

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

Conformity to RoHS Directive

## VLC Series VLC6020

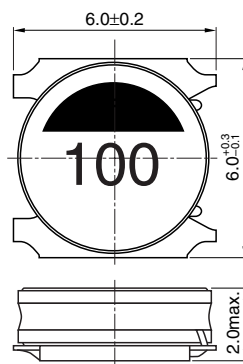
### FEATURES

- Miniature size  
Mount area: 6×6mm  
Height: 2.0mm max.
- Generic use for portable DC to DC converter line.
- Available for automatic mounting in tape and reel package.
- The products do not contain lead and support lead-free soldering.
- It is a product conforming to halogen-free.

### APPLICATIONS

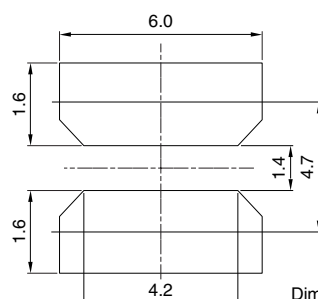
DC to DC converters for LCD TVs, printers, note PCs, etc.

### SHAPES AND DIMENSIONS

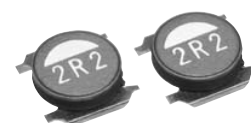


Dimensions in mm

### RECOMMENDED PC BOARD PATTERN



Dimensions in mm



### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance (%)	Test frequency (kHz)	DC resistance (Ω)		Rated current(A)*	
				max.	typ.	Based on inductance change max.	Based on temperature rise typ.
VLC6020T-R50N	0.5	±30	100	0.014	0.011	4.9	5.7
VLC6020T-R80N	0.8	±30	100	0.021	0.016	4.0	5.1
VLC6020T-3R3N	3.3	±30	100	0.058	0.048	2.1	3.1
VLC6020T-4R7N	4.7	±30	100	0.079	0.066	1.8	2.5
VLC6020T-6R8M	6.8	±20	100	0.12	0.098	1.5	2.2
VLC6020T-100M	10	±20	100	0.18	0.15	1.2	1.6
VLC6020T-150M	15	±20	100	0.23	0.19	0.95	1.3

\* 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.

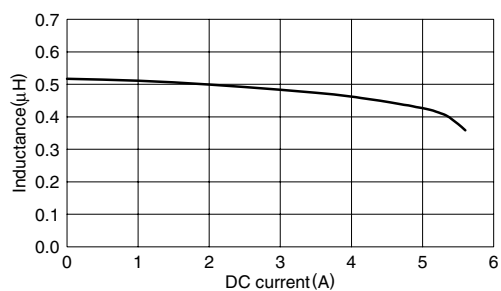
- Operating temperature range: -40 to +105°C (Including self-temperature rise)
- Test equipment Inductance: 4285A PRECISION LCR METER, HP or equivalent  
Rdc: MILLIOHM METER VP-2941A, MATSUSHITA or equivalent  
L(ldc1): 4285A PRECISION LCR METER, HP with 42841A BIAS CURRENT SOURCE, HP/42842C TEST FIXTURE, HP or equivalent

- 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.

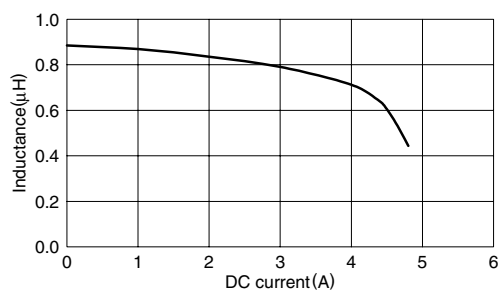
- All specifications are subject to change without notice.

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

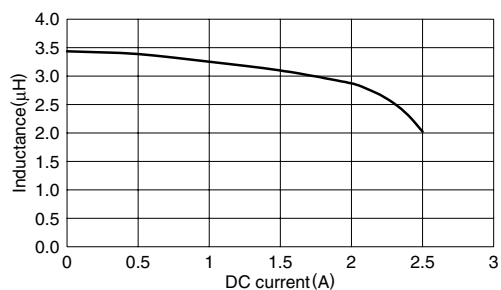
VLC6020T-R50N



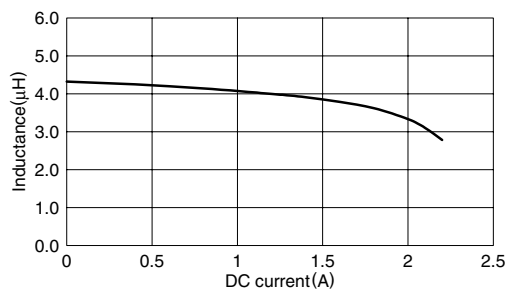
VLC6020T-R80N



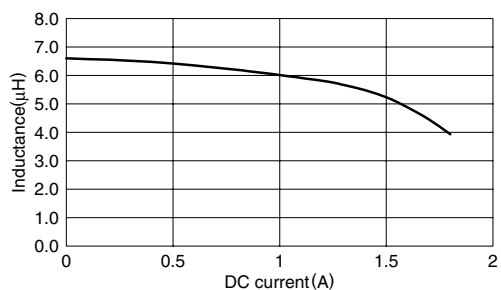
VLC6020T-3R3N



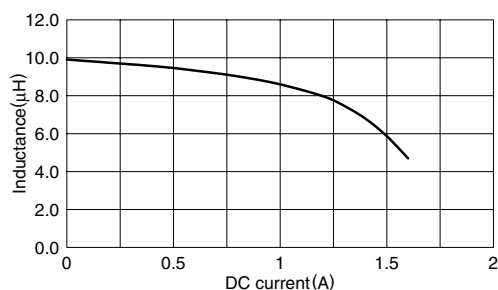
VLC6020T-4R7N



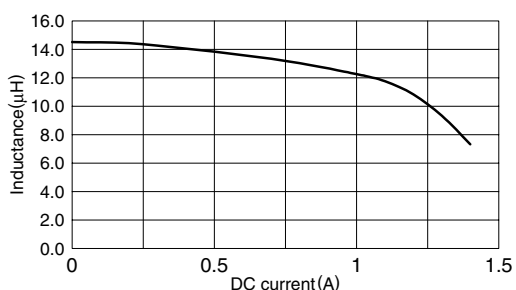
VLC6020T-6R8M



VLC6020T-100M



VLC6020T-150M



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