

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

Conformity to RoHS Directive

VLF Series VLF302510MT

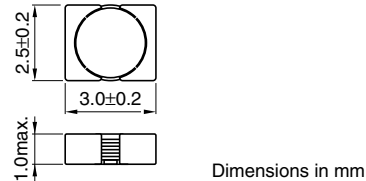
FEATURES

- Miniature size
Mount area: 3.0×2.5mm
Low profile: 1.0mm max. height
- 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 contain no lead and also support lead-free soldering.
- The products is halogen-free.
- It is a product conforming to RoHS directive.

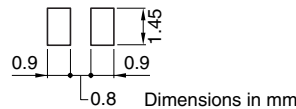
APPLICATIONS

Smartphones, LCD displays, HDDs, Cellular phone, DVCs, DSCs, 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 Idc1		Based on temperature rise Idc2
						max.	typ.	typ.
VLF302510MT-1R0N	1.0	±30	1.0	0.040	0.033	2.00	2.22	2.13
VLF302510MT-1R5N	1.5	±30	1.0	0.066	0.055	1.49	1.65	1.65
VLF302510MT-2R2M	2.2	±20	1.0	0.084	0.070	1.23	1.37	1.50
VLF302510MT-3R3M	3.3	±20	1.0	0.126	0.105	1.09	1.21	1.20
VLF302510MT-4R7M	4.7	±20	1.0	0.168	0.140	0.86	0.95	1.08
VLF302510MT-6R8M	6.8	±20	1.0	0.258	0.215	0.73	0.81	0.84
VLF302510MT-100M	10	±20	1.0	0.372	0.310	0.59	0.65	0.73
VLF302510MT-150M	15	±20	1.0	0.600	0.500	0.47	0.52	0.55
VLF302510MT-220M	22	±20	1.0	0.876	0.730	0.38	0.42	0.45

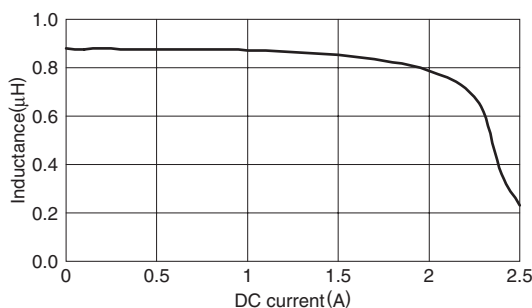
* Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.

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

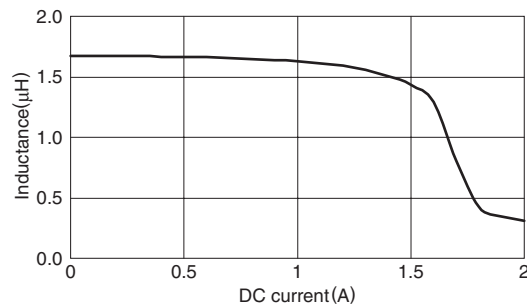
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

VLF302510MT-1R0N



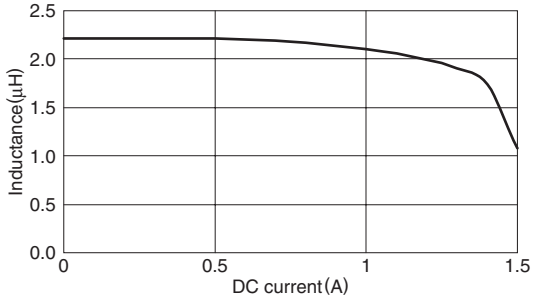
VLF302510MT-1R5N



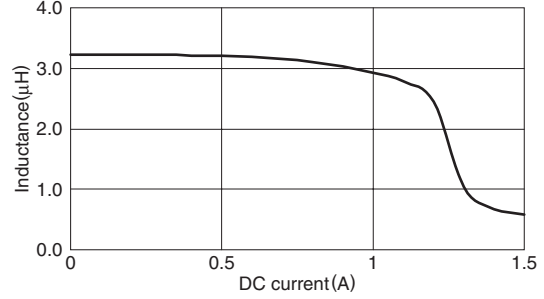
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- All specifications are subject to change without notice.

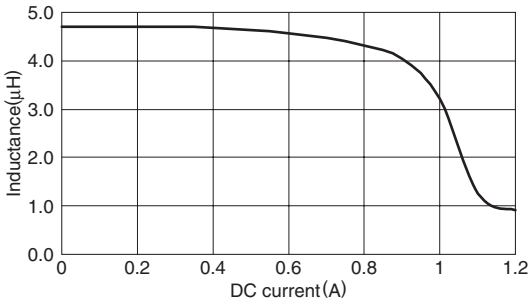
TYPICAL ELECTRICAL CHARACTERISTICS
INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS
VLF302510MT-2R2M



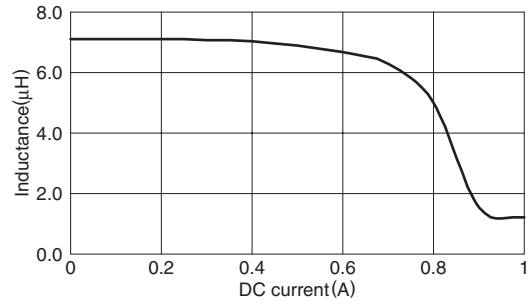
VLF302510MT-3R3M



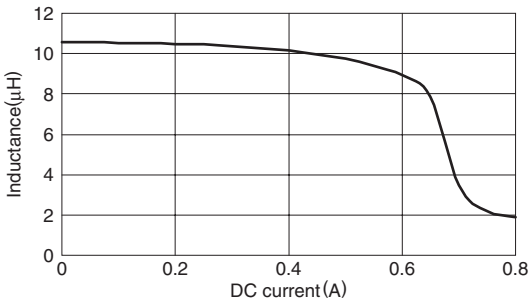
VLF302510MT-4R7M



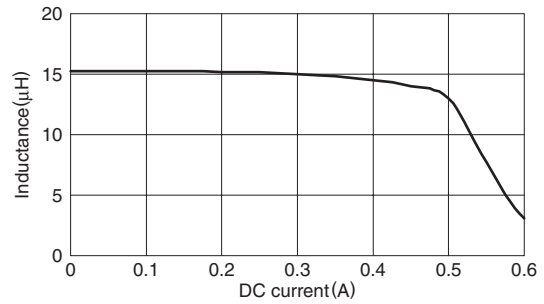
VLF302510MT-6R8M



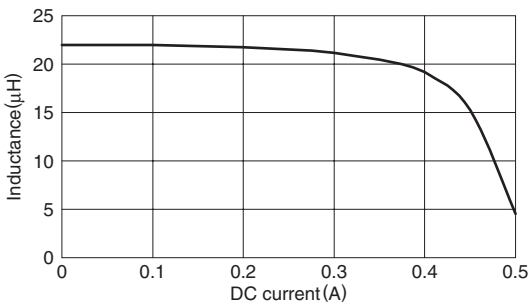
VLF302510MT-100M



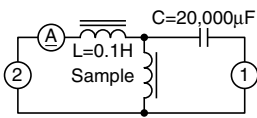
VLF302510MT-150M



VLF302510MT-220M



TEST CIRCUIT



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