

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

**Conformity to RoHS Directive** 

# VLCF Series VLCF5020-1

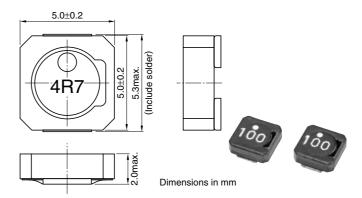
#### **FEATURES**

- Miniature size
   Mount area: 5×5mm
  - Height: 2.0mm max.
- Generic use for portable 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 do not contain lead and support lead-free soldering.

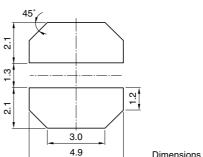
### **APPLICATIONS**

DC to DC converters for DVC, DSC, PDA, MD, LCD displays, HDDs, etc.

#### **SHAPES AND DIMENSIONS**



### RECOMMENDED PC BOARD PATTERN



Dimensions in mm

## **ELECTRICAL CHARACTERISTICS**

Part No.	Inductance (µH)	Inductance tolerance	Test frequency (kHz)	DC resistance( $\Omega$ )		Rated current(A)*	
				max.	typ.	Based on inductance change max.	Based on temperature rise typ.
VLCF5020T-2R2N2R6-1	2.2	±30%	100	0.071	0.058	2.62	2.76
VLCF5020T-2R7N2R2-1	2.7	±30%	100	0.083	0.069	2.28	2.55
VLCF5020T-3R3N2R0-1	3.3	±30%	100	0.096	0.079	2.02	2.37
VLCF5020T-4R7N1R7-1	4.7	±30%	100	0.122	0.102	1.7	2.09
VLCF5020T-6R8N1R3-1	6.8	±30%	100	0.165	0.138	1.39	1.8
VLCF5020T-100M1R1-1	10	±20%	100	0.237	0.198	1.13	1.5
VLCF5020T-150MR90-1	15	±20%	100	0.35	0.292	0.90	1.2
VLCF5020T-220MR75-1	22	±20%	100	0.496	0.413	0.75	1.0
VLCF5020T-330MR62-1	33	±20%	100	0.717	0.597	0.62	0.86
VLCF5020T-470MR51-1	47	±20%	100	1.05	0.875	0.51	0.71

<sup>\*</sup> 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.

<sup>•</sup> Operating temperature range: -40 to +105°C (Including self-temperature rise)

<sup>•</sup> 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.