公TDK

SMD Inductors(Coils)
For Power Line(Wound)

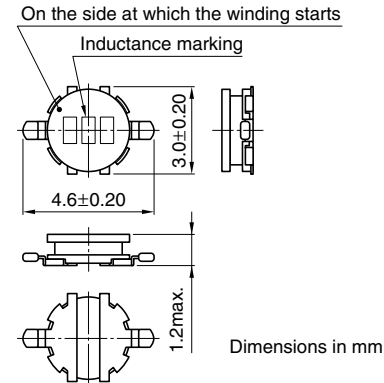**Conformity to RoHS Directive**

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.
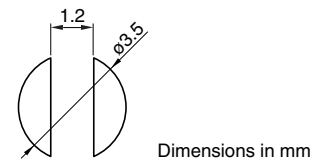• With several variations in drum core height, users can choose the perfect product for their application.

APPLICATIONS

• LCD modules
• Cellular phones
• Hard disk drives

SHAPES AND DIMENSIONS

On the side at which the winding starts
Inductance marking

3.0±0.20

4.6±0.20

1.2max.

Dimensions in mm

RECOMMENDED PC BOARD PATTERN

1.2
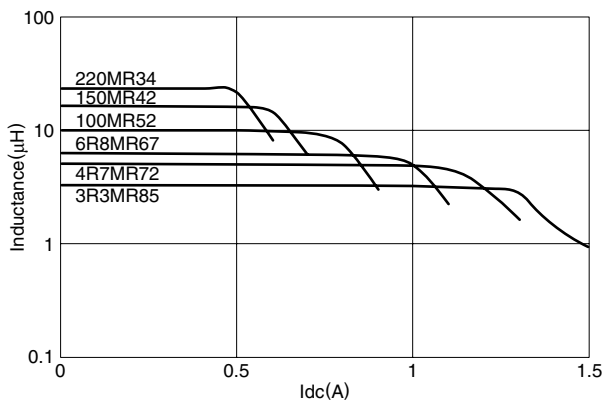Ø3.5

Dimensions in mm

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.