

SMD Inductors(Coils) For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

VLS Series VLS252010E

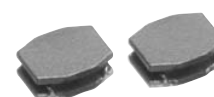
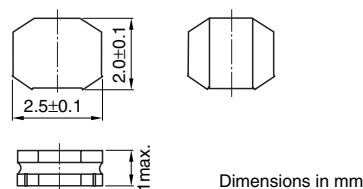
FEATURES

- Miniature size
Mount area: 2.5×2mm
Height: 1.0mm max.
- Generic use for portable DC to DC converter line.
- High magnetic shield construction should actualize high resolution for EMC protection.
- Available for automatic mounting in tape and reel package.
- The products do not contain lead and support lead-free soldering.

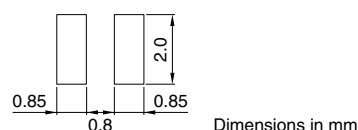
APPLICATIONS

Cellular phones, DVCs, DSCs, PDAs, LCD displays, HDDs, etc.

SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μ H)	Inductance tolerance (%)	Test frequency (MHz)	DC resistance (Ω)		Rated current(A)* Based on inductance change		Based on temperature rise typ.
				max.	typ.	max.	typ.	
VLS252010ET-R47N	0.47	\pm 30	1.0	0.046	0.038	2.50	2.80	2.65
VLS252010ET-R68N	0.68	\pm 30	1.0	0.062	0.052	2.05	2.30	2.20
VLS252010ET-1R0N	1.0	\pm 30	1.0	0.084	0.070	1.75	1.90	1.90
VLS252010ET-1R5N	1.5	\pm 30	1.0	0.128	0.107	1.45	1.60	1.50
VLS252010ET-2R2M	2.2	\pm 20	1.0	0.190	0.158	1.20	1.30	1.20
VLS252010ET-3R3M	3.3	\pm 20	1.0	0.275	0.229	0.94	1.05	1.00
VLS252010ET-4R7M	4.7	\pm 20	1.0	0.398	0.332	0.80	0.89	0.82
VLS252010ET-6R8M	6.8	\pm 20	1.0	0.532	0.443	0.68	0.76	0.71
VLS252010ET-100M	10	\pm 20	1.0	0.854	0.712	0.56	0.63	0.55

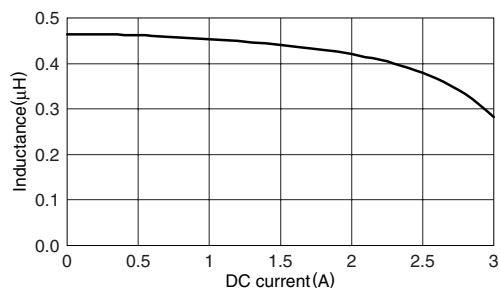
* Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.

- Operating temperature range: -40 to +105°C (Including self-temperature rise)

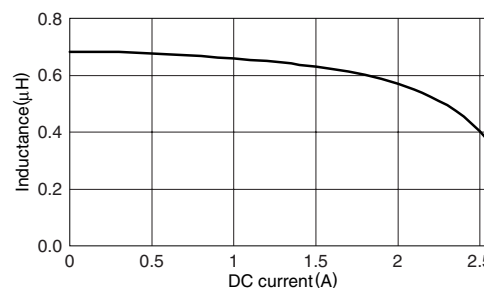
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

VLS252010ET-R47N



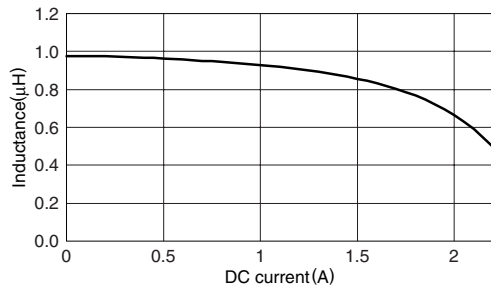
VLS252010ET-R68N



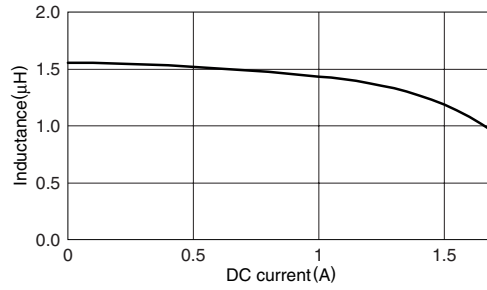
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- All specifications are subject to change without notice.

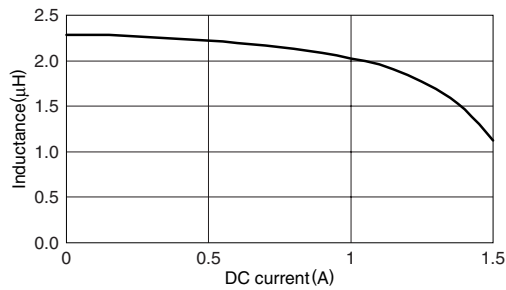
TYPICAL ELECTRICAL CHARACTERISTICS
INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS
VLS252010ET-1R0N



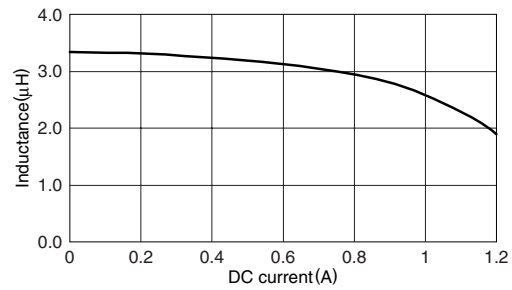
VLS252010ET-1R5N



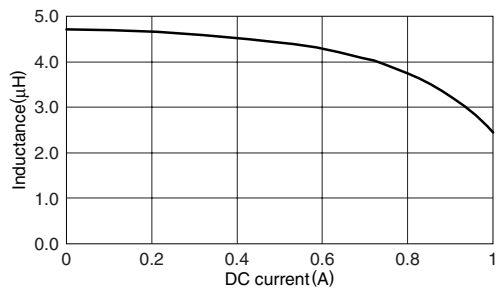
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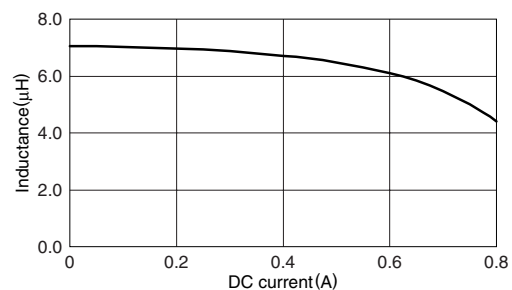
VLS252010ET-3R3M



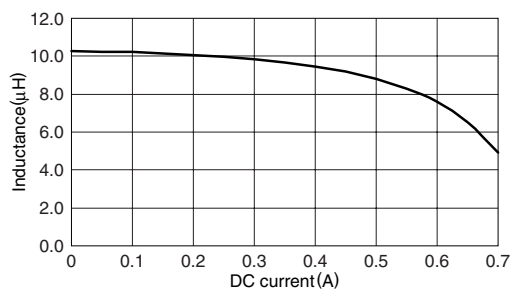
VLS252010ET-4R7M



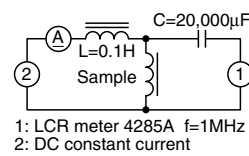
VLS252010ET-6R8M



VLS252010ET-100M



TEST CIRCUIT



1: LCR meter 4285A f=1MHz
 2: DC constant current

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