



**THE DATASHEET OF  
CDEP149NP-1R7MC**



# SMD Power Inductor CDEP149



## Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 15.2 × 15.2 × 10.0 mm Max.
- Product weight: 7.3g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -40°C ~ +100°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +100°C
- Solder reflow temperature: 260 °C peak.

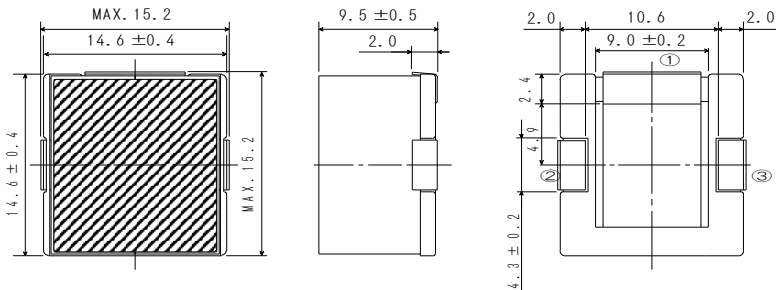
## Packaging

- Carrier tape and reel packaging
- 14.6" diameter reel
- 250pcs per reel

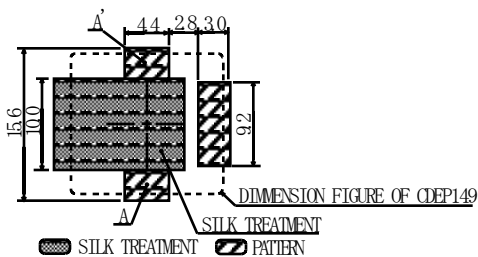
## Applications

- Ideally used in personal computer CPU power supply.

## Dimension - [mm]



## Land pattern and Schematics - [mm]





## Electrical Characteristics

### Electrical Characteristics - 1

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX] (Typ.) (at 20°C)	SATURATION CURRENT ( A ) (at 20°C) ※2	TEMPERATURE RISE CURRENT ( A ) ※3
CDEP149NP-0R7NC	0R7N	0.75μH±30%	1.1(0.9)	24.0	35.0
CDEP149NP-1R7MC	1R7M	1.7μH±20%	1.6(1.3)	16.8	30.0
CDEP149NP-3R0MC	3R0M	3.0μH±20%	2.3(1.9)	12.4	28.0

### Electrical Characteristics - 2

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX] (Typ.) (at 20°C)	SATURATION CURRENT ( A ) (at 20°C) ※2	TEMPERATURE RISE CURRENT ( A ) ※3
CDEP149NP-0R4NC-H	0R4N	0.45μH±30%	1.1(0.9)	32.0	35.0
CDEP149NP-1R0MC-H	1R0M	1.0μH±20%	1.6(1.3)	26.0	30.0
CDEP149NP-1R8MC-H	1R8M	1.8μH±20%	2.3(1.9)	20.0	28.0

※1. Measuring condition: at 100kHz.

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

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

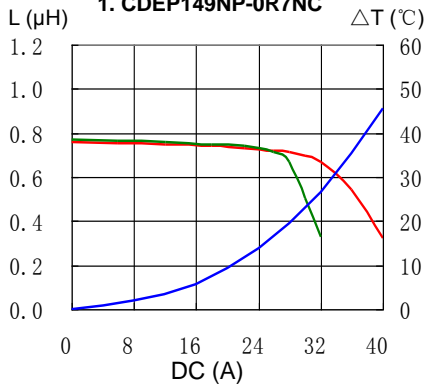
# SMD Power Inductor CDEP149



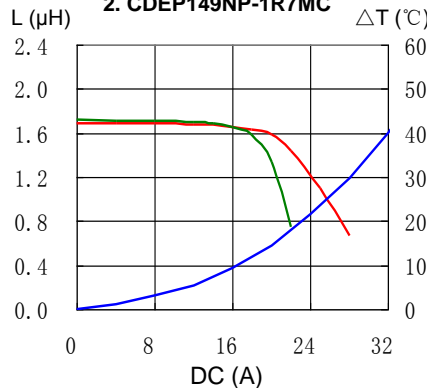
## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

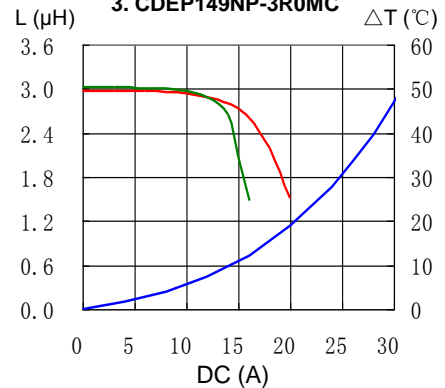
1. CDEP149NP-0R7NC



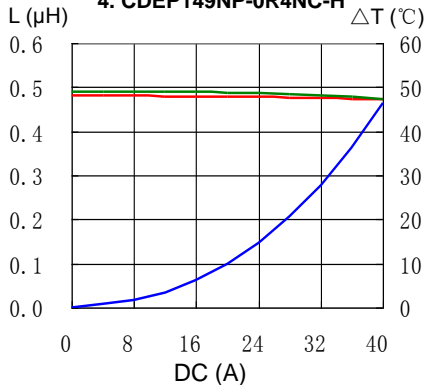
2. CDEP149NP-1R7MC



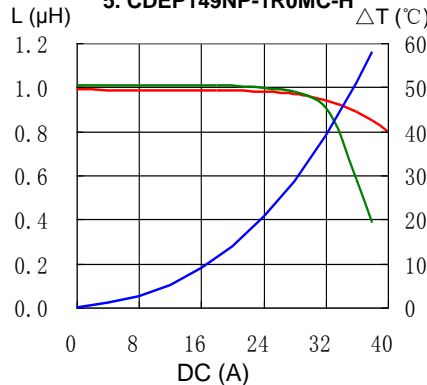
3. CDEP149NP-3R0MC



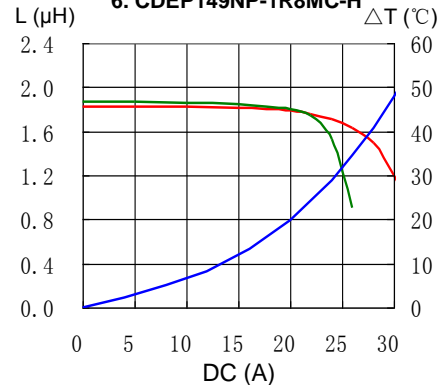
4. CDEP149NP-0R4NC-H



5. CDEP149NP-1R0MC-H

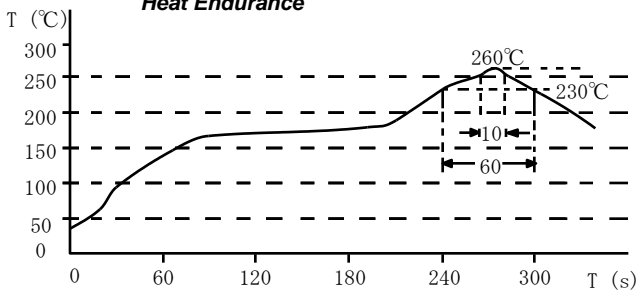


6. CDEP149NP-1R8MC-H

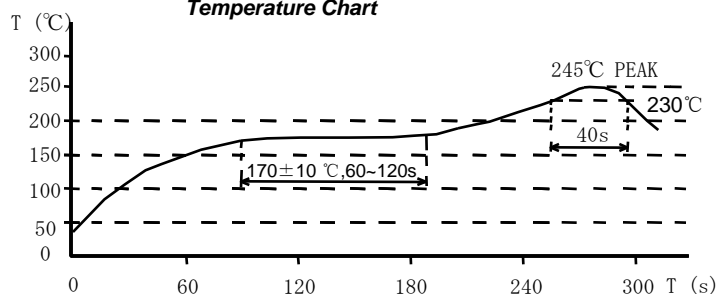


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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