

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

Conformity to RoHS Directive

## VLCF Series VLCF4018-2

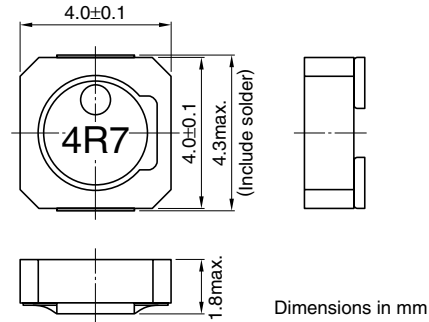
### FEATURES

- Miniature size  
Mount area: 4×4mm  
Height: 1.8mm 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.

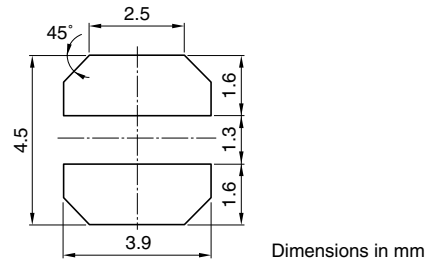
### APPLICATIONS

DC to DC converters for DVC, DSC, PDA, MD, LCD displays, 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. |
| VLCF4018T-1R6N1R7-2 | 1.6             | ±30                     | 100                  | 0.051            | 0.044 | 1.72                            | 2.42                           |
| VLCF4018T-2R2N1R4-2 | 2.2             | ±30                     | 100                  | 0.06             | 0.052 | 1.44                            | 2.23                           |
| VLCF4018T-3R3N1R2-2 | 3.3             | ±30                     | 100                  | 0.079            | 0.069 | 1.26                            | 1.93                           |
| VLCF4018T-4R7N1R0-2 | 4.7             | ±30                     | 100                  | 0.101            | 0.088 | 1.07                            | 1.72                           |
| VLCF4018T-6R8NR94-2 | 6.8             | ±30                     | 100                  | 0.124            | 0.108 | 0.94                            | 1.55                           |
| VLCF4018T-100MR74-2 | 10              | ±20                     | 100                  | 0.188            | 0.163 | 0.74                            | 1.26                           |
| VLCF4018T-150MR59-2 | 15              | ±20                     | 100                  | 0.268            | 0.233 | 0.59                            | 1.1                            |
| VLCF4018T-220MR49-2 | 22              | ±20                     | 100                  | 0.369            | 0.321 | 0.49                            | 0.9                            |
| VLCF4018T-330MR42-2 | 33              | ±20                     | 100                  | 0.54             | 0.469 | 0.42                            | 0.74                           |
| VLCF4018T-470MR34-2 | 47              | ±20                     | 100                  | 0.76             | 0.661 | 0.34                            | 0.62                           |

\* 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.