

SMD Inductors(Coils) For Power Line(Wound)

Conformity to RoHS Directive

VLP Series VLP4612

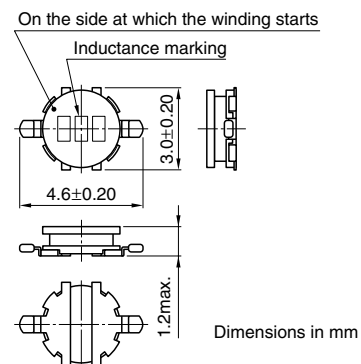
FEATURES

- This is an SMD power inductor for power supplies that has an open magnetic path construction based on a low-height drum core (upright).
- User terminals are contact-formed on the bottom of the drum core using copper (finished with tin plating).
- It uses crosswise windings and supports large currents.
- It is lead-free compatible.
- With several variations in drum core height, users can choose the perfect product for their application.

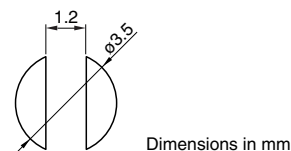
APPLICATIONS

- LCD modules
- Cellular phones
- Hard disk drives

SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



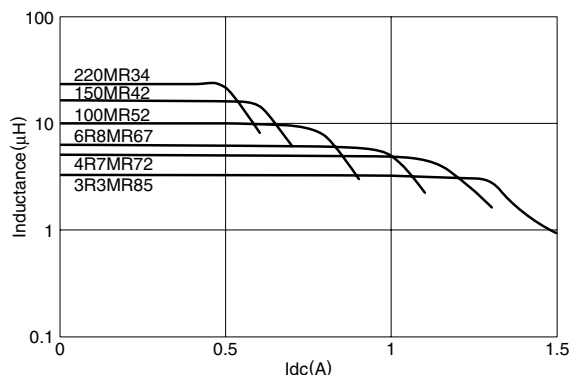
ELECTRICAL CHARACTERISTICS

| Part No. | Inductance (μH) | Inductance tolerance (%) | Test frequency (kHz) | DC resistance (Ω)max. | Rated current(A)* | |
|------------------|-----------------|--------------------------|----------------------|-----------------------|----------------------------|---------------------------|
| | | | | | Based on inductance change | Based on temperature rise |
| VLP4612T-1R0M1R5 | 1.0 | ±20% | 100 | 0.11 | 2.30 max. | 1.50 typ. |
| VLP4612T-1R8M1R3 | 1.8 | ±20% | 100 | 0.14 | 1.70 max. | 1.30 typ. |
| VLP4612T-2R5M1R1 | 2.5 | ±20% | 100 | 0.17 | 1.40 max. | 1.10 typ. |
| VLP4612T-3R3MR85 | 3.3 | ±20% | 100 | 0.26 | 0.90 max. | 0.85 typ. |
| VLP4612T-4R7MR72 | 4.7 | ±20% | 100 | 0.28 | 0.88 max. | 0.72 typ. |
| VLP4612T-6R8MR67 | 6.8 | ±20% | 100 | 0.38 | 0.77 max. | 0.67 typ. |
| VLP4612T-100MR52 | 10.0 | ±20% | 100 | 0.62 | 0.59 max. | 0.52 typ. |
| VLP4612T-150MR42 | 15.0 | ±20% | 100 | 0.96 | 0.45 max. | 0.42 typ. |
| VLP4612T-220MR34 | 22.0 | ±20% | 100 | 1.42 | 0.39 max. | 0.34 typ. |

* Rated current: The rated current is the smaller of the values given based on the rate of inductance change (10% decrease from the initial value) or the temperature rise (temperature rise of 40°C caused by the heat generated by the product itself). Please note that the current applied must be DC.

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



- 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.