

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

Conformity to RoHS Directive

## VLF Series VLF10045

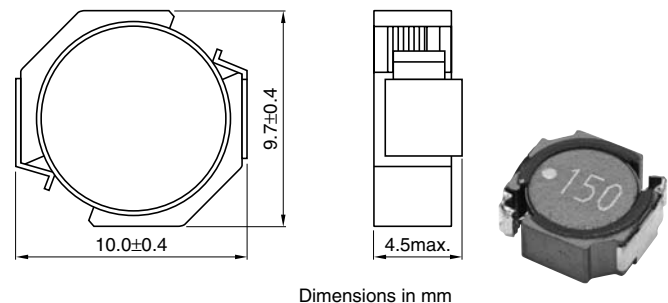
### FEATURES

- 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 reel package.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

### APPLICATIONS

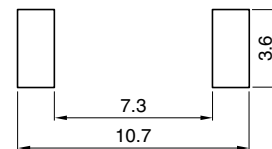
Note book computers, amusement equipment, DVD players, VRMs, plasma displays, etc.

### SHAPES AND DIMENSIONS



Dimensions in mm

### RECOMMENDED PC BOARD PATTERN



Dimensions in mm

### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance(%)	Test frequency (kHz)	DC resistance(mΩ)		Rated current(A)*	
				max.	typ.	Based on inductance change max.	Based on temperature rise typ.
VLF10045T-1R0N100	1.0	±30	100	5.5	4.6	13.5	10
VLF10045T-1R5N9R0	1.5	±30	100	6.8	5.7	11.1	9
VLF10045T-2R2N7R4	2.2	±30	100	10.2	8.5	9.1	7.4
VLF10045T-3R3N6R9	3.3	±30	100	11.6	9.7	7.5	6.9
VLF10045T-4R7N6R1	4.7	±30	100	15	12.5	6.3	6.1
VLF10045T-6R8N5R1	6.8	±30	100	21.4	17.8	5.2	5.1
VLF10045T-100M4R3	10	±20	100	29	25.0	4.3	4.3
VLF10045T-150M3R5	15	±20	100	43	37.3	3.5	3.5
VLF10045T-220M2R8	22	±20	100	57	49.5	2.8	3.0
VLF10045T-330M2R3	33	±20	100	81	70.1	2.3	2.6
VLF10045T-470M1R9	47	±20	100	112	97.6	1.9	2.2
VLF10045T-680M1R6	68	±20	100	182	158	1.6	1.7
VLF10045T-101M1R3	100	±20	100	250	217	1.3	1.4
VLF10045T-151M1R1	150	±20	100	352	306	1.1	1.2
VLF10045T-221MR90	220	±20	100	499	434	0.9	1.0
VLF10045T-331MR70	330	±20	100	829	721	0.7	0.8

\* 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.