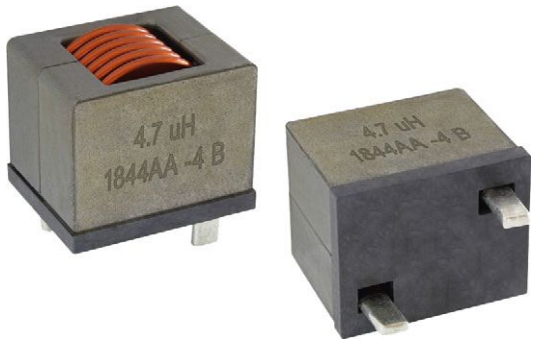
High Current, Through-Hole Inductor
Edge-Wound Series



FEATURES

AUTOMOTIVE GRADE

Pb-free

RoHS COMPLIANT

HALOGEN FREE

GREEN (5-2008)

- High temperature continuous operation, up to 180 °C with no aging
- Low DCR to minimize losses and reduce temperature rise
- Powdered iron alloy core technology provides stable inductance and saturation over operating temperature with satisfactory core losses
- Soft saturation gives predictable inductance decrease with increasing DC current independent of temperature
- Standard terminal is stripped and tinned for through hole mounting but other terminal configurations such as bare copper, SMD, and press fit pin are available upon request
- Hot dipped Sn plating provides low risk of whisker growth
- Custom options are available
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

- High current and high temperature applications
- DC/DC converters
- High current motor and switching noise suppression
- Inverters
- On board chargers

STANDARD ELECTRICAL SPECIFICATIONS

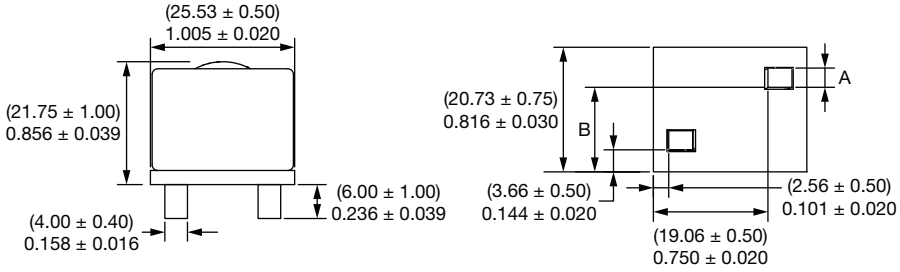
L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR AT 25 °C TYP. (mΩ)	DCR AT 25 °C MAX. (mΩ)	HEAT RATING CURRENT DC TYP. (1) (A)	SATURATION CURRENT DC TYP. (2) (A)	SATURATION CURRENT DC TYP. (3) (A)	SRF TYP. (MHz)	DIMENSION A ± 0.016 [0.4] (inch [mm])	DIMENSION B ± 0.020 [0.5] (inch [mm])
1.2	0.25	0.30	80	110	150	90	0.126 [3.2]	0.543 [13.8]
2.2	0.35	0.40	70	75	110	45	0.098 [2.5]	0.571 [14.5]
3.3	0.63	0.70	50	60	90	25	0.079 [2.0]	0.591 [15.0]
4.7	0.86	0.95	45	50	70	15	0.071 [1.8]	0.598 [15.2]

Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -40 °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
- Isolation voltage, coil to core: 350 V_{DC}, 60 s, 5 mA max.

(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 %
(3) DC current (A) that will cause L_0 to drop approximately 30 %

DIMENSIONS in inches (millimeters)



For technical questions, contact: magnetics@vishay.com

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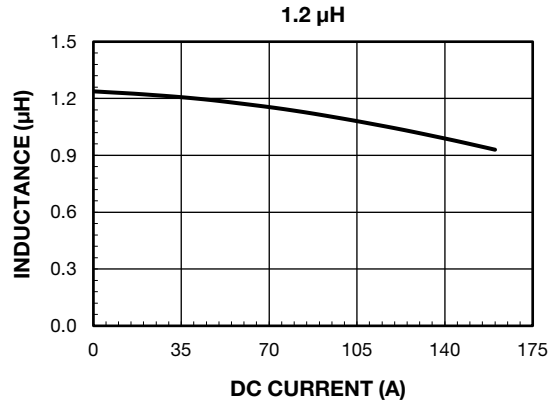
DESCRIPTION

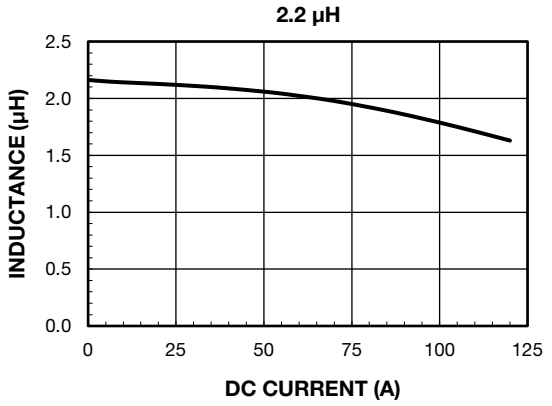
IHDM-1008BC-3A	1.2 µH	± 20 %	EV	e3
MODEL	INDUCTANCE	INDUCTANCE TOLERANCE	PACKAGE	JEDEC® LEAD (Pb)-FREE STANDARD

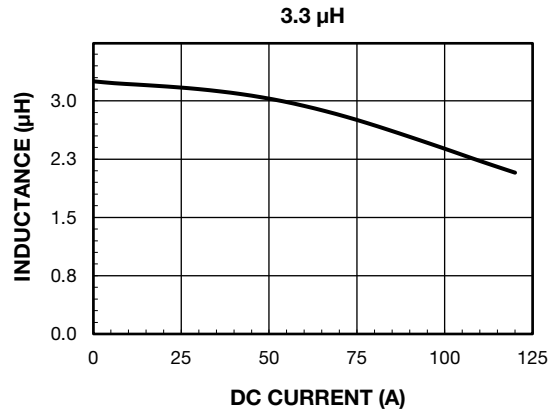
GLOBAL PART NUMBER

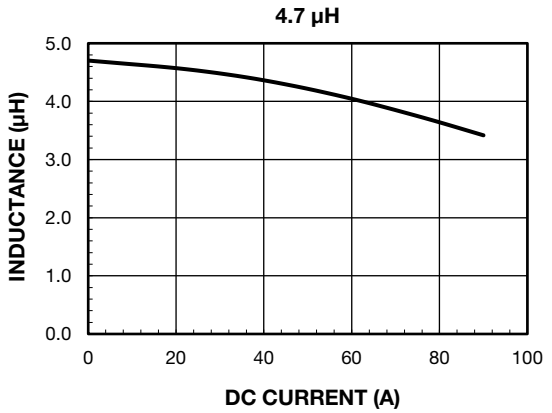
I	H	D	M	1	0	0	8	B	C	E	V	1	R	2	M	3	A
MODEL				SIZE						LEAD (Pb)-FREE	STYLE V: vertical	INDUCTANCE VALUE			TOL.	SERIES	

PERFORMANCE GRAPHS









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