

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

Conformity to RoHS Directive

## VLF Series VLF3014A

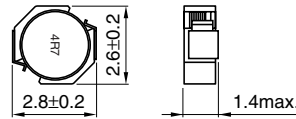
### FEATURES

- Miniature size  
Mount area: 2.6×2.8mm  
Height: 1.4mm 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

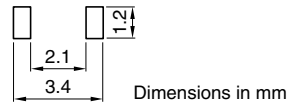
DVCs, DSCs, PDAs, MDs, LCD displays, cellular phones, cordless telephones, HDDs, FDDs, etc.

### SHAPES AND DIMENSIONS



Dimensions in mm

### RECOMMENDED PC BOARD PATTERN



Dimensions in mm

### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance(%)	Test frequency (kHz)	DC resistance(Ω)		Rated current(A)		
				max.	typ.	Based on inductance change max.*1	Based on temperature rise typ.*2	Based on inductance change typ.*3
VLF3014AT-1R0N1R8*4	1	±30	100	0.048	0.042	2.5	1.8	2.5
VLF3014AT-2R2M1R2	2.2	±20	100	0.1	0.091	1.7	1.2	1.6
VLF3014AT-3R3M1R0	3.3	±20	100	0.15	0.13	1.3	1	1.1
VLF3014AT-4R7MR90	4.7	±20	100	0.2	0.17	1.2	0.9	0.8
VLF3014AT-6R8MR72	6.8	±20	100	0.31	0.27	1	0.72	0.78
VLF3014AT-100MR59	10	±20	100	0.46	0.4	0.8	0.59	0.65
VLF3014AT-220MR37	22	±20	100	1.20	1	0.52	0.37	0.43

\*1 Rated current based on inductance variation: Current when inductance decreases by 30% of the initial value due to direct current superimposed characteristics

\*2 Rated current based on increasing product temperature: Current when temperature of the product reaches +40°C

\*3 Rated current based on inductance variation: Current when inductance decreases by 10% of the initial value due to direct current superimposed characteristics

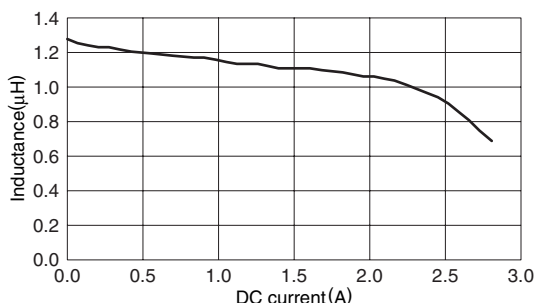
\*4 Tentative

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

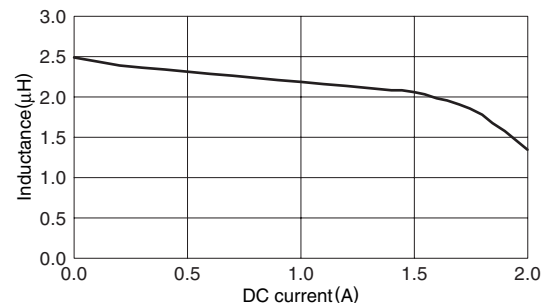
### TYPICAL ELECTRICAL CHARACTERISTICS

#### INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

##### VLF3014AT-1R0N1R8(TENTATIVE)



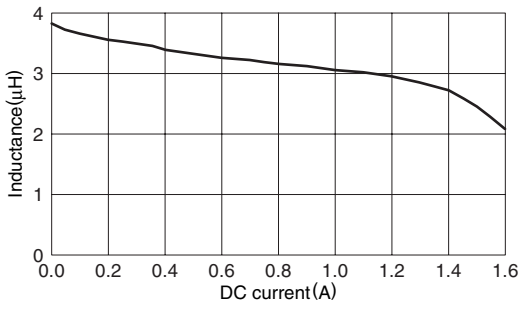
##### VLF3014AT-2R2M1R2



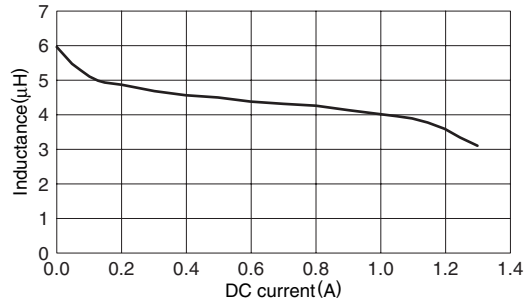
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

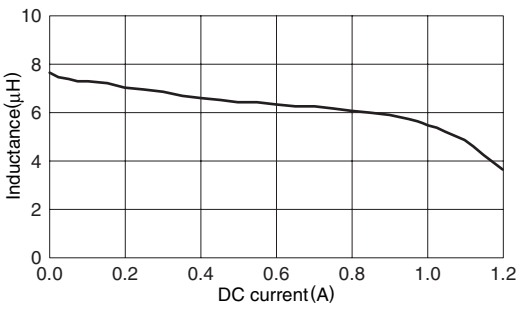
**TYPICAL ELECTRICAL CHARACTERISTICS**  
**INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS**  
**VLF3014AT-3R3M1R0**



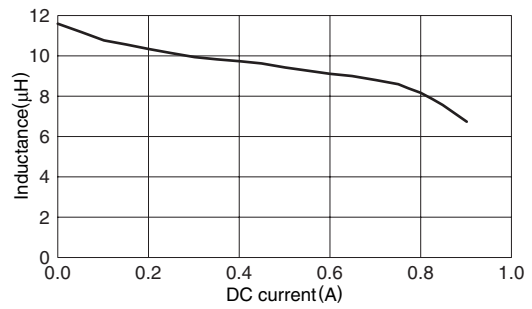
**VLF3014AT-4R7MR90**



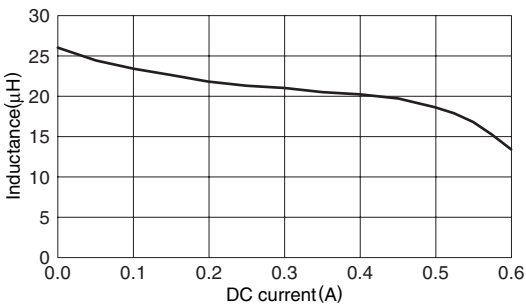
**VLF3014AT-6R8MR72**



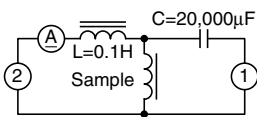
**VLF3014AT-100MR59**



**VLF3014AT-220MR37**



**TEST CIRCUIT**



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