

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

**Conformity to RoHS Directive** 

#### VLS Series VLS252015

#### **FEATURES**

Miniature size

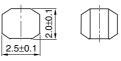
Mount area: 2.5×2mm Height: 1.5mm max.

- 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 real package.
- The products do not contain lead and support lead-free soldering.

#### **APPLICATIONS**

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

#### **SHAPES AND DIMENSIONS**





Dimensions in mm



#### RECOMMENDED PC BOARD PATTERN



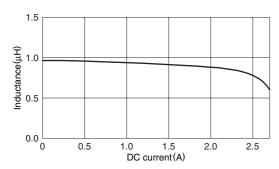
Dimensions in mm

#### **ELECTRICAL CHARACTERISTICS**

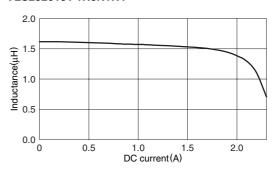
Part No.	Inductance (µH)	Inductance tolerance (%)	Test frequency (MHz)	DC resistance (Ω)		Rated current(A)*		
						Based on inductance change		Based on
				max.	typ.	max.	typ.	temperature rise typ.
VLS252015T-1R0N1R7	1	±30	1	0.082	0.068	2.3	2.62	1.7
VLS252015T-1R5N1R4	1.5	±30	1	0.12	0.1	1.9	2.18	1.4
VLS252015T-2R2M1R2	2.2	±20	1	0.16	0.133	1.7	1.9	1.2
VLS252015T-3R3M1R0	3.3	±20	1	0.218	0.182	1.4	1.57	1
VLS252015T-4R7MR89	4.7	±20	1	0.318	0.265	1.2	1.35	0.89
VLS252015T-6R8MR73	6.8	±20	1	0.48	0.4	1	1.13	0.73
VLS252015T-100MR66	10	±20	1	0.588	0.49	0.82	0.93	0.66

<sup>\*</sup> 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.

### TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS VLS252015T-1R0N1R7



#### VLS252015T-1R5N1R4

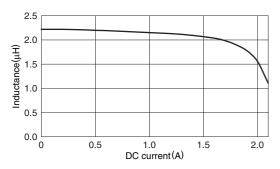


<sup>•</sup> Operating temperature range: -40 to +105°C (Including self-temperature rise)

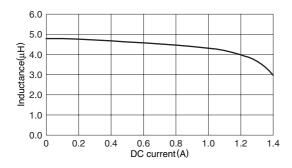
<sup>•</sup> Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.



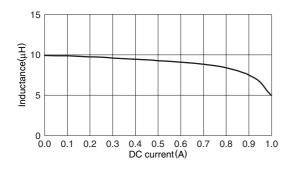
## TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS VLS252015T-2R2M1R2



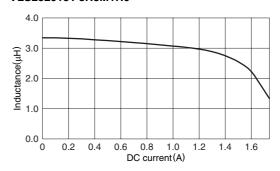
#### VLS252015T-4R7MR89



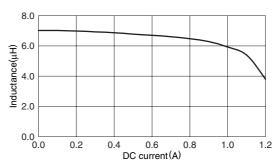
#### VLS252015T-100MR66



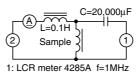
#### VLS252015T-3R3M1R0



#### VLS252015T-6R8MR73



#### **TEST CIRCUIT**



2: DC constant current

<sup>•</sup> All specifications are subject to change without notice.

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