

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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

Conformity to RoHS Directive

VLC Series VLC5020

FEATURES

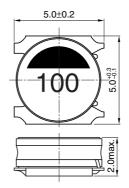
· Miniature size Mount area: 5×5mm Height: 2.0mm max.

- Generic use for portable DC to DC converter line.
- Available for automatic mounting in tape and real package.
- The products do not contain lead and support lead-free
- It is a product conforming to halogen-free.

APPLICATIONS

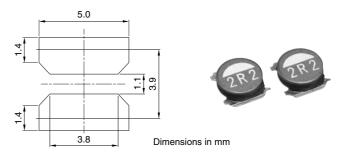
DC to DC converters for LCD TVs, printers, note PCs, etc.

SHAPES AND DIMENSIONS



Dimensions in mm

RECOMMENDED PC BOARD PATTERN



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. |
| VLC5020T-R47N | 0.47 | ±30 | 100 | 0.018 | 0.015 | 5.6 | 5.4 |
| VLC5020T-1R2N | 1.2 | ±30 | 100 | 0.030 | 0.026 | 3.8 | 4.0 |
| VLC5020T-1R5N | 1.5 | ±30 | 100 | 0.038 | 0.032 | 3.3 | 3.9 |
| VLC5020T-2R2N | 2.2 | ±30 | 100 | 0.045 | 0.038 | 3.0 | 3.7 |
| VLC5020T-3R3N | 3.3 | ±30 | 100 | 0.071 | 0.060 | 2.4 | 2.9 |
| VLC5020T-4R7N | 4.7 | ±30 | 100 | 0.097 | 0.081 | 2.0 | 2.4 |
| VLC5020T-100M | 10 | ±20 | 100 | 0.186 | 0.156 | 1.3 | 1.8 |

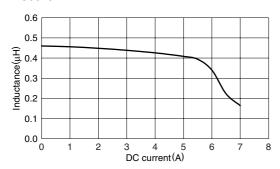
- * Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.
- Operating temperature range: -40 to +105°C (Including self-temperature rise)
- Test equipment Inductance: 4285A PRECISION LCR METER, HP or equivalant

Rdc: MILLIOHM METER VP-2941A, MATSUSHITA or equivalant

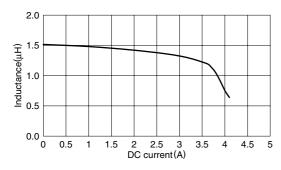
L(Idc1): 4285A PRECISION LCR METER, HP with 42841A BIAS CURRENT SOURCE, HP/42842C TEST FIXTURE, HP or equivalant

• 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.

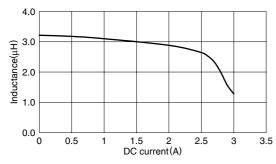
TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS VLC5020T-R47N



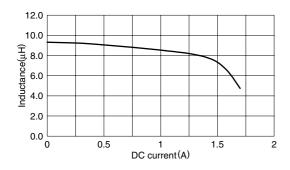
VLC5020T-1R5N



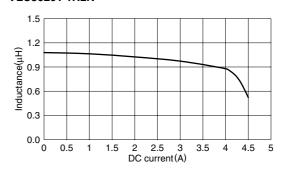
VLC5020T-3R3N



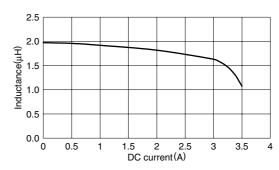
VLC5020T-100M



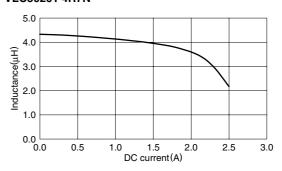
VLC5020T-1R2N



VLC5020T-2R2N



VLC5020T-4R7N



[•] All specifications are subject to change without notice.