

# Inductors

## For Power Line SMD

## VLF Series VLF5014A Type

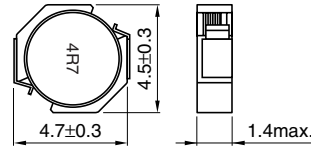
### FEATURES

- Miniature size  
Mount area: 4.5×4.7mm  
Low profile: 1.4mm 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, MDs, LCD displays,  
Cellular phones, cordless telephones, HDDs, FDDs, etc.

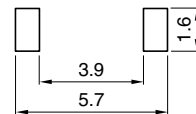
### SHAPES AND DIMENSIONS



Dimensions in mm



### RECOMMENDED PC BOARD PATTERN



Dimensions in mm

### ELECTRICAL CHARACTERISTICS

| Part No.          | Inductance<br>( $\mu$ H) | Inductance<br>tolerance(%) | Test frequency<br>(kHz) | DC resistance( $\Omega$ ) |      | Rated current(A)*                  |                                   |
|-------------------|--------------------------|----------------------------|-------------------------|---------------------------|------|------------------------------------|-----------------------------------|
|                   |                          |                            |                         | max.                      | typ. | Based on inductance<br>change max. | Based on temperature<br>rise typ. |
| VLF5014AT-4R7M1R1 | 4.7                      | $\pm$ 20                   | 100                     | 0.13                      | 0.12 | 1.7                                | 1.1                               |
| VLF5014AT-6R8MR99 | 6.8                      | $\pm$ 20                   | 100                     | 0.19                      | 0.16 | 1.4                                | 0.99                              |
| VLF5014AT-100MR92 | 10                       | $\pm$ 20                   | 100                     | 0.22                      | 0.19 | 1.1                                | 0.92                              |
| VLF5014AT-150MR76 | 15                       | $\pm$ 20                   | 100                     | 0.32                      | 0.28 | 0.97                               | 0.8                               |

\* 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)

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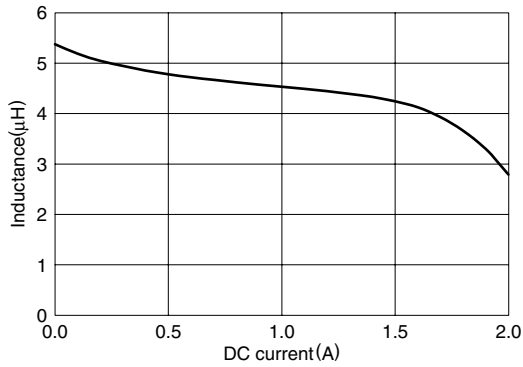
For Power Line  
SMD

## VLF Series VLF5014A Type

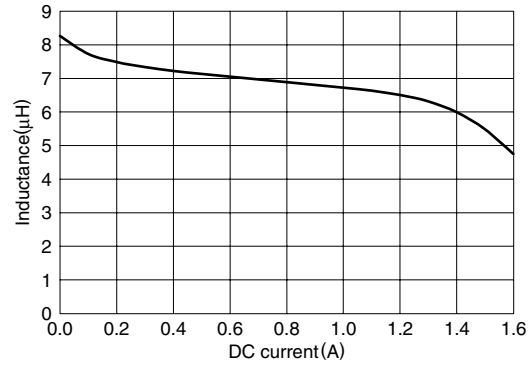
### TYPICAL ELECTRICAL CHARACTERISTICS

#### INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

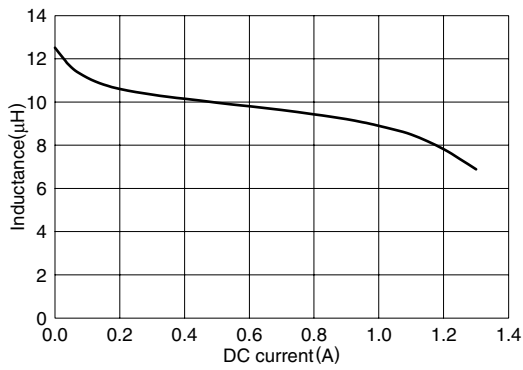
##### VLF5014AT-4R7M1R1



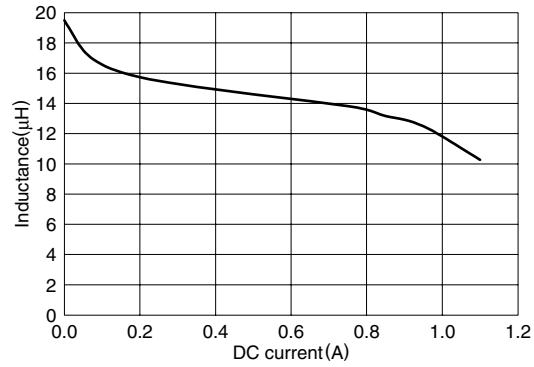
##### VLF5014AT-6R8MR99



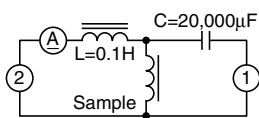
##### VLF5014AT-100MR92



##### VLF5014AT-150MR76



### TEST CIRCUIT



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