

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

Conformity to RoHS Directive

VLS Series VLS3015E

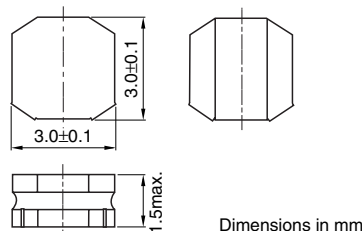
FEATURES

- Miniature size
Mount area: 3×3mm
Height: 1.5mm 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.

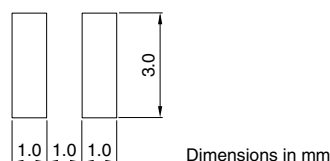
APPLICATIONS

DSCs, DVCs, PDAs, portable game devices, cellular phones, LCD displays, HDDs, etc.

SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance (%)	Test frequency (MHz)	DC resistance (Ω)		Rated current(A)*		
				max.	typ.	Based on inductance change		Based on temperature rise typ.
						max.	typ.	
VLS3015ET-1R0N	1.0	± 30	1.0	0.058	0.048	2.00	2.20	2.10
VLS3015ET-1R5N	1.5	± 30	1.0	0.075	0.062	1.50	1.70	1.85
VLS3015ET-2R2M	2.2	± 20	1.0	0.084	0.070	1.35	1.50	1.75
VLS3015ET-3R3M	3.3	± 20	1.0	0.112	0.093	1.15	1.30	1.50
VLS3015ET-4R7M	4.7	± 20	1.0	0.136	0.113	1.00	1.10	1.35
VLS3015ET-6R8M	6.8	± 20	1.0	0.216	0.180	0.92	1.00	1.05
VLS3015ET-100M	10	± 20	1.0	0.288	0.240	0.70	0.78	0.94
VLS3015ET-150M	15	± 20	1.0	0.456	0.380	0.58	0.65	0.75
VLS3015ET-220M	22	± 20	1.0	0.660	0.550	0.48	0.54	0.62
VLS3015ET-330M	33	± 20	1.0	0.984	0.820	0.39	0.43	0.51
VLS3015ET-470M	47	± 20	1.0	1.500	1.250	0.32	0.35	0.41

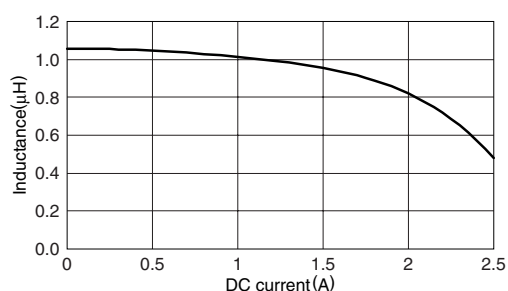
* Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.

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

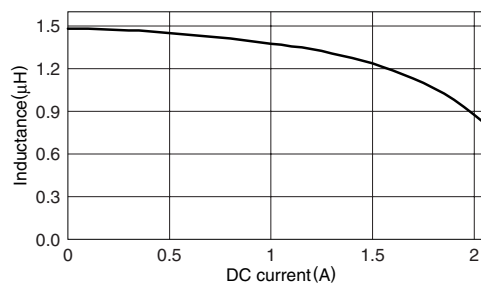
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

VLS3015ET-1R0N



VLS3015ET-1R5N

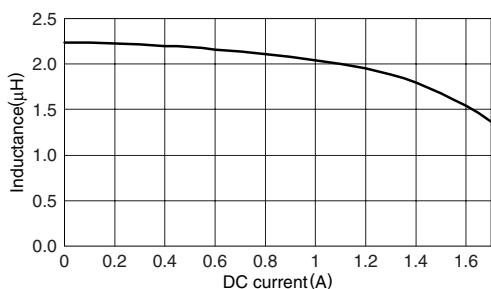


- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

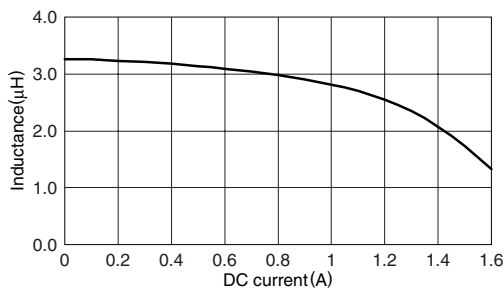
- All specifications are subject to change without notice.

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

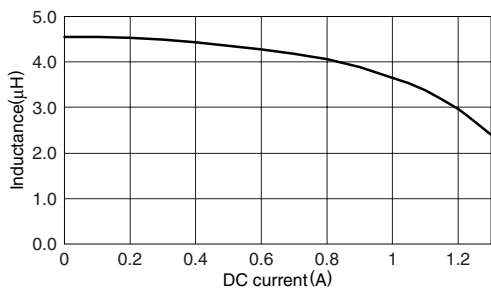
VLS3015ET-2R2M



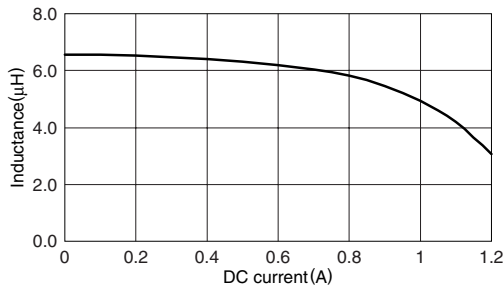
VLS3015ET-3R3M



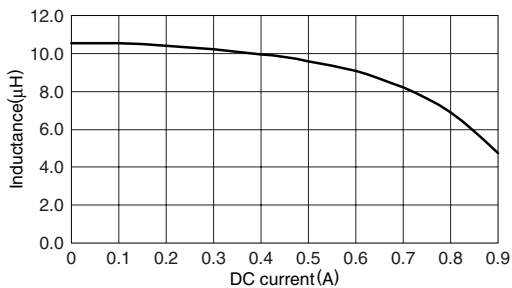
VLS3015ET-4R7M



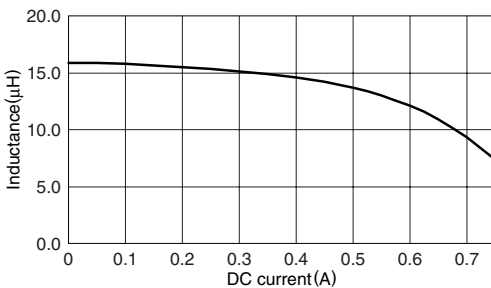
VLS3015ET-6R8M



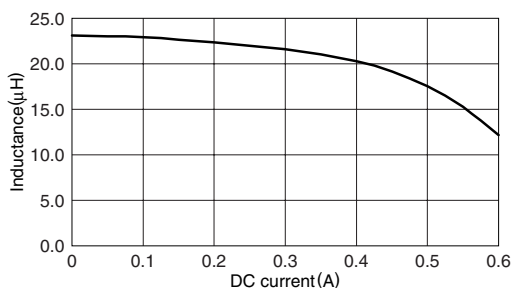
VLS3015ET-100M



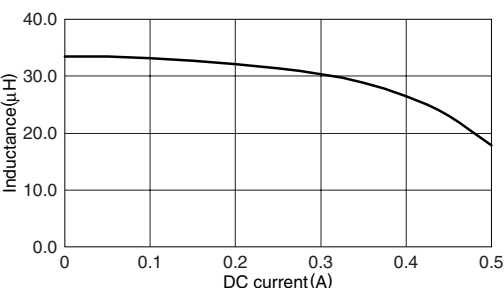
VLS3015ET-150M



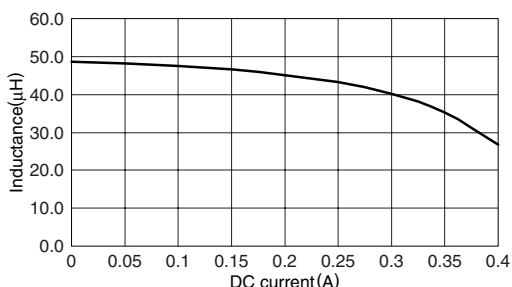
VLS3015ET-220M



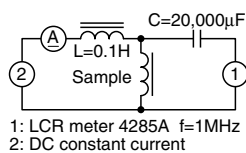
VLS3015ET-330M



VLS3015ET-470M



TEST CIRCUIT



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