

Inductors for Power Circuits

Wound/STD • magnetic shielded

VLP series

Type: VLP6045L
 VLP8040

Issue date: March 2012

- All specifications are subject to change without notice.
 - 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.
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Inductors for Power Circuits

Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

VLP Series VLP6045L

FEATURES

- Miniature size
Mount area: 6×6mm
Height: 4.5mm max.
- Optimal for choke coils for DC-DC converters in mobile devices.
- 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 TVs, printers, note PCs, etc.

PRODUCT IDENTIFICATION

VLP	6045	L	T	-	○○○	□
(1)	(2)	(3)	(4)	(5)	(6)	

(1) Series name

(2) Dimensions L×H

6045 6.8×4.5mm max.

(3) Welding

L Leser welding

(4) Packaging style

T Embossed carrier tape

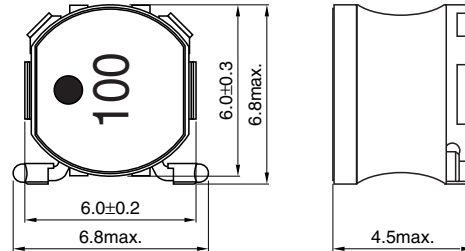
(5) Inductance value

1R0 1.0μH

(6) Inductance tolerance

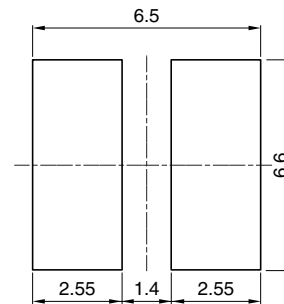
N	±30%
M	±20%

SHAPES AND DIMENSIONS



Dimensions in mm

RECOMMENDED PC BOARD PATTERN

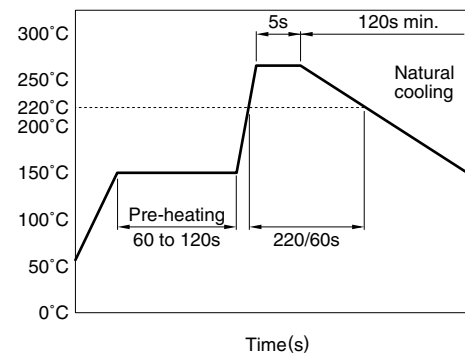


Dimensions in mm

CIRCUIT DIAGRAM



RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



• 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.

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.
VLP6045LT-1R0N	1.0	± 30	100	0.017	0.013	8.6	6.5
VLP6045LT-1R5N	1.5	± 30	100	0.024	0.018	7.2	5.4
VLP6045LT-2R2N	2.2	± 30	100	0.026	0.020	6.4	5.1
VLP6045LT-3R3N	3.3	± 30	100	0.033	0.025	5.2	4.6
VLP6045LT-4R7M	4.7	± 20	100	0.038	0.029	4.4	4.1
VLP6045LT-6R8M	6.8	± 20	100	0.057	0.044	3.8	3.3
VLP6045LT-100M	10	± 20	100	0.072	0.055	3.2	3.0
VLP6045LT-150M	15	± 20	100	0.112	0.086	2.5	2.3
VLP6045LT-220M	22	± 20	100	0.140	0.108	2.1	2.0
VLP6045LT-330M	33	± 20	100	0.202	0.155	1.6	1.5
VLP6045LT-470M	47	± 20	100	0.299	0.230	1.4	1.4
VLP6045LT-680M	68	± 20	100	0.455	0.350	1.1	1.0
VLP6045LT-101M	100	± 20	100	0.663	0.510	0.9	0.8

* Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the initial 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

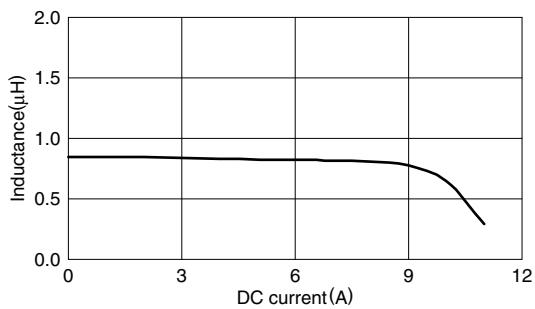
Rdc: MILLIOHM METER VP-2941A, MATSUSHITA or equivalent

L(ldc1): 4285A PRECISION LCR METER, HP with 42841A BIAS CURRENT SOURCE, HP/42842C TEST FIXTURE, HP or equivalent

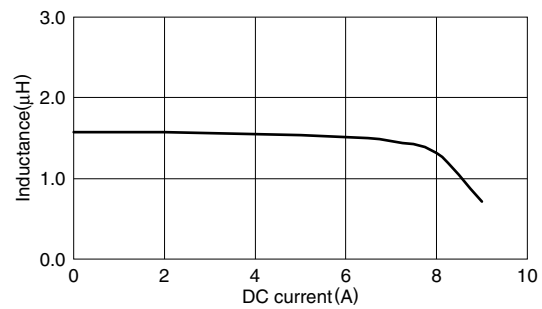
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

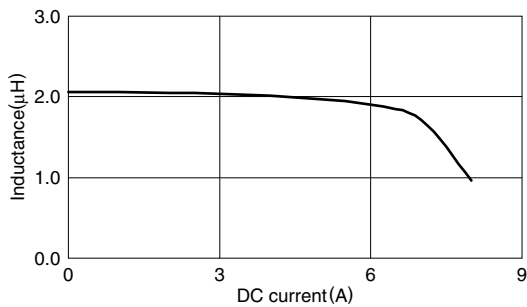
VLP6045LT-1R0N



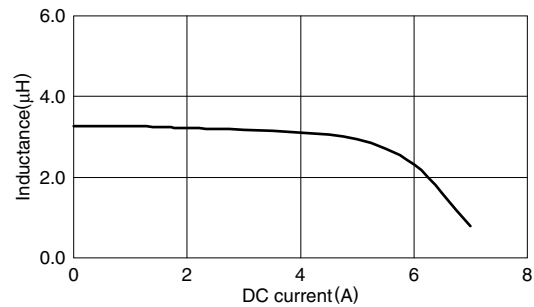
VLP6045LT-1R5N



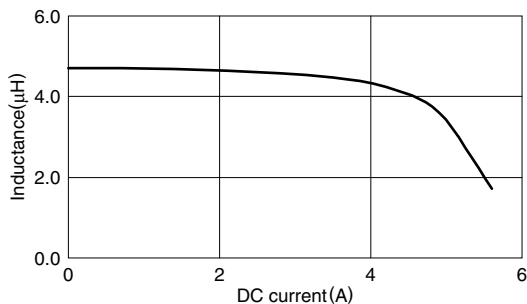
VLP6045LT-2R2N



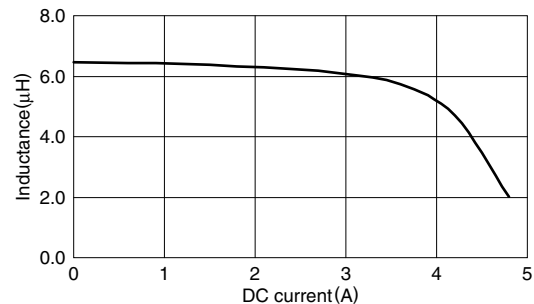
VLP6045LT-3R3N



VLP6045LT-4R7M



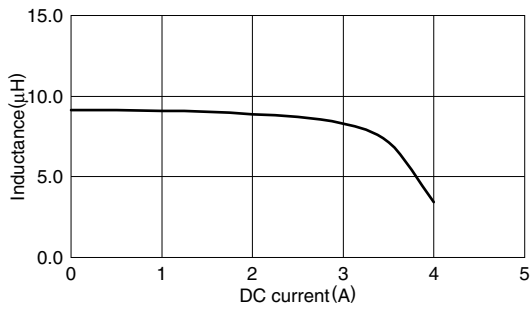
VLP6045LT-6R8M



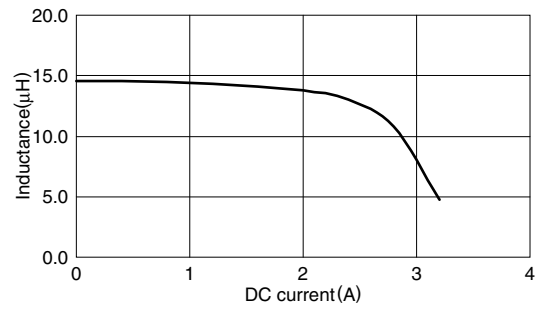
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

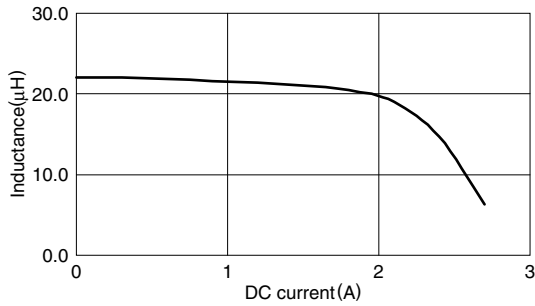
VLP6045LT-100M



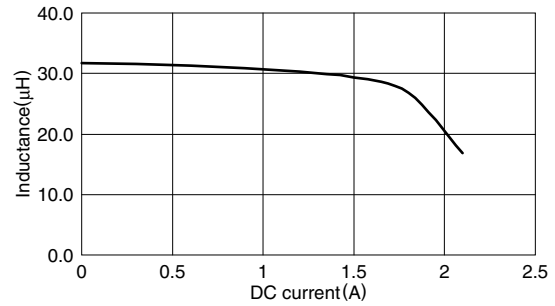
VLP6045LT-150M



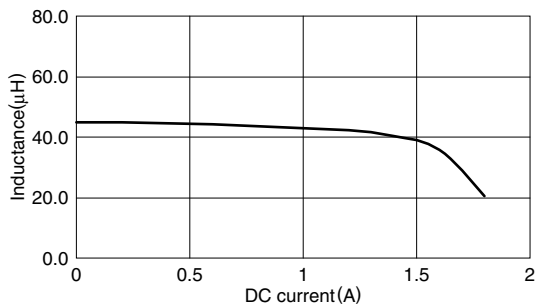
VLP6045LT-220M



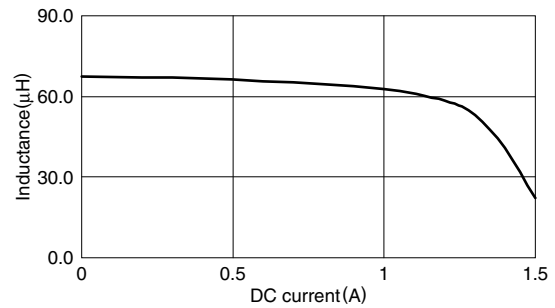
VLP6045LT-330M



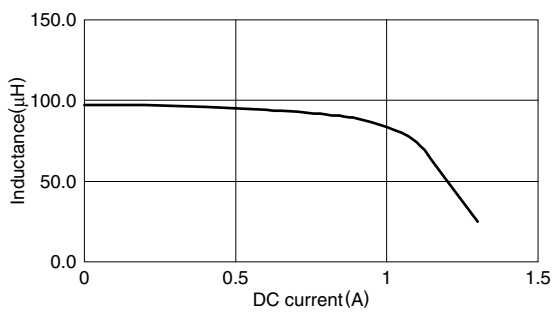
VLP6045LT-470M



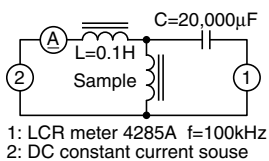
VLP6045LT-680M



VLP6045LT-101M

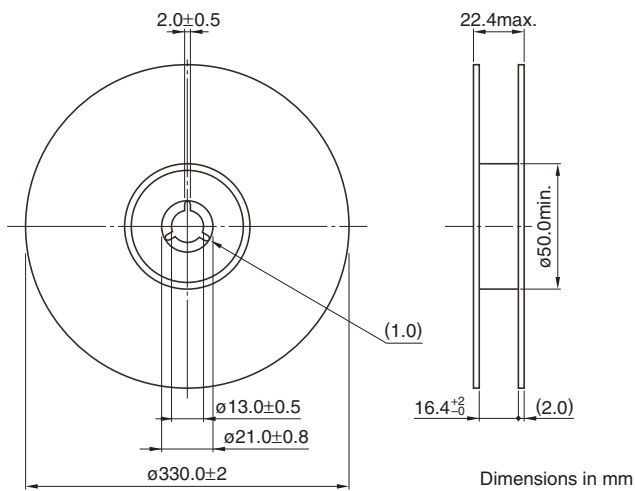


TEST CIRCUIT

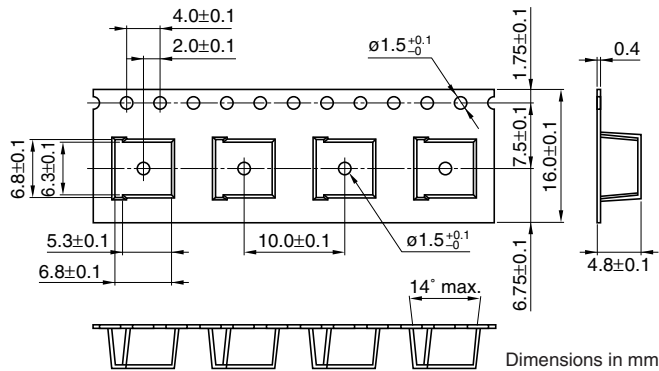


PACKAGING STYLES

REEL DIMENSIONS



TAPE DIMENSIONS



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Conformity to RoHS Directive

VLP Series VLP8040

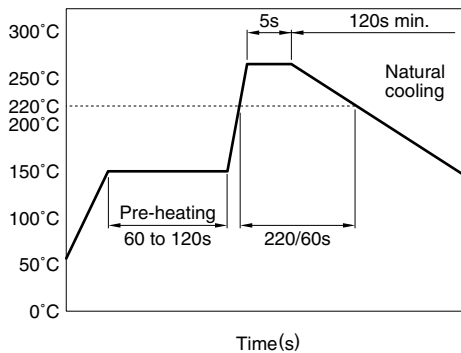
FEATURES

- Miniature size
Mount area: 8×7.7mm
Height: 4.0mm 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.

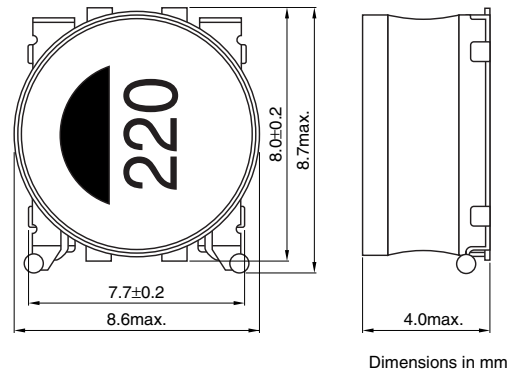
APPLICATIONS

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

RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING

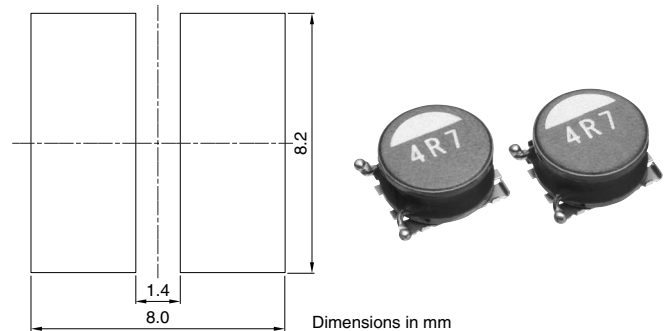


SHAPES AND DIMENSIONS



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.
VLP8040T-1R0N	1.0	±30	100	0.011	0.008	9.4	7.0
VLP8040T-1R5N	1.5	±30	100	0.013	0.010	7.8	6.7
VLP8040T-2R2N	2.2	±30	100	0.015	0.012	6.7	6.2
VLP8040T-3R3N	3.3	±30	100	0.020	0.015	5.2	5.2
VLP8040T-4R7M	4.7	±20	100	0.025	0.019	4.4	4.5
VLP8040T-6R8M	6.8	±20	100	0.032	0.024	3.6	4.0
VLP8040T-100M	10	±20	100	0.038	0.032	3.2	3.5
VLP8040T-150M	15	±20	100	0.058	0.048	2.6	2.9
VLP8040T-220M	22	±20	100	0.075	0.062	2.2	2.5
VLP8040T-330M	33	±20	100	0.11	0.090	1.8	2.1
VLP8040T-470M	47	±20	100	0.16	0.13	1.5	1.7
VLP8040T-680M	68	±20	100	0.23	0.19	1.2	1.4
VLP8040T-101M	100	±20	100	0.33	0.28	1.0	1.2
VLP8040T-151M	150	±20	100	0.49	0.41	0.8	1.0
VLP8040T-221M	220	±20	100	0.73	0.61	0.6	0.8
VLP8040T-331M	330	±20	100	1.1	0.89	0.5	0.7
VLP8040T-681M	680	±20	100	2.2	1.8	0.3	0.5

* 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

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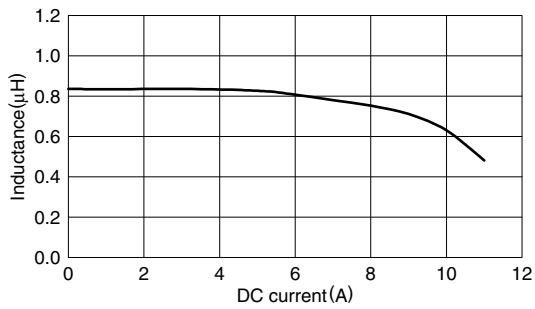
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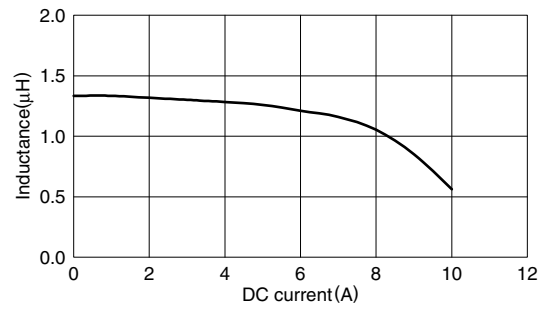
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

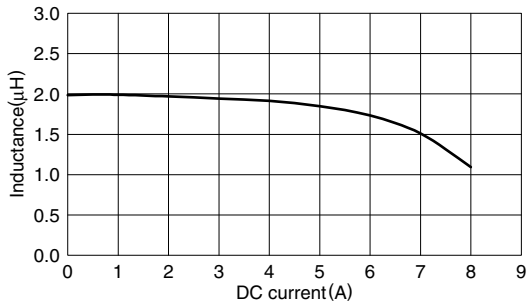
VLP8040T-1R0N



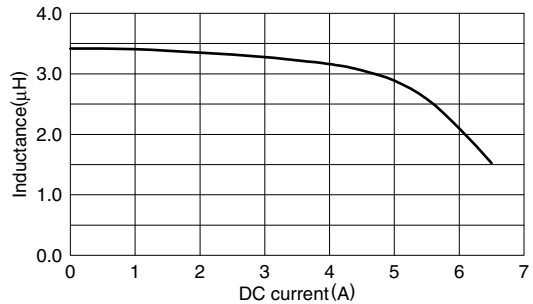
VLP8040T-1R5N



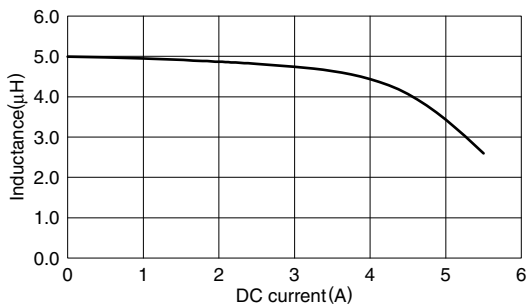
VLP8040T-2R2N



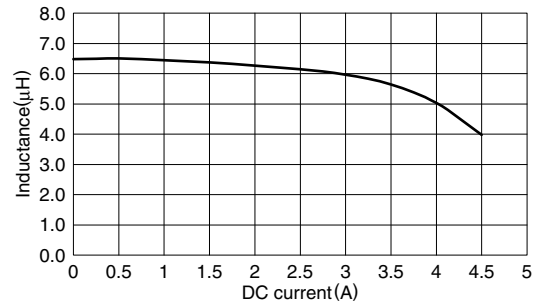
VLP8040T-3R3N



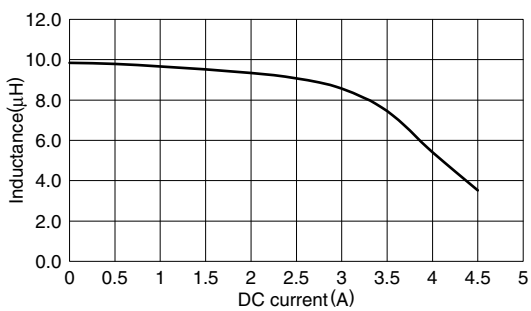
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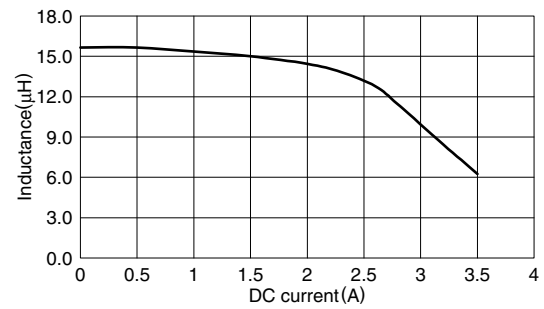
VLP8040T-6R8M



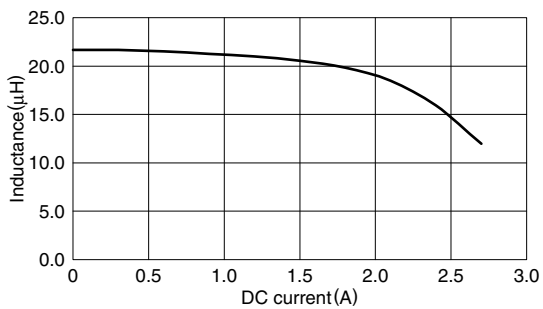
VLP8040T-100M



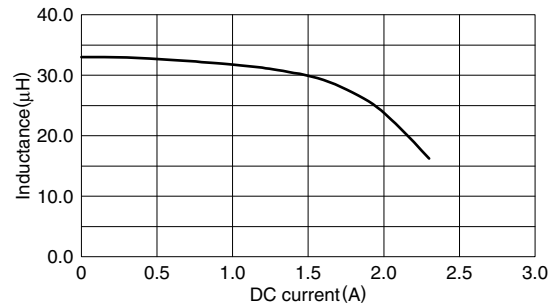
VLP8040T-150M



VLP8040T-220M



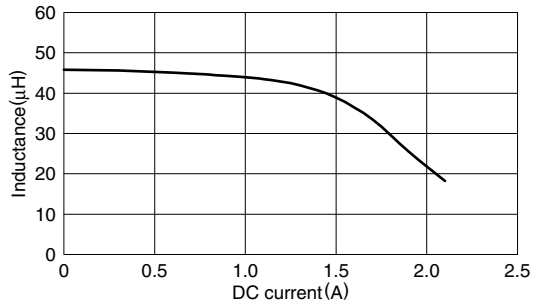
VLP8040T-330M



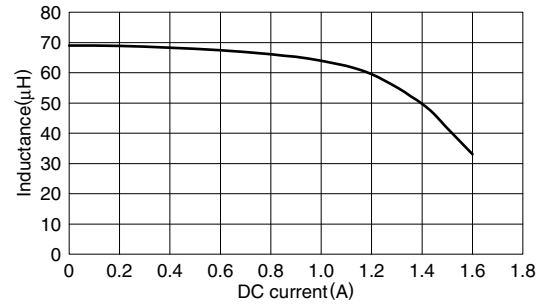
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

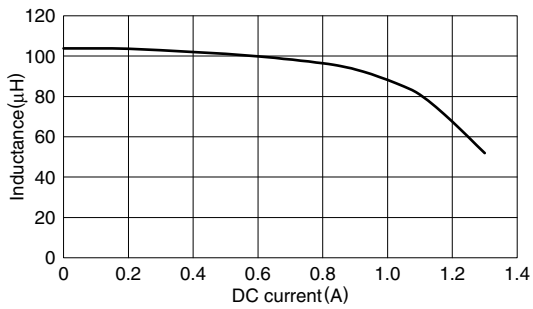
VLP8040T-470M



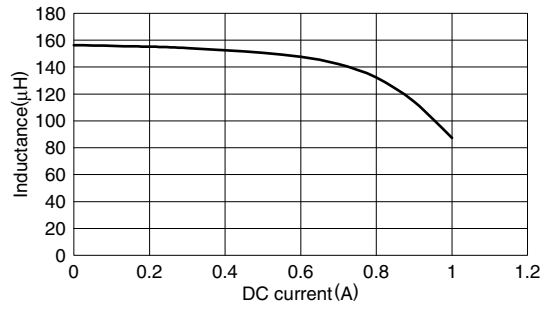
VLP8040T-680M



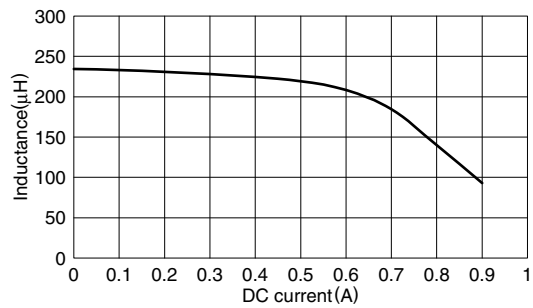
VLP8040T-101M



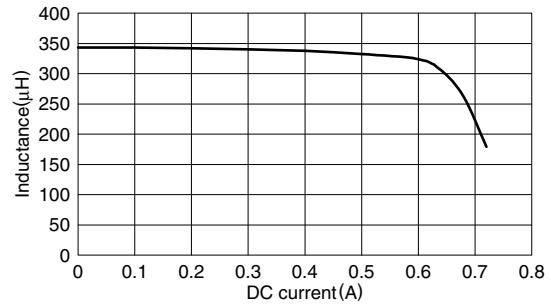
VLP8040T-151M



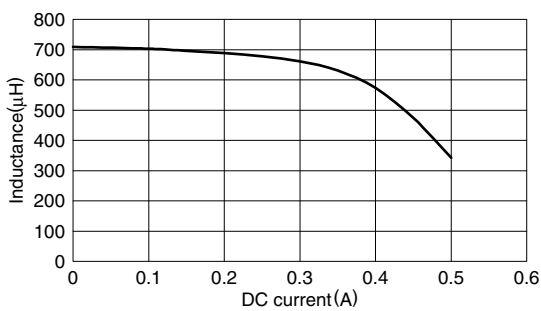
VLP8040T-221M



VLP8040T-331M



VLP8040T-681M





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.