

# Inductors(Coil) For Power Supply SMD

## VLP Series VLP56 Type

### FEATURES

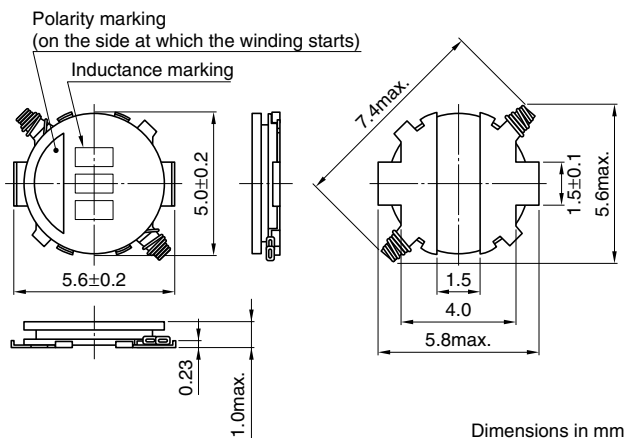
- This is an SMD power inductor for power supplies that has an open magnetic path construction based on a low-height drum core (upright).
- User terminals are contact-formed on the bottom of the drum core using copper (finished with tin plating).
- It uses crosswise windings and supports large currents.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



### APPLICATIONS

- LCD modules
- Cell phones
- Hard drives

### SHAPES AND DIMENSIONS



### ELECTRICAL CHARACTERISTICS

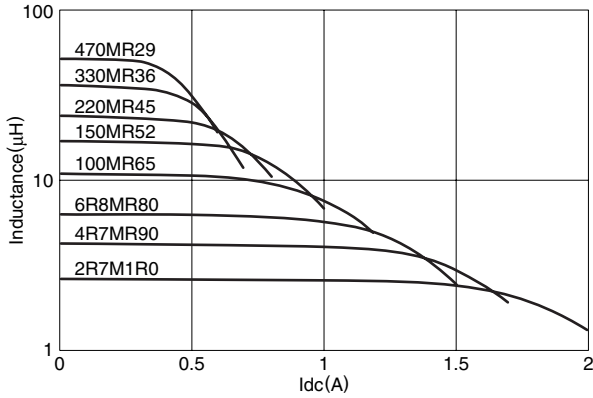
| Part No.         | Inductance (μH) | Inductance tolerance (%) | Test frequency (kHz) | DC resistance (Ω)max. | Rated current(A)*          |                           |
|------------------|-----------------|--------------------------|----------------------|-----------------------|----------------------------|---------------------------|
|                  |                 |                          |                      |                       | Based on inductance change | Based on temperature rise |
| VLP5610T-2R7M1R0 | 2.7             | ±20%                     | 100                  | 0.17                  | 1.26 max.                  | 1.05 typ.                 |
| VLP5610T-4R7MR90 | 4.7             | ±20%                     | 100                  | 0.24                  | 1.08 max.                  | 0.90 typ.                 |
| VLP5610T-6R8MR80 | 6.8             | ±20%                     | 100                  | 0.30                  | 0.90 max.                  | 0.80 typ.                 |
| VLP5610T-100MR65 | 10.0            | ±20%                     | 100                  | 0.45                  | 0.72 max.                  | 0.65 typ.                 |
| VLP5610T-150MR52 | 15.0            | ±20%                     | 100                  | 0.71                  | 0.63 max.                  | 0.52 typ.                 |
| VLP5610T-220MR45 | 22.0            | ±20%                     | 100                  | 0.96                  | 0.50 max.                  | 0.45 typ.                 |
| VLP5610T-330MR36 | 33.0            | ±20%                     | 100                  | 1.47                  | 0.41 max.                  | 0.36 typ.                 |
| VLP5610T-470MR29 | 47.0            | ±20%                     | 100                  | 1.93                  | 0.36 max.                  | 0.29 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.

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### TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



### TEMPERATURE RISE CHARACTERISTICS

