

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[TDK Corporation](#)

[VLF10045T-1R0N100](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

## SMD Inductors(Coils)

Conformity to RoHS Directive

## For Power Line(Wound, Magnetic Shielded)

### VLF Series VLF10045

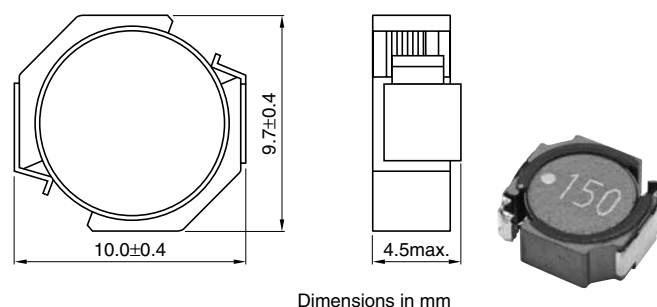
#### FEATURES

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

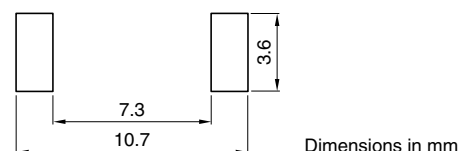
#### APPLICATIONS

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

#### SHAPES AND DIMENSIONS



#### RECOMMENDED PC BOARD PATTERN



#### ELECTRICAL CHARACTERISTICS

| Part No.          | Inductance<br>(μH) | Inductance<br>tolerance(%) | Test frequency<br>(kHz) | DC resistance(mΩ) |      | Rated current(A)*                  |                                   |
|-------------------|--------------------|----------------------------|-------------------------|-------------------|------|------------------------------------|-----------------------------------|
|                   |                    |                            |                         | max.              | typ. | Based on inductance<br>change max. | Based on temperature<br>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)