

# SMD Power Inductor CDPH40D18



## Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 4.2 × 4.2 × 2.0mm Max.
- Product weight: 120mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -40°C~+105°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C
- Solder reflow temperature: 260 °C peak.

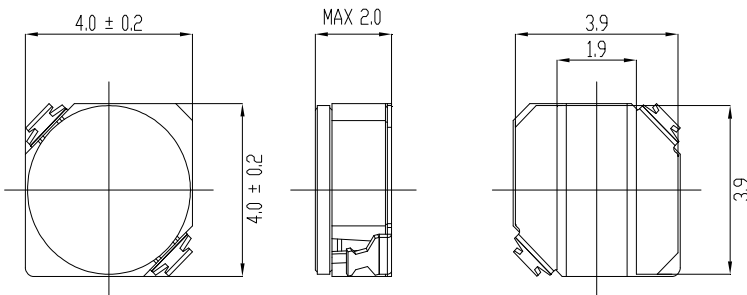
## Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 3000pcs per reel

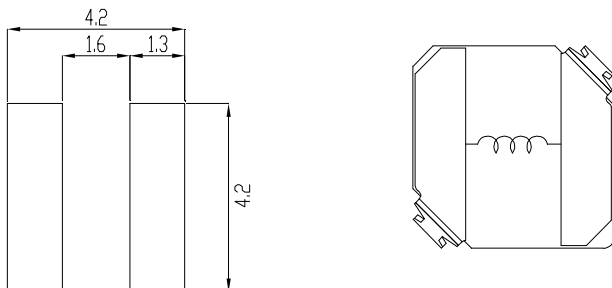
## Applications

- Ideally used in Mobilephone, PDA, MP3, DSC/DVC, etc as DC-DC converter inductors.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

Part No.	Inductance ( $\mu$ H) [Within] ※1	D.C.R. (m $\Omega$ ) [Within] (At 20°C)	Saturation current (A) ※2	Temperature rise current (A) ※3
CDPH40D18NP-4R7MC	4.7 ± 20%	103 ± 20%	1.84	1.30
CDPH40D18NP-100MC	10.0 ± 20%	231 ± 20%	1.22	0.82
CDPH40D18NP-330MC	33.0 ± 20%	764 ± 20%	0.64	0.43

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of its nominal value.

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

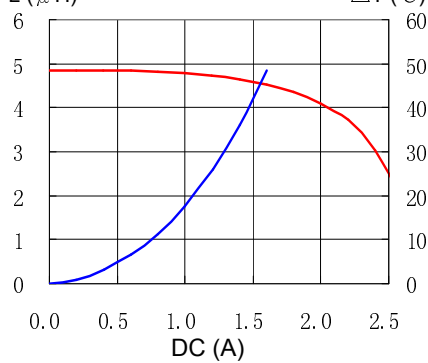
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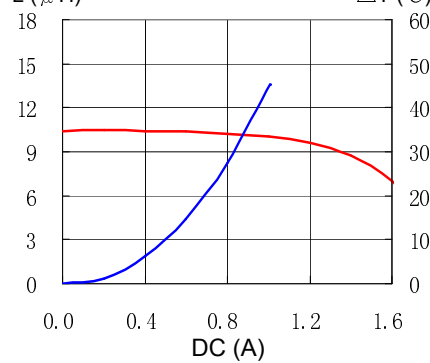
## Saturation Current & Temperature Rise Graph

— L (20°C) —  $\Delta T$

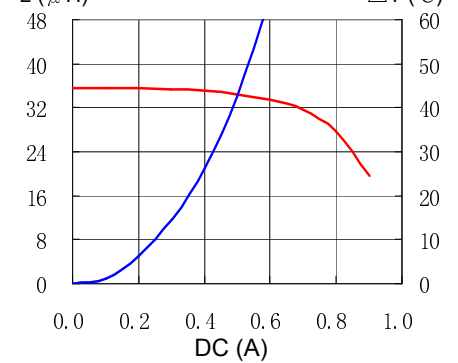
1. CDPH40D18NP-4R7MC



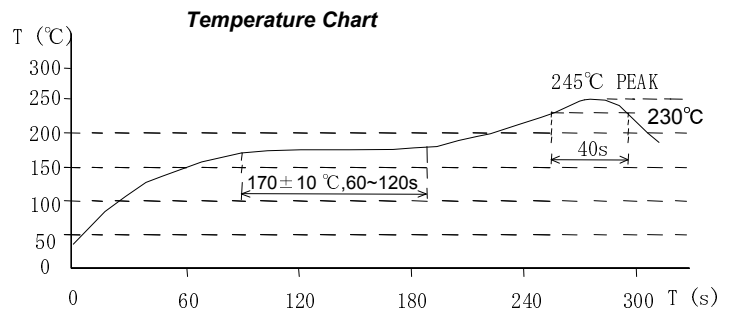
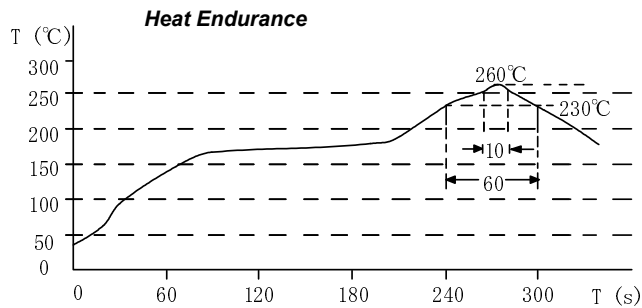
2. CDPH40D18NP-100MC



3. CDPH40D18NP-330MC



## Solder Reflow Condition



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

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