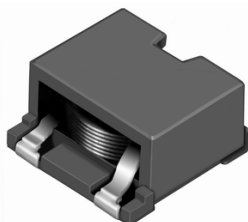


# SMD Power Inductor CDEP147



RoHS

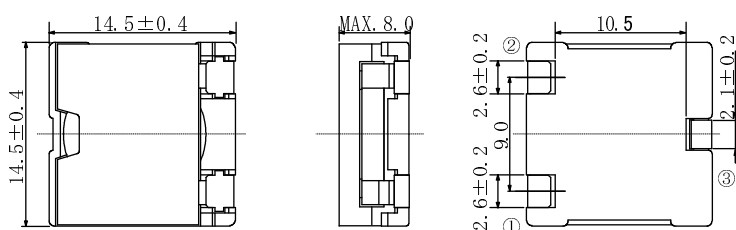
Halogen  
Free



## Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 14.9 × 14.9 × 8.0 mm Max.
- Product weight: 5.3g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Dimension - [mm]



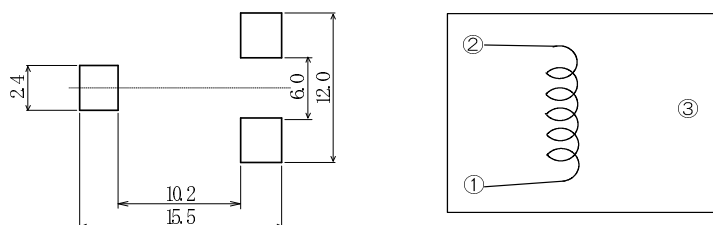
## Environmental Data

- Operating temperature range: -40°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+125°C
- Solder reflow temperature: 260 °C peak.

## Packaging

- Carrier tape and reel packaging
- 13.0" diameter reel
- 300pcs per reel

## Land pattern and Schematics - [mm]



## Applications

- Ideally used in personal computer CPU power supply.

## Electrical Characteristics

Electrical Characteristics-low D.C.R. type

| PART NO.            | STAMP | INDUCTANCE<br>[WITHIN] ※1 | D.C.R. (mΩ)<br>[MAX.] (Typ.)<br>(at 20°C) | SATURATION<br>CURRENT (A) ※2 |            | TEMPERATURE<br>RISE CURRENT<br>(A) ※3 |
|---------------------|-------|---------------------------|-------------------------------------------|------------------------------|------------|---------------------------------------|
|                     |       |                           |                                           | (at 20°C)                    | (at 100°C) |                                       |
| CDEP147NP-0R5MC-125 | 0R5ML | 0.5 μH ± 20%              | 1.18(0.98)                                | 39.6(49.5)                   | 33.9(42.4) | 23.0                                  |
| CDEP147NP-1R1MC-125 | 1R1ML | 1.1 μH ± 20%              | 1.46(1.22)                                | 26.4(33.0)                   | 22.8(28.5) | 21.5                                  |
| CDEP147NP-2R0MC-125 | 2R0ML | 2.0 μH ± 20%              | 2.02(1.69)                                | 19.6(24.5)                   | 16.8(21.0) | 20.0                                  |
| CDEP147NP-3R1MC-125 | 3R1ML | 3.1 μH ± 20%              | 3.23(2.70)                                | 16.0(20.0)                   | 13.6(17.0) | 17.5                                  |
| CDEP147NP-4R5MC-125 | 4R5ML | 4.5 μH ± 20%              | 4.97(4.14)                                | 13.6(17.0)                   | 11.6(14.5) | 16.0                                  |
| CDEP147NP-6R1MC-125 | 6R1ML | 6.1 μH ± 20%              | 6.03(5.02)                                | 11.6(14.5)                   | 10.0(12.5) | 12.5                                  |
| CDEP147NP-8R0MC-125 | 8R0ML | 8.0 μH ± 20%              | 7.80(6.50)                                | 10.0(12.5)                   | 8.2(10.3)  | 11.0                                  |
| CDEP147NP-100MC-125 | 100ML | 10.0 μH ± 20%             | 9.85(8.21)                                | 9.2(11.5)                    | 7.6(9.5)   | 10.0                                  |
| CDEP147NP-120MC-125 | 120ML | 12.0 μH ± 20%             | 13.31(11.1)                               | 8.0(10.0)                    | 6.6(8.2)   | 8.5                                   |

# SMD Power Inductor CDEP147



## Electrical Characteristics—standard type

| PART NO.           | STAMP | INDUCTANCE<br>[WITHIN] ※1 | D.C.R. (mΩ)<br>[MAX.] (Typ.)<br>(at 20°C) | SATURATION<br>CURRENT ( A ) ※2 |            | TEMPERATURE<br>RISE CURRENT<br>( A ) ※3 |
|--------------------|-------|---------------------------|-------------------------------------------|--------------------------------|------------|-----------------------------------------|
|                    |       |                           |                                           | (at 20°C)                      | (at 100°C) |                                         |
| CDEP147NP-0R4NC-95 | 0R4NS | 0.4 μH ±25%               | 1.18(0.98)                                | 52.8(66.0)                     | 45.6(57.0) | 23.0                                    |
| CDEP147NP-0R9MC-95 | 0R9MS | 0.9 μH ±20%               | 1.46(1.22)                                | 36.0(45.0)                     | 30.8(38.5) | 21.5                                    |
| CDEP147NP-1R5MC-95 | 1R5MS | 1.5 μH ±20%               | 2.02(1.69)                                | 27.2(34.0)                     | 22.8(28.5) | 20.0                                    |
| CDEP147NP-2R4MC-95 | 2R4MS | 2.4 μH ±20%               | 3.23(2.70)                                | 22.4(28.0)                     | 19.2(24.0) | 17.5                                    |
| CDEP147NP-3R4MC-95 | 3R4MS | 3.4 μH ±20%               | 4.97(4.14)                                | 18.4(23.0)                     | 16.0(20.0) | 16.0                                    |
| CDEP147NP-4R7MC-95 | 4R7MS | 4.7 μH ±20%               | 6.03(5.02)                                | 15.2(19.0)                     | 14.2(17.8) | 12.5                                    |
| CDEP147NP-6R1MC-95 | 6R1MS | 6.1 μH ±20%               | 7.80(6.50)                                | 14.8(18.5)                     | 12.4(15.5) | 11.0                                    |
| CDEP147NP-7R7MC-95 | 7R7MS | 7.7 μH ±20%               | 9.85(8.21)                                | 12.4(15.5)                     | 10.6(13.2) | 10.0                                    |
| CDEP147NP-9R5MC-95 | 9R5MS | 9.5 μH ±20%               | 13.31(11.1)                               | 11.2(14.0)                     | 9.6(12.0)  | 8.5                                     |

## Electrical Characteristics—high power type

| PART NO.           | STAMP | INDUCTANCE<br>[WITHIN] ※1 | D.C.R. (mΩ)<br>[MAX.] (Typ.)<br>(at 20°C) | SATURATION<br>CURRENT ( A ) ※2 |            | TEMPERATURE<br>RISE CURRENT<br>( A ) ※3 |
|--------------------|-------|---------------------------|-------------------------------------------|--------------------------------|------------|-----------------------------------------|
|                    |       |                           |                                           | (at 20°C)                      | (at 100°C) |                                         |
| CDEP147NP-0R3NC-73 | 0R3NH | 0.3 μH ±25%               | 1.18(0.98)                                | 70.0(87.6)                     | 59.8(74.8) | 23.0                                    |
| CDEP147NP-0R7MC-73 | 0R7MH | 0.7 μH ±20%               | 1.46(1.22)                                | 46.4(58.0)                     | 39.2(49.0) | 21.5                                    |
| CDEP147NP-1R2MC-73 | 1R2MH | 1.2 μH ±20%               | 2.02(1.69)                                | 35.7(44.7)                     | 30.0(37.5) | 20.0                                    |
| CDEP147NP-1R8MC-73 | 1R8MH | 1.8 μH ±20%               | 3.23(2.70)                                | 29.6(37.0)                     | 24.0(30.0) | 17.5                                    |
| CDEP147NP-2R6MC-73 | 2R6MH | 2.6 μH ±20%               | 4.97(4.14)                                | 24.4(30.5)                     | 20.4(25.5) | 16.0                                    |
| CDEP147NP-3R5MC-73 | 3R5MH | 3.5 μH ±20%               | 6.03(5.02)                                | 20.8(26.0)                     | 17.2(21.5) | 12.5                                    |
| CDEP147NP-4R7MC-73 | 4R7MH | 4.7 μH ±20%               | 7.80(6.50)                                | 17.6(22.0)                     | 16.0(20.0) | 11.0                                    |
| CDEP147NP-5R9MC-73 | 5R9MH | 5.9 μH ±20%               | 9.85(8.21)                                | 16.4(20.5)                     | 14.0(17.5) | 10.0                                    |
| CDEP147NP-7R3MC-73 | 7R3MH | 7.3 μH ±20%               | 13.31(11.1)                               | 14.6(18.3)                     | 12.2(15.3) | 8.5                                     |

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 75% of its nominal value.

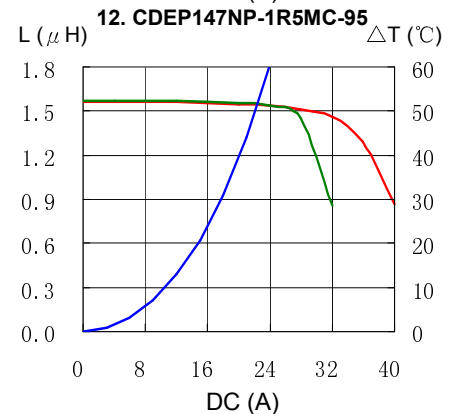
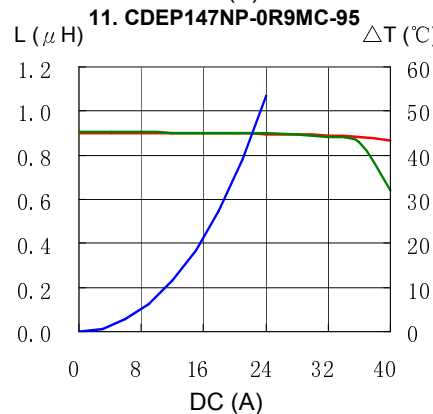
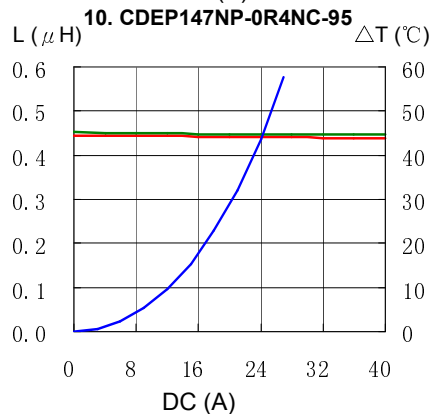
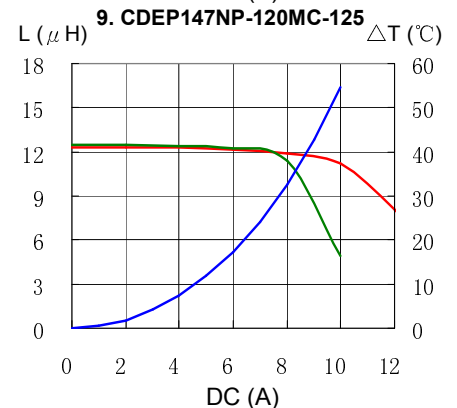
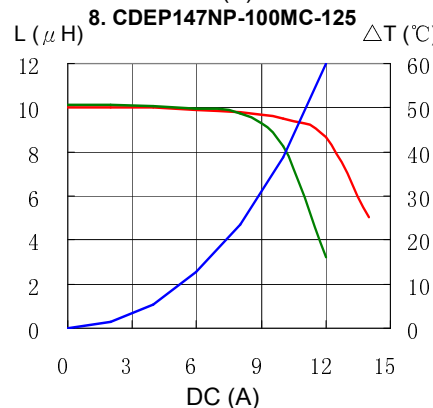
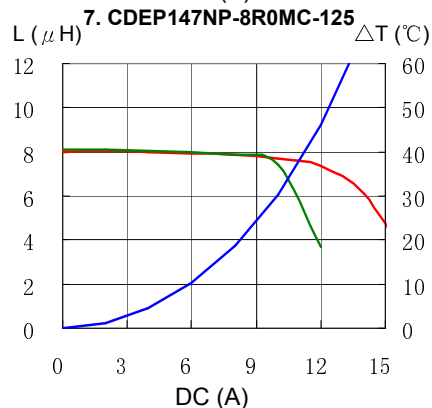
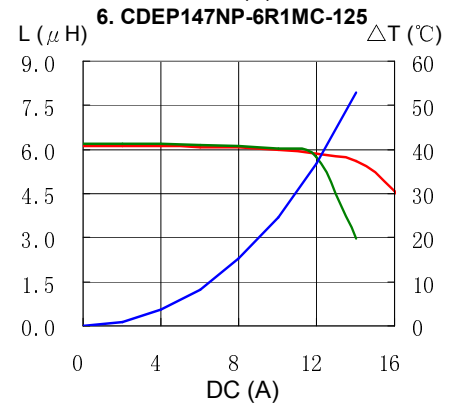
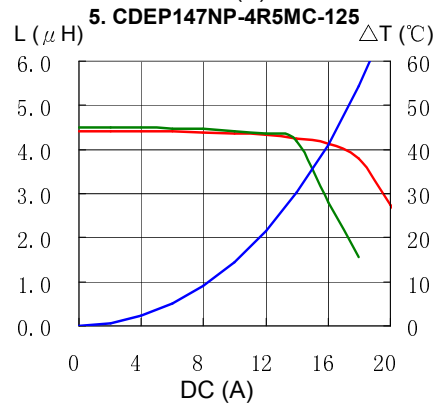
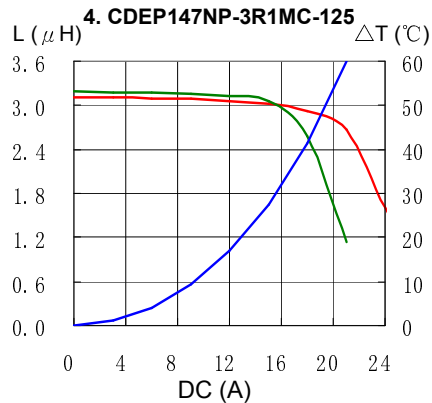
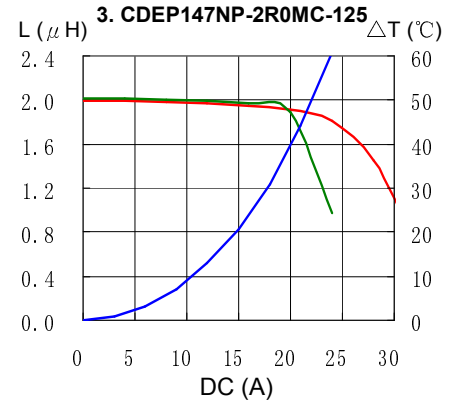
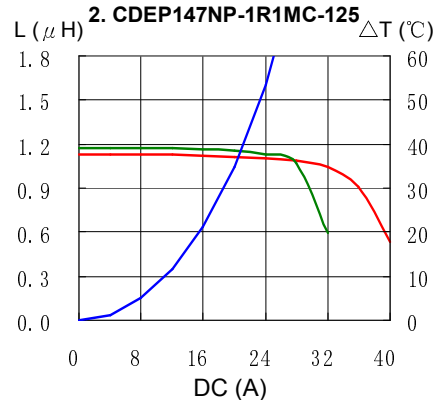
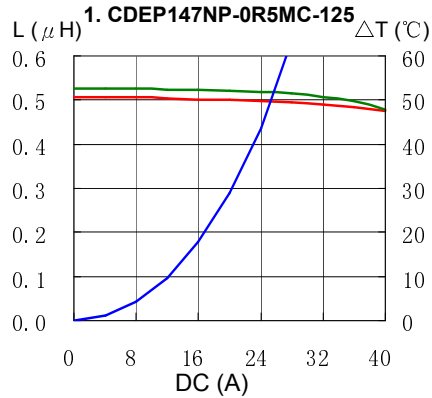
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

# SMD Power Inductor CDEP147



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

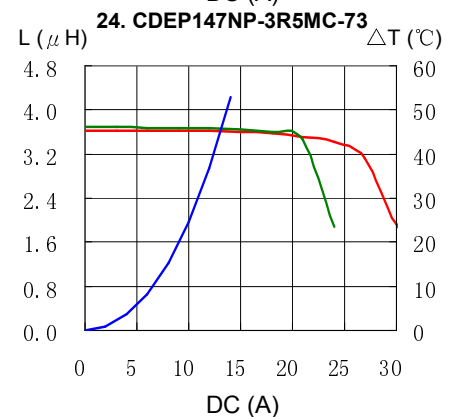
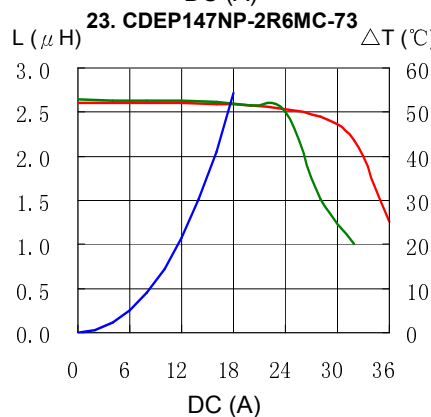
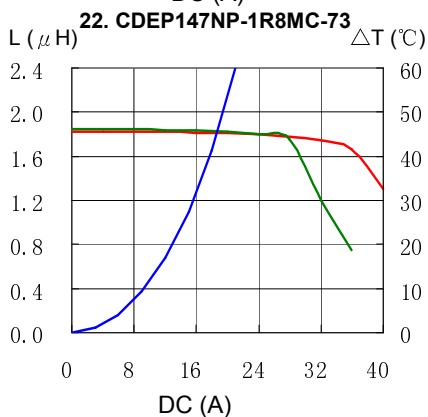
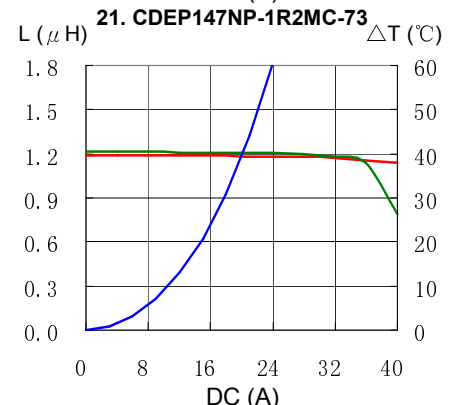
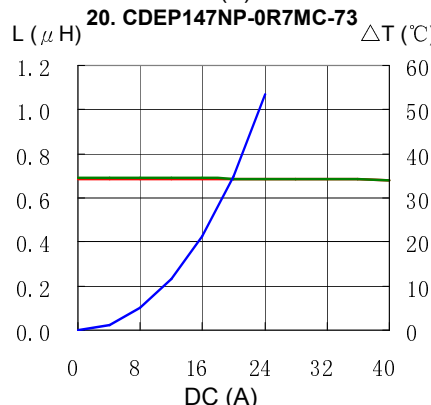
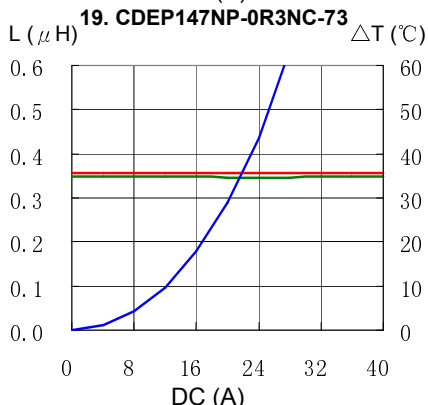
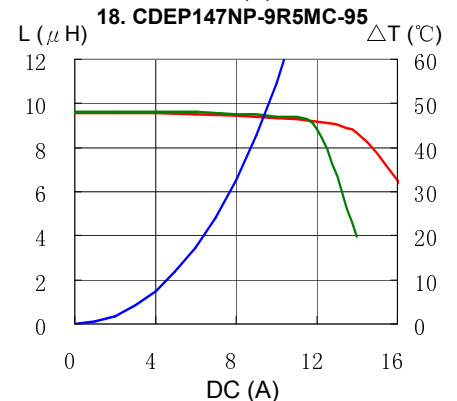
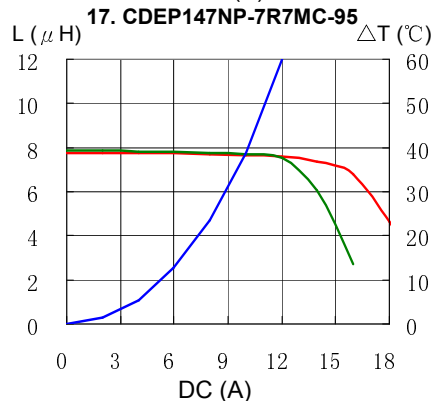
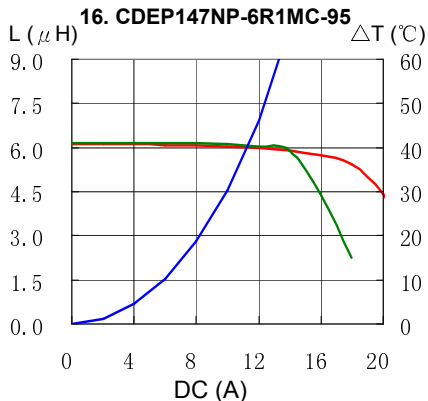
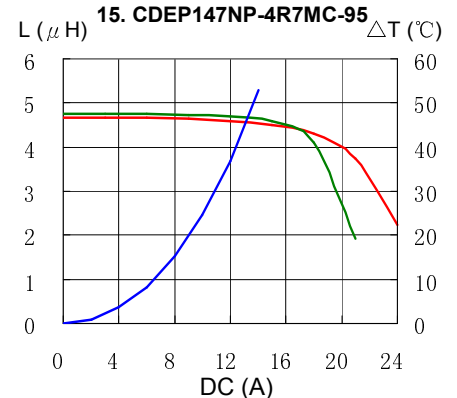
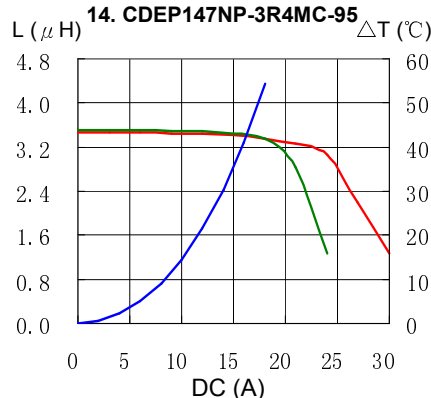
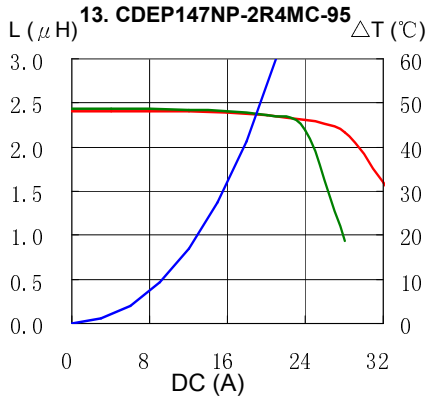


# SMD Power Inductor CDEP147



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

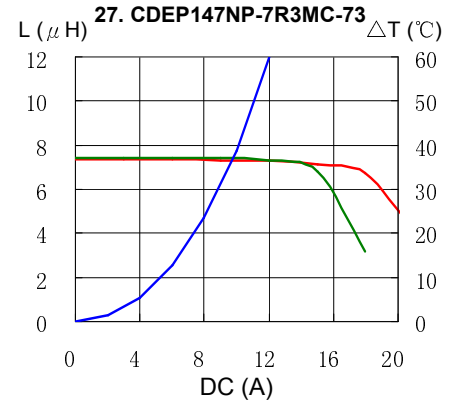
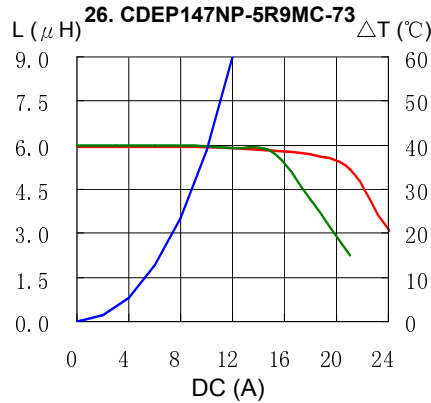
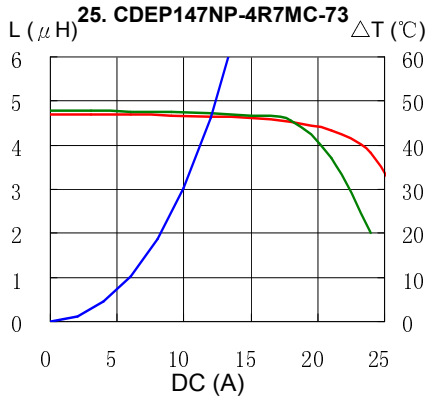


# SMD Power Inductor CDEP147

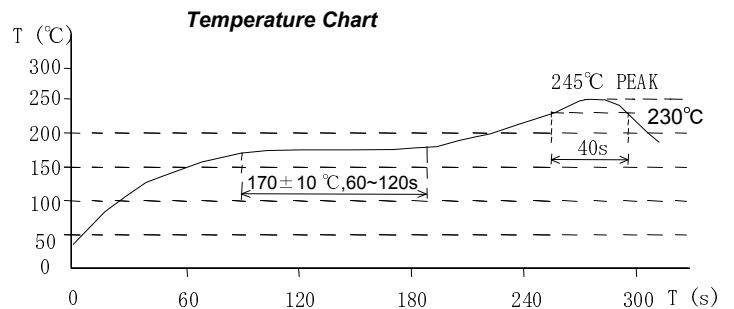
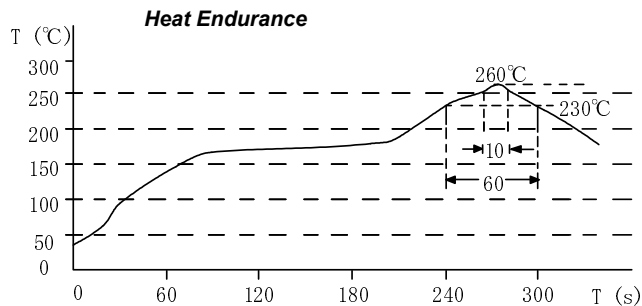


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



## Solder Reflow Condition



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

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- 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;
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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

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