Conformity to RoHS Directive

会TDK

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

VLF Series VLF10045

FEATURES

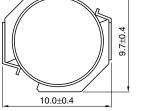
- Mount area: 9.7×10.0mm
 Low profile: 4.5mm max. height
- Compare to SLF10145(TDK conventional product) type Low loss and large current capability design DC resistance: 0.89×SLF10145 Rated DC current: 1.47×SLF10145
- · Generic use for DC to DC converter line.
- High magnetic shield construction should actualize high resolution for EMC protection.
- · Available for automatic mounting in tape and real package.
- The products contain no lead and also support lead-free soldering.
- · It is a product conforming to RoHS directive.

ELECTRICAL CHARACTERISTICS

APPLICATIONS

Note book computers, amusement equipment, DVD players, VRMs, plasma displays, etc.

SHAPES AND DIMENSIONS



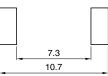


Dimensions in mm

4.5max

RECOMMENDED PC BOARD PATTERN

3.6



Dimensions in mm

Inductorso	Inductorio	Toot frequency	DC resistance(mΩ)		Rated current(A)*	
(μH)	tolerance(%)	(kHz)	max.	typ.	Based on inductance change max.	Based on temperature rise typ.
1.0	±30	100	5.5	4.6	13.5	10
1.5	±30	100	6.8	5.7	11.1	9
2.2	±30	100	10.2	8.5	9.1	7.4
3.3	±30	100	11.6	9.7	7.5	6.9
4.7	±30	100	15	12.5	6.3	6.1
6.8	±30	100	21.4	17.8	5.2	5.1
10	±20	100	29	25.0	4.3	4.3
15	±20	100	43	37.3	3.5	3.5
22	±20	100	57	49.5	2.8	3.0
33	±20	100	81	70.1	2.3	2.6
47	±20	100	112	97.6	1.9	2.2
68	±20	100	182	158	1.6	1.7
100	±20	100	250	217	1.3	1.4
150	±20	100	352	306	1.1	1.2
220	±20	100	499	434	0.9	1.0
330	±20	100	829	721	0.7	0.8
	1.0 1.5 2.2 3.3 4.7 6.8 10 15 22 33 47 68 100 150 220	(μH) tolerance(%)1.0 ± 30 1.5 ± 30 2.2 ± 30 3.3 ± 30 4.7 ± 30 6.8 ± 30 10 ± 20 15 ± 20 22 ± 20 33 ± 20 47 ± 20 68 ± 20 100 ± 20 150 ± 20 220 ± 20	(μH) tolerance(%) (kHz) 1.0 ± 30 1001.5 ± 30 1002.2 ± 30 1003.3 ± 30 1004.7 ± 30 1006.8 ± 30 10010 ± 20 10015 ± 20 10022 ± 20 10033 ± 20 10068 ± 20 100100 ± 20 10022 ± 20 10033 ± 20 100150 ± 20 100150 ± 20 100220 ± 20 100	$\begin{array}{c ccccc} \text{Inductance} & \text{Iest frequency} \\ (\mu\text{H}) & \text{tolerance}(\%) & (k\text{Hz}) & \text{max.} \\ \hline 1.0 & \pm 30 & 100 & 5.5 \\ 1.5 & \pm 30 & 100 & 6.8 \\ \hline 2.2 & \pm 30 & 100 & 10.2 \\ \hline 3.3 & \pm 30 & 100 & 11.6 \\ \hline 4.7 & \pm 30 & 100 & 15 \\ \hline 6.8 & \pm 30 & 100 & 21.4 \\ 10 & \pm 20 & 100 & 29 \\ 15 & \pm 20 & 100 & 43 \\ 22 & \pm 20 & 100 & 57 \\ \hline 33 & \pm 20 & 100 & 81 \\ \hline 47 & \pm 20 & 100 & 81 \\ \hline 47 & \pm 20 & 100 & 112 \\ \hline 68 & \pm 20 & 100 & 182 \\ \hline 100 & \pm 20 & 100 & 250 \\ \hline 150 & \pm 20 & 100 & 352 \\ \hline 220 & \pm 20 & 100 & 499 \\ \hline \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

* 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.