

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

Conformity to RoHS Directive

VLF Series VLF4012A-2

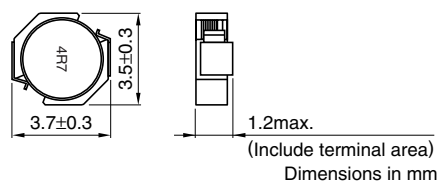
FEATURES

- Miniature size
Mount area: 3.5×3.7mm
Low profile: 1.2mm 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 do not contain lead and support lead-free soldering.

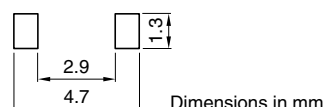
APPLICATIONS

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

SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance(%)	Test frequency (kHz)	DC resistance(Ω)		Rated current(A)*	
				max.	typ.	Based on inductance change max.	Based on temperature rise typ.
VLF4012AT-3R3M1R0-2	3.3	±20	100	0.11	0.095	1.0	1.4
VLF4012AT-4R7MR82-2	4.7	±20	100	0.15	0.12	0.82	1.2
VLF4012AT-6R8MR74-2	6.8	±20	100	0.20	0.17	0.74	1.0
VLF4012AT-100MR50-2	10	±20	100	0.23	0.20	0.5	0.97

* 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)

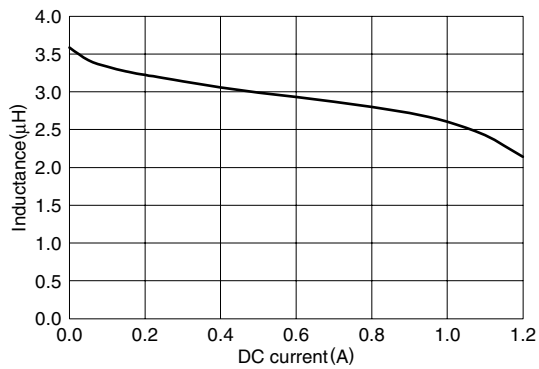
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

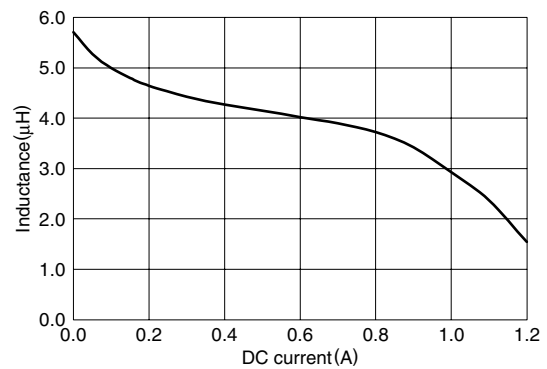
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

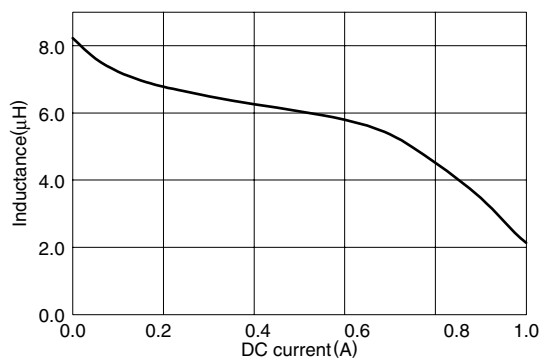
VLF4012AT-3R3M1R0-2



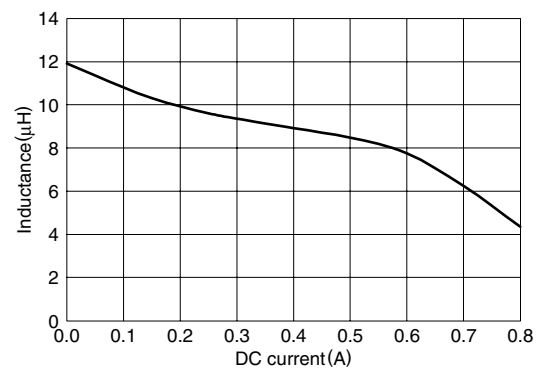
VLF4012AT-4R7MR82-2



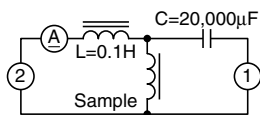
VLF4012AT-6R8MR74-2



VLF4012AT-100MR50-2



TEST CIRCUIT



- 1: LCR meter 4285A=100kHz
2: DC constant current