR INK



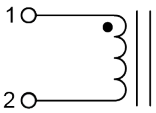
SIDE VIEW



BOTTOM VIEW

SIDE VIEW

Tolerances ±.010 inches



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) 6/	Rated Current (Adc) 7/	Lead Dimension "D"
SHCL2-250	0.025	0.020	0.011	15.0	27.6	0.052
SHCL2-500	0.050	0.035	0.015	12.6	23.1	0.052
SHCL2-750	0.075	0.047	0.020	11.3	20.8	0.052
SHCL2-101	0.10	0.066	0.027	9.5	17.4	0.046
SHCL2-251	0.25	0.165	0.07	6.0	10.9	0.037
SHCL2-501	0.50	0.350	0.15	4.0	7.3	0.030
SHCL2-751	0.75	0.530	0.24	3.2	5.9	0.026
SHCL2-122	1.2	0.750	0.30	2.8	5.2	0.026
SHCL2-202	2.0	1.2	0.50	2.2	4.0	0.024
SHCL2-292	2.9	1.8	0.75	1.8	3.3	0.021
SHCL2-502	5.0	3.1	1.2	1.4	2.6	0.019
SHCL2-692	6.9	4.5	1.8	1.1	2.1	0.017
SHCL2-103	10.0	6.6	2.8	0.9	1.7	0.015
SHCL2-163	16.0	10.6	4.5	0.7	1.4	0.014

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 to when rated current is applied
4/ Maximum Weight: TBD
5/ All electrical values above are referenced at room temperature prior to burn-in, after burn-in the inductance can shift to approximately +/- 20%
6/ Based on 40°C temperature rise at an ambient temperature of 130°C. All burn-in testing is performed per this current value and MIL-PRF-27 Class T (170°C) operating temperature
7/ See performance curves for operating temperature versus applied current

VE PART NUMBER STRUCTURE KEY

EXAMPLE: SHCL2-101KS-3-B

INDUCTANCE (mH)

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

270 = 27uH
102 = 1.0mH
103 = 10mH

TOLERANCE (%)

K	± 10

TERMINATION

S	SnPb
R	Pure Tin

RELIABILITY

2	Group A MIL-STD-981
3	Group A+B MIL-STD-981
4	Group A+B+C MIL-STD-981
7	Other

PACKAGING (Default Bulk)

B	Bulk

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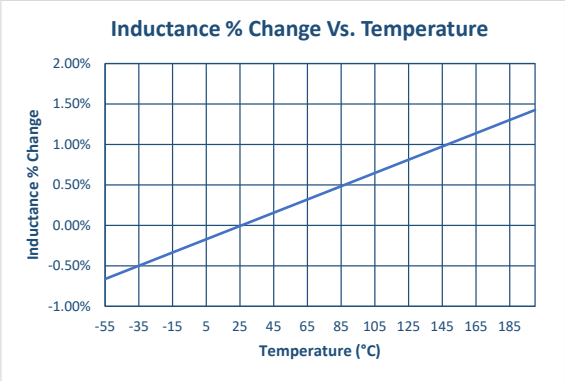

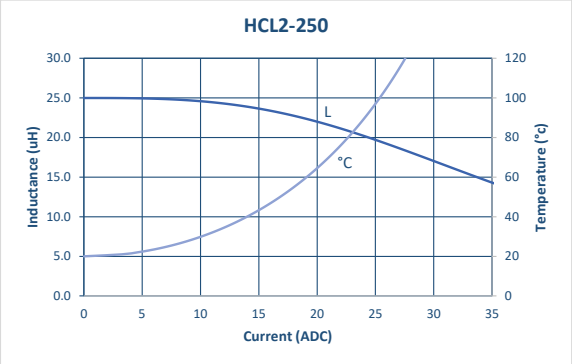

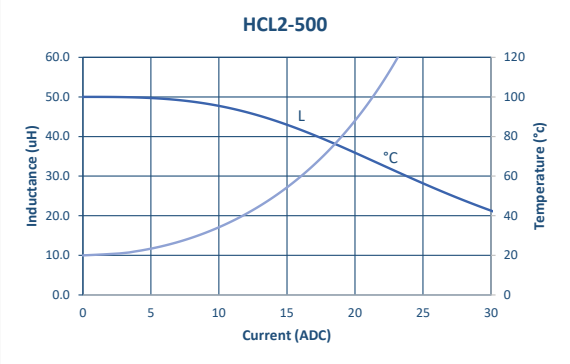

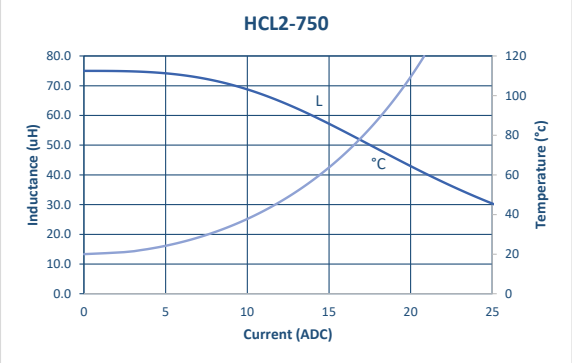

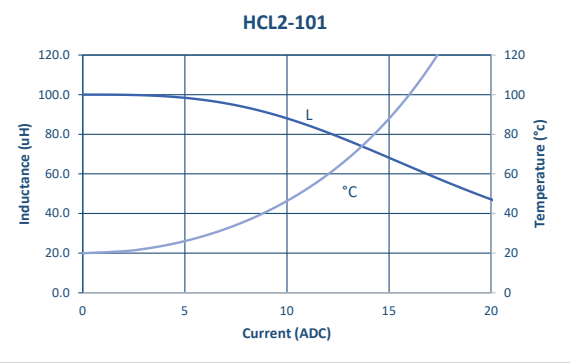

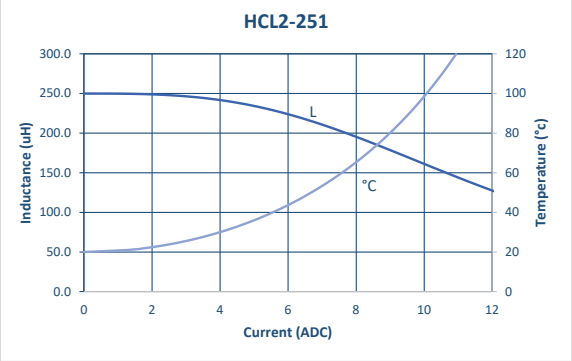

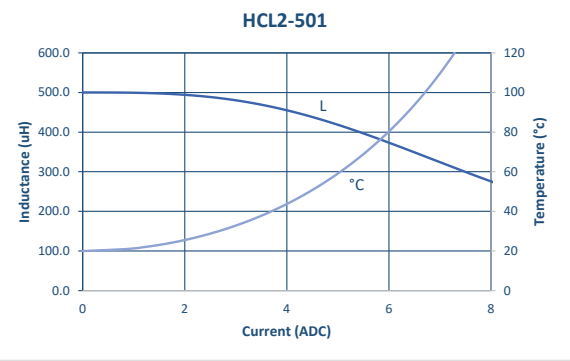

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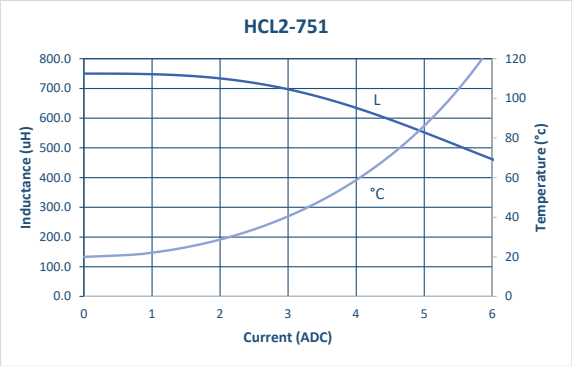

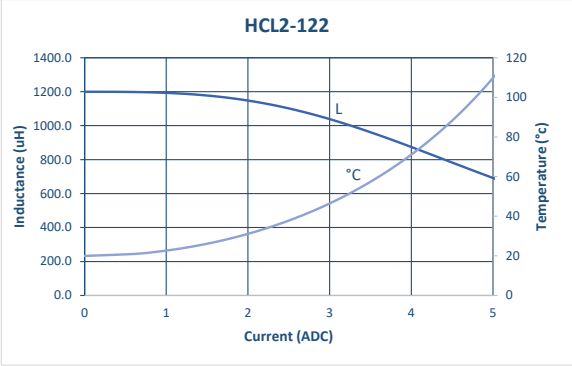

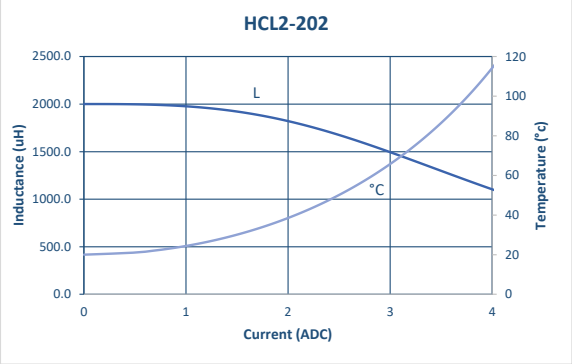

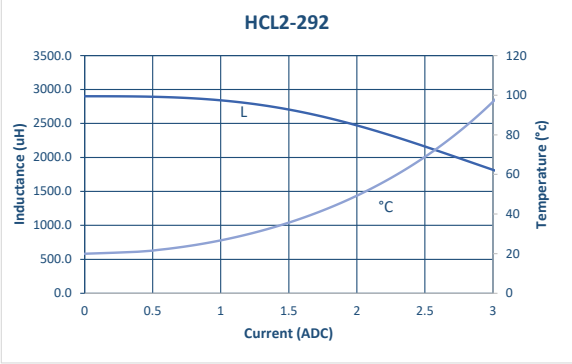

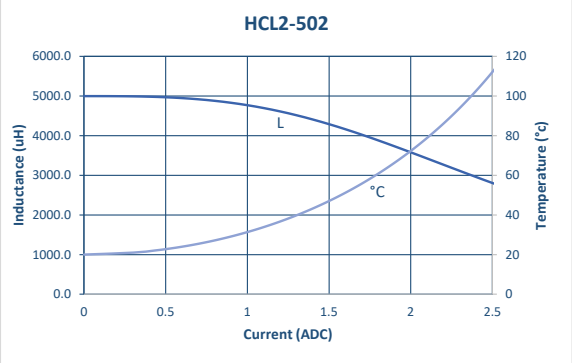

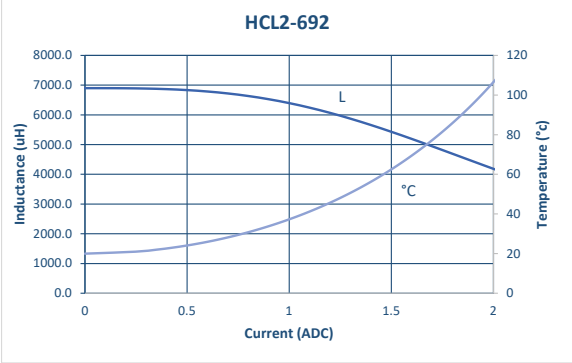

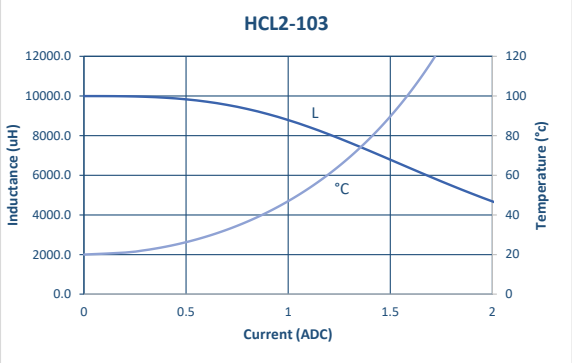

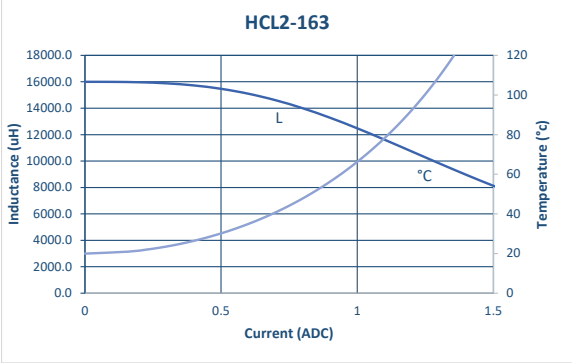

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