

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

Conformity to RoHS Directive

VLC Series VLC5045

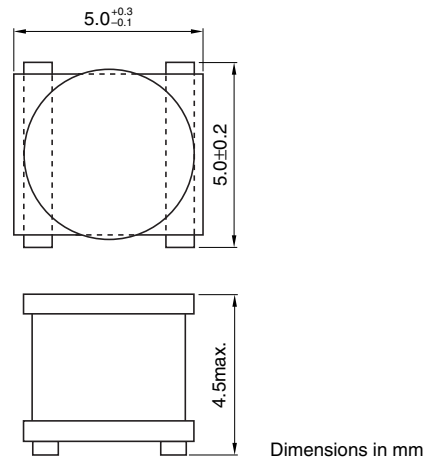
FEATURES

- Miniature size
Mount area: 5×5mm
Height: 4.5mm 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.

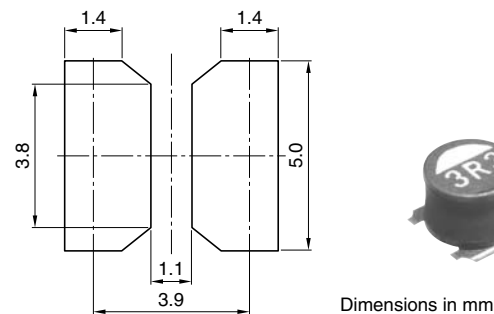
APPLICATIONS

DC to DC converters for LCD-TV, printers, note PC, etc.

SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



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.
VLC5045T-1R5N	1.5	$\pm 30\%$	100	0.018	0.014	5.5	4.6
VLC5045T-2R2N	2.2	$\pm 30\%$	100	0.022	0.017	5.0	4.3
VLC5045T-3R3N	3.3	$\pm 30\%$	100	0.029	0.023	4.0	4.0
VLC5045T-4R7M	4.7	$\pm 20\%$	100	0.034	0.028	3.3	3.2
VLC5045T-6R8M	6.8	$\pm 20\%$	100	0.046	0.038	2.7	2.8
VLC5045T-100M	10	$\pm 20\%$	100	0.066	0.055	2.1	2.3
VLC5045T-150M	15	$\pm 20\%$	100	0.100	0.083	1.8	1.9
VLC5045T-220M	22	$\pm 20\%$	100	0.17	0.13	1.6	1.5
VLC5045T-330M	33	$\pm 20\%$	100	0.23	0.19	1.2	1.1

* 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)

• 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.

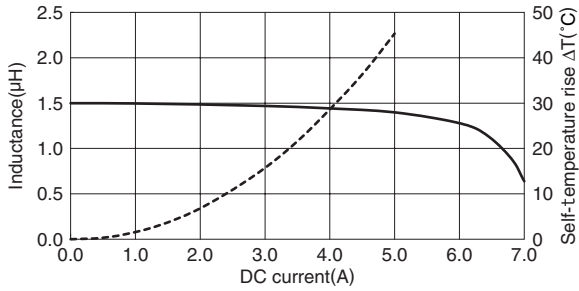
• All specifications are subject to change without notice.

TYPICAL ELECTRICAL CHARACTERISTICS

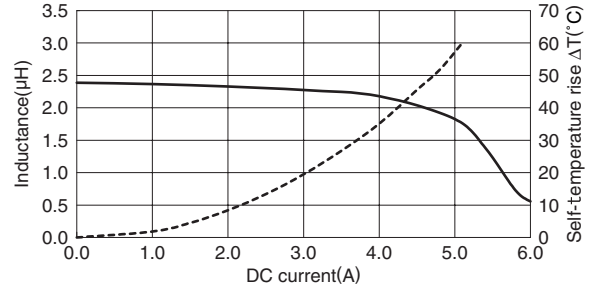
INDUCTANCE CHANGE and TEMPERATURE RISE vs. I_{dc} SUPERPOSITION

— I_{dc} vs. Inductance(μ H)
 - - - I_{dc} vs. $\Delta T(^{\circ}\text{C})$

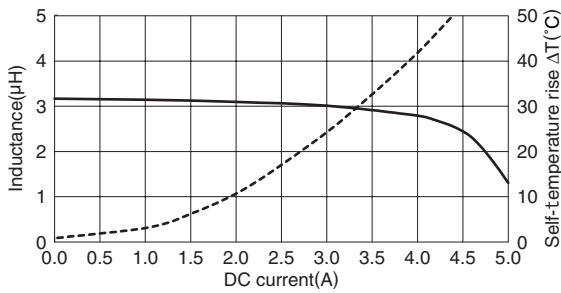
VLC5045T-1R5N



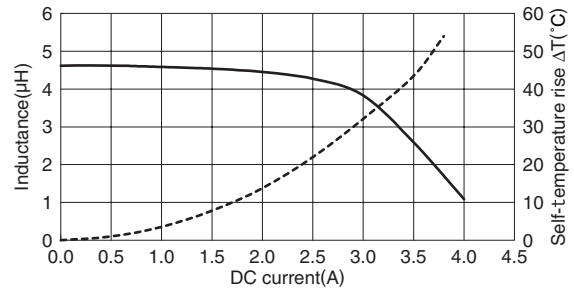
VLC5045T-2R2N



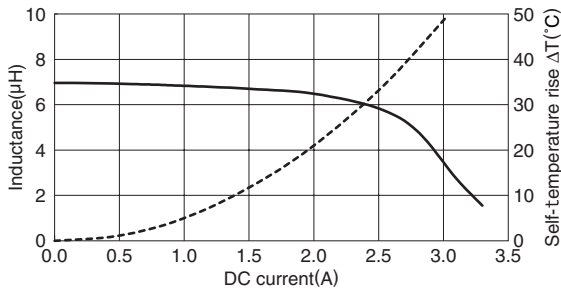
VLC5045T-3R3N



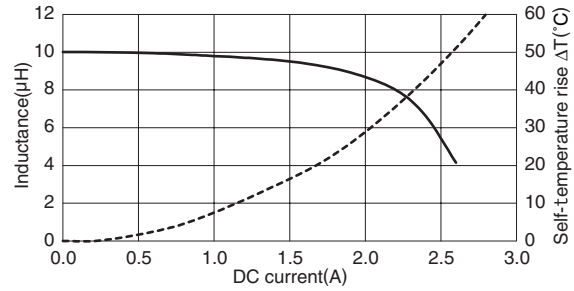
VLC5045T-4R7M



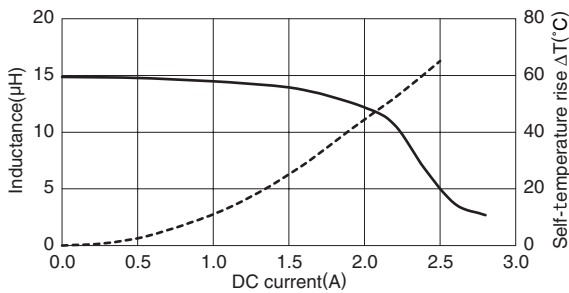
VLC5045T-6R8M



VLC5045T-100M



VLC5045T-150M



VLC5045T-220M

