

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

Conformity to RoHS Directive

VLCF Series VLCF4018-2

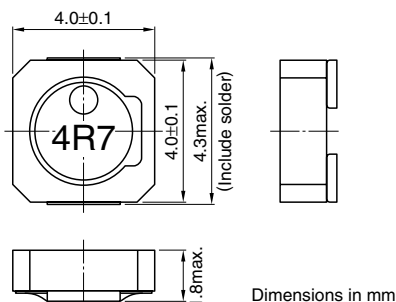
FEATURES

- Mount area: 4×4mm
Low profile: 1.8mm 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.
- It is a product conforming to RoHS directive.

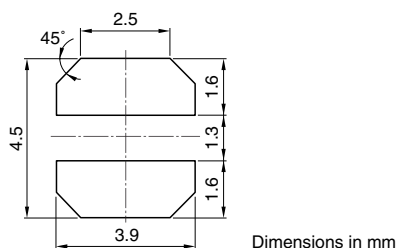
APPLICATIONS

Power source inductor for mobile devices such as mobile phones, HDDs, and DSCs

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-10MR74-2 | 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.