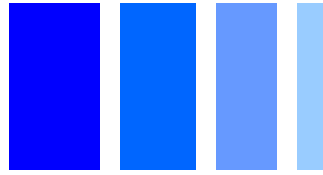


SMD Power Inductor CEP125



Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 12.9 × 12.9 × 5.6 mm Max.
- Product weight: 2.7g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

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.

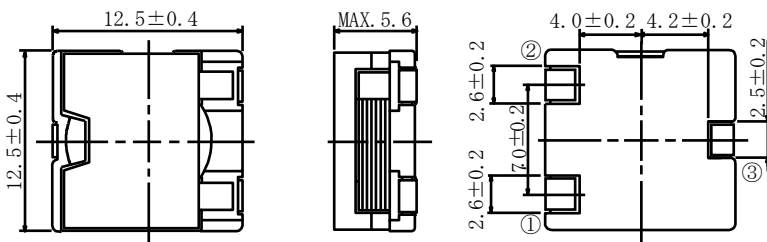
Packaging

- Carrier tape and reel packaging
- 13.0" diameter reel
- 500pcs per reel

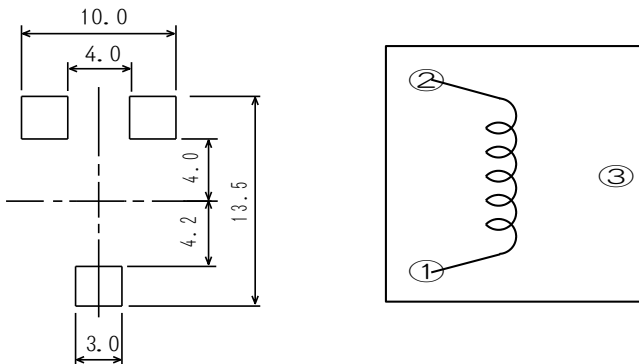
Applications

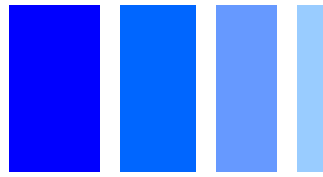
- Ideally used in portable computer CPU and other power supply.

Dimension - [mm]



Land pattern and Schematics - [mm]





Electrical Characteristics - 1

| PART NO. | STAMP | INDUCTANCE [WITHIN] ※1 | D.C.R. (mΩ) [MAX.] (Typ.) (at 20°C) | SATURATION CURRENT(A) ※2 | | TEMPERATURE RISE CURRENT (A) ※3 |
|----------------|-------|---------------------------|---|-----------------------------|-----------|---------------------------------------|
| | | | | (at 20°C) | (at100°C) | |
| CEP125NP-1R5MC | 1R5M | 1.5μH±20% | 2.5(2.1) | 14.0 | 11.8 | 16.5 |
| CEP125NP-2R5MC | 2R5M | 2.5μH±20% | 3.4(2.8) | 10.0 | 8.8 | 15.5 |
| CEP125NP-4R0MC | 4R0M | 4.0μH±20% | 5.4(4.5) | 8.3 | 7.2 | 12.5 |
| CEP125NP-6R0MC | 6R0M | 6.0μH±20% | 8.0(6.6) | 6.7 | 5.8 | 9.9 |
| CEP125NP-8R2MC | 8R2M | 8.2μH±20% | 11.4(9.5) | 5.8 | 5.1 | 8.2 |
| CEP125NP-100MC | 100M | 10.0μH±20% | 13.5(11.2) | 5.0 | 4.6 | 7.6 |

Electrical Characteristics - 2

| PART NO. | STAMP | INDUCTANCE [WITHIN] ※1 | D.C.R. (mΩ) [MAX.] (Typ.) (at 20°C) | SATURATION CURRENT (A) ※2 | | TEMPERATURE RISE CURRENT (A) ※3 |
|------------------|-------|---------------------------|---|--------------------------------|-----------|---|
| | | | | (at 20°C) | (at100°C) | |
| CEP125NP-1R0MC-H | 1R0MH | 1.0μH±20% | 2.5(2.1) | 20.0 | 17.4 | 16.5 |
| CEP125NP-1R8MC-H | 1R8MH | 1.8μH±20% | 3.4(2.8) | 15.3 | 12.9 | 15.5 |
| CEP125NP-2R8MC-H | 2R8MH | 2.8μH±20% | 5.4(4.5) | 12.3 | 10.2 | 12.5 |
| CEP125NP-4R0MC-H | 4R0MH | 4.0μH±20% | 8.0(6.6) | 10.3 | 8.6 | 9.9 |
| CEP125NP-5R6MC-H | 5R6MH | 5.6μH±20% | 11.4(9.5) | 8.8 | 7.7 | 8.2 |
| CEP125NP-7R2MC-H | 7R2MH | 7.2μH±20% | 13.5(11.2) | 7.8 | 6.6 | 7.6 |

Electrical Characteristics - 3

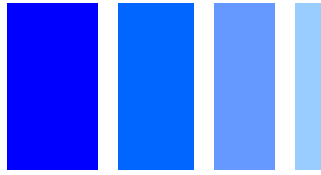
| PART NO. | STAMP | INDUCTANCE [WITHIN] ※1 | D.C.R. (mΩ) [MAX.] (Typ.) (at 20°C) | SATURATION CURRENT (A) ※2 | | TEMPERATURE RISE CURRENT (A) ※3 |
|------------------|-------|---------------------------|---|--------------------------------|-----------|---|
| | | | | (at 20°C) | (at100°C) | |
| CEP125NP-0R3NC-U | 0R3NU | 0.35μH±30% | 1.8(1.5) | 35.0 | 32.0 | 18.5 |
| CEP125NP-0R8NC-U | 0R8NU | 0.8μH±30% | 2.5(2.1) | 25.7 | 21.8 | 16.5 |
| CEP125NP-1R4MC-U | 1R4MU | 1.4μH±20% | 3.4(2.8) | 19.2 | 16.4 | 15.5 |
| CEP125NP-2R2MC-U | 2R2MU | 2.2μH±20% | 5.4(4.5) | 14.8 | 12.8 | 12.5 |
| CEP125NP-3R2MC-U | 3R2MU | 3.2μH±20% | 8.0(6.6) | 12.8 | 10.9 | 9.9 |
| CEP125NP-4R3MC-U | 4R3MU | 4.3μH±20% | 11.4(9.5) | 11.0 | 9.1 | 8.2 |
| CEP125NP-5R6MC-U | 5R6MU | 5.6μH±20% | 13.5(11.2) | 9.5 | 7.8 | 7.6 |

※1. Measuring condition: at 100kHz.

※2. Saturation current :The value of D.C. current when the inductance decreases to 65% (while the tolerance is ±30%) or 75% (while the tolerance is ±20%) of it's nominal.

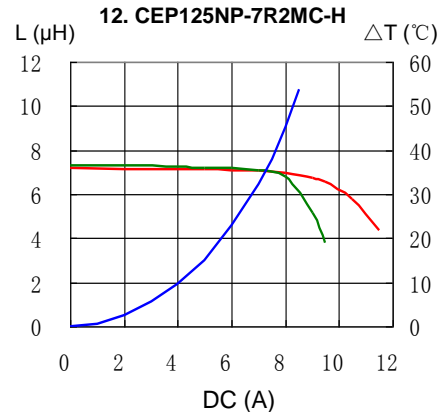
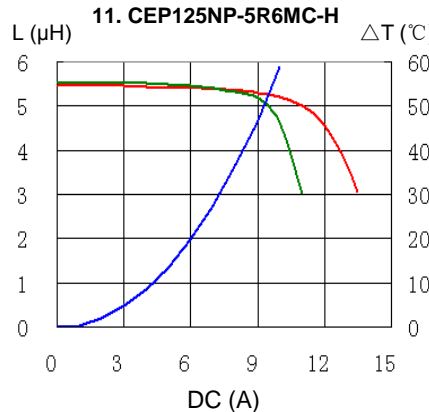
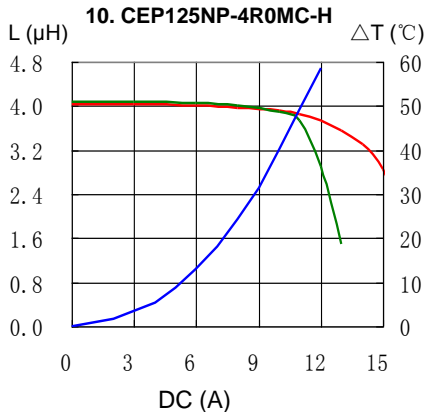
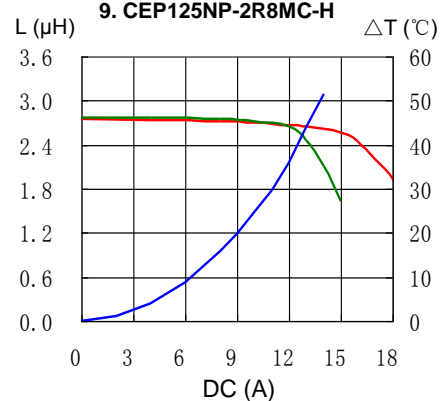
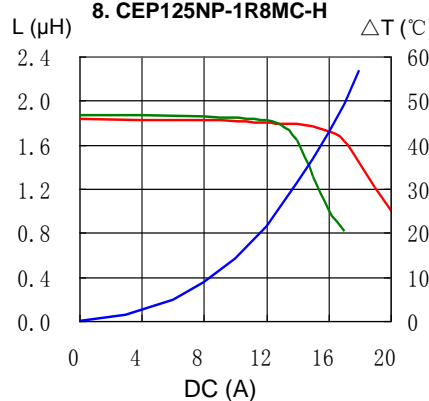
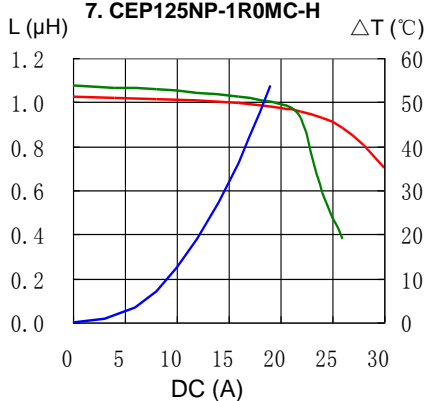
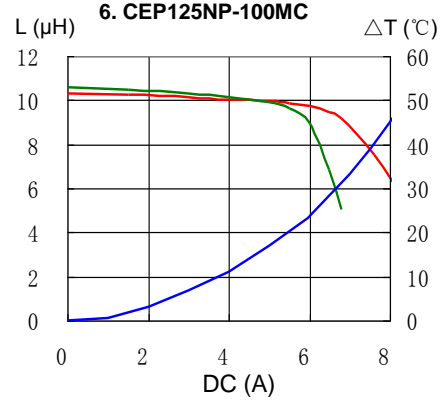
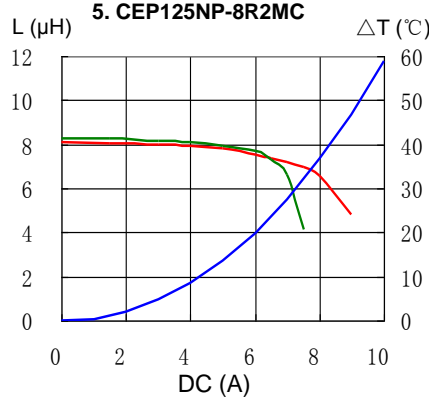
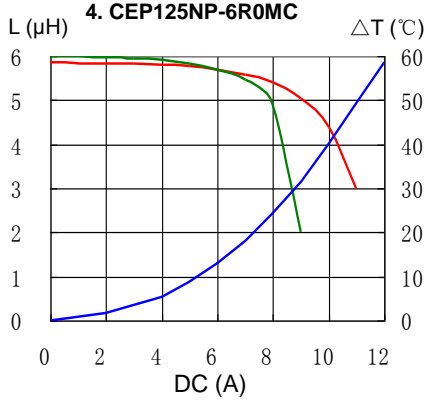
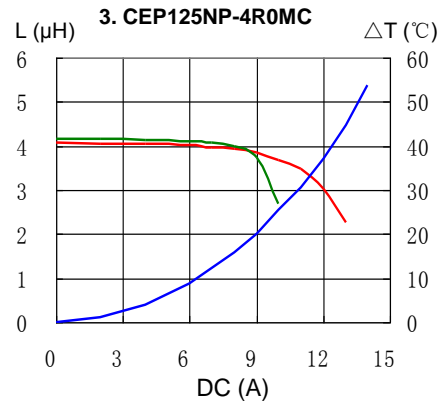
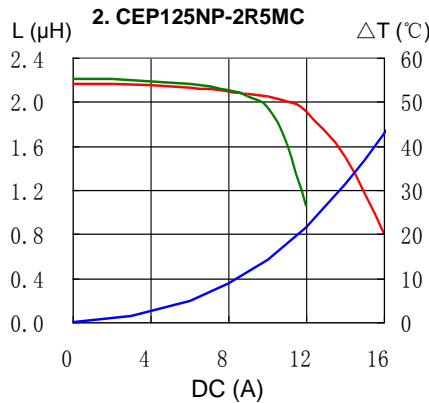
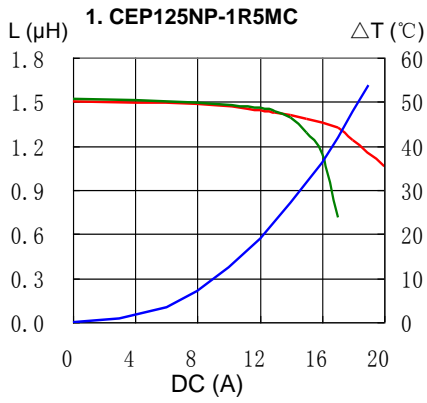
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

SMD Power Inductor CEP125

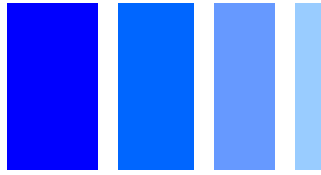


Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

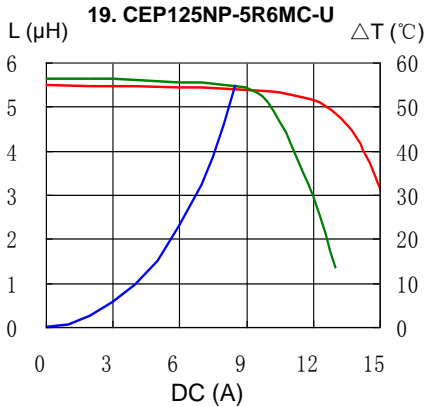
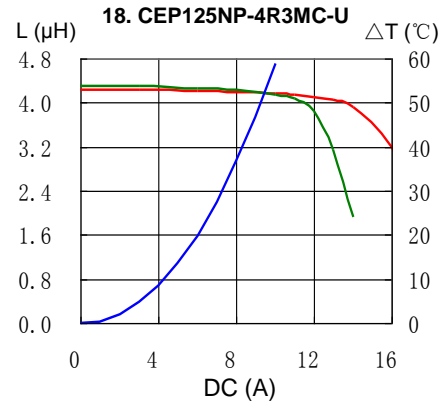
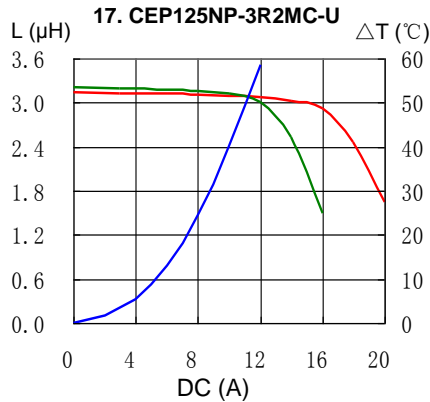
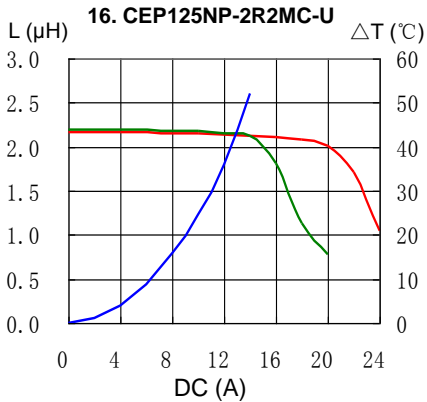
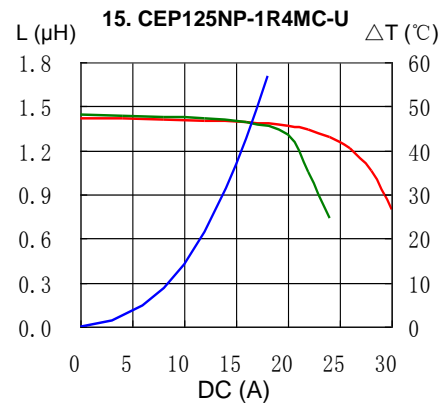
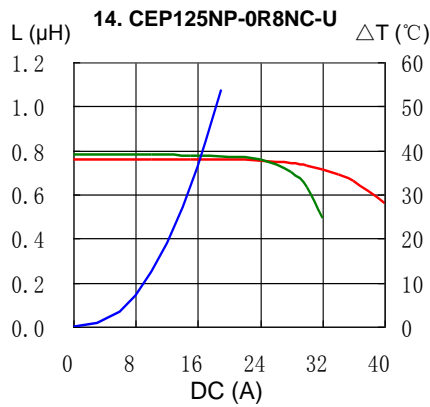
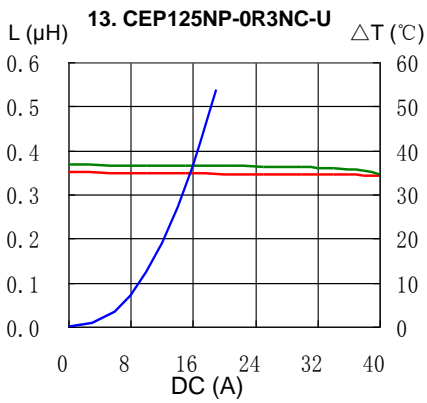


SMD Power Inductor CEP125

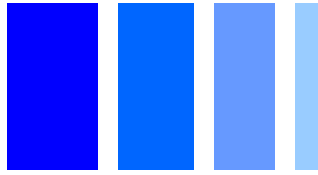


Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

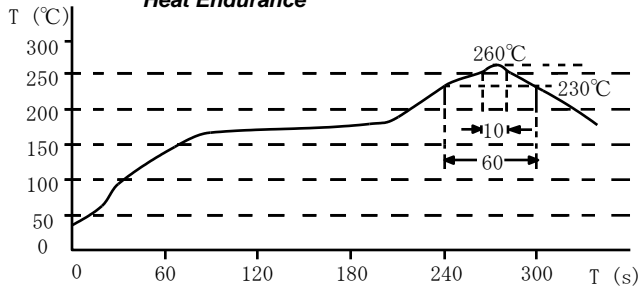


SMD Power Inductor CEP125

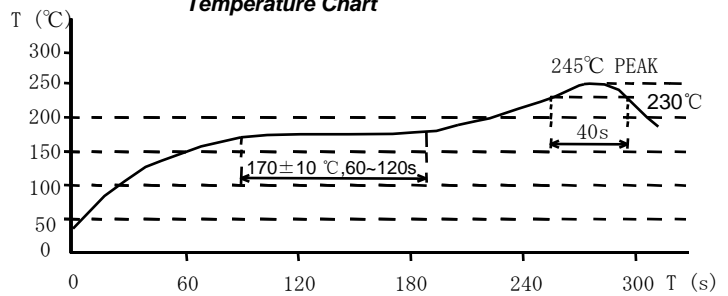


Solder Reflow Condition

Heat Endurance



Temperature Chart



Please refer to the sales offices on our website - <http://www.sumida.com>

Hong Kong

Tel.+852-2880-6781
FAX.+852-2565-9600
sales@hk.sumida.com

Saitama(Japan)

Tel.+81-48-691-7300
FAX.+81-48-691-7340
sales@jp.sumida.com

Chicago

Tel.+1-847-545-6700
FAX. +1-847-545-6720
sales@us.sumida.com

Shanghai

Tel.+86-21-5836-3299
FAX.+86-21-5836-3266
shanghai.sales@cn.sumida.com

Seoul

Tel.+82-2-6237-0777
FAX.+82-2-6237-0778
sales@kr.sumida.com

Obernzell

Tel.+49-8591-937-0
FAX. +49-8591-937-103
contact@eu.sumida.com

Shenzhen

Tel.+86-755-8291-0228
FAX.+86-755-8291-0338
shenzhen.sales@cn.sumida.com

Singapore

Tel.+65-6296-3388
FAX.+65-6841-4426
sales@sg.sumida.com

Neumarkt

Tel.+49-9181-4509-110
FAX. +49-9181-4509-310
infocomp@eu.sumida.com

Taipei

Tel.+886-2-8751-2737
FAX.+886-2-8751-2738
sales@tw.sumida.com

San Jose

Tel.+1-408-321-9660
FAX.+1-408-321-9308
sales@us.sumida.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Fixed Inductors](#) category:

Click to view products by [Sumida](#) manufacturer:

Other Similar products are found below :

[CR43NP-680KC](#) [CR54NP-820KC](#) [CR54NP-8R5MC](#) [CTX32CT-100](#) [70F224AI](#) [MGDQ4-00004-P](#) [MHL1ECTTP18NJ](#) [MHL1JCTTD12NJ](#)
[PE-51506NL](#) [PE-53601NL](#) [PE-53602NL](#) [PE-53630NL](#) [PE-53824SNLT](#) [PE-62892NL](#) [PE-92100NL](#) [PG0434.801NLT](#) [PG0936.113NLT](#)
[9310-16](#) [PM06-2N7](#) [PM06-39NJ](#) [A01TK](#) [1206CS-471XJ](#) [HC2-2R2TR](#) [HC2LP-R47-R](#) [HC3-2R2-R](#) [1206CS-151XG](#) [RCH664NP-140L](#)
[RCH664NP-4R7M](#) [RCH8011NP-221L](#) [RCP1317NP-332L](#) [RCP1317NP-391L](#) [RCR1010NP-470M](#) [RCR110DNP-331L](#) [DH2280-4R7M](#)
[DS1608C-106](#) [ASPI-4020HI-R10M-T](#) [B10TJ](#) [B82477P4333M](#) [B82498B3101J000](#) [B82498B3680J000](#) [ELJ-RE27NJF2](#) [1812CS-153XJ](#)
[1812CS-183XJ](#) [1812CS-223XJ](#) [1812LS-104XJ](#) [1812LS-105XJ](#) [1812LS-124XJ](#) [1812LS-154XJ](#) [1812LS-223XJ](#) [1812LS-224XJ](#)