

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

Conformity to RoHS Directive

VLC Series VLC6038

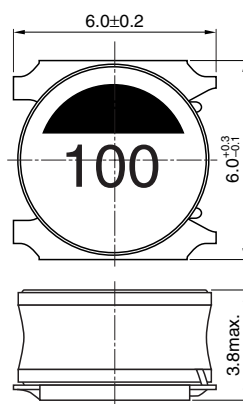
FEATURES

- Miniature size
Mount area: 6×6mm
Height: 3.8mm 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

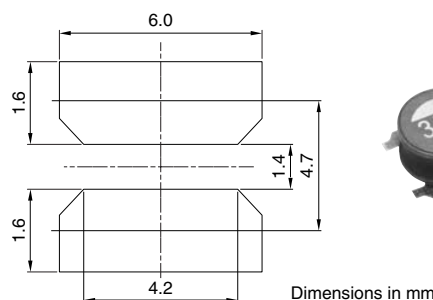
DC to DC converters for LCD TVs, printers, note PCs, etc.

SHAPES AND DIMENSIONS



Dimensions in mm

RECOMMENDED PC BOARD PATTERN



Dimensions in mm

ELECTRICAL CHARACTERISTICS

| Part No. | Inductance (μ H) | Inductance tolerance (%) | Test frequency (kHz) | DC resistance (Ω) | | Rated current(A)* | |
|---------------|--------------------------|--------------------------------|-------------------------|-------------------------------|-------|------------------------------------|-----------------------------------|
| | | | | max. | typ. | Based on inductance change max. | Based on temperature rise typ. |
| VLC6038T-3R3N | 3.3 | \pm 30 | 100 | 0.043 | 0.033 | 3.9 | 3.2 |
| VLC6038T-4R7M | 4.7 | \pm 20 | 100 | 0.052 | 0.040 | 3.3 | 2.9 |
| VLC6038T-6R8M | 6.8 | \pm 20 | 100 | 0.063 | 0.049 | 2.8 | 2.7 |
| VLC6038T-100M | 10 | \pm 20 | 100 | 0.085 | 0.066 | 2.4 | 2.3 |
| VLC6038T-150M | 15 | \pm 20 | 100 | 0.12 | 0.088 | 2.0 | 2.0 |

* 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.

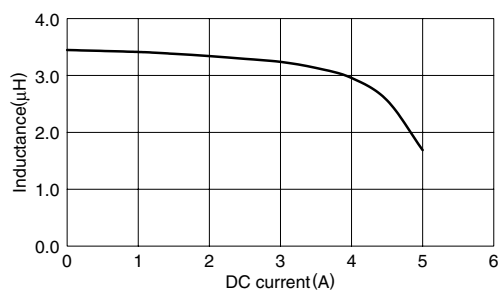
- Operating temperature range: -40 to +105°C (Including self-temperature rise)
- Test equipment Inductance: 4285A PRECISION LCR METER, HP or equivalent
Rdc: MILLIOHM METER VP-2941A, MATSUSHITA or equivalent
L(ldc1): 4285A PRECISION LCR METER, HP with 42841A BIAS CURRENT SOURCE, HP/42842C TEST FIXTURE,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

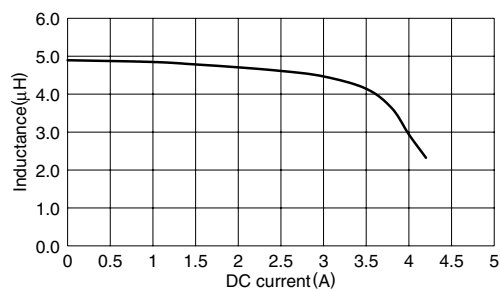
- All specifications are subject to change without notice.

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

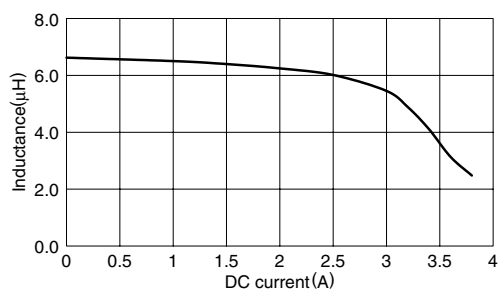
VLC6038T-3R3N



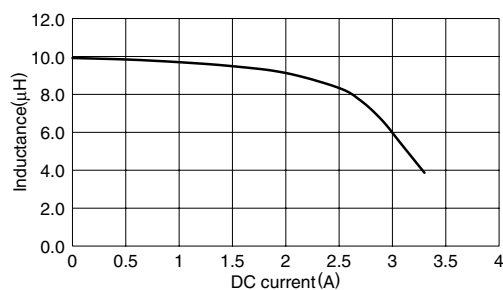
VLC6038T-4R7M



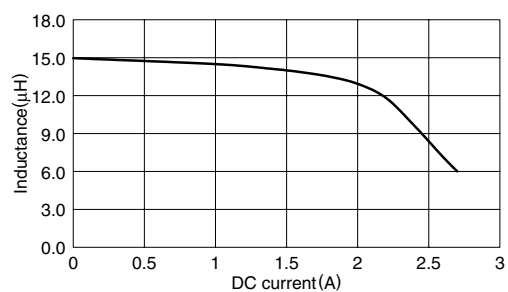
VLC6038T-6R8M



VLC6038T-100M



VLC6038T-150M



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