

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.

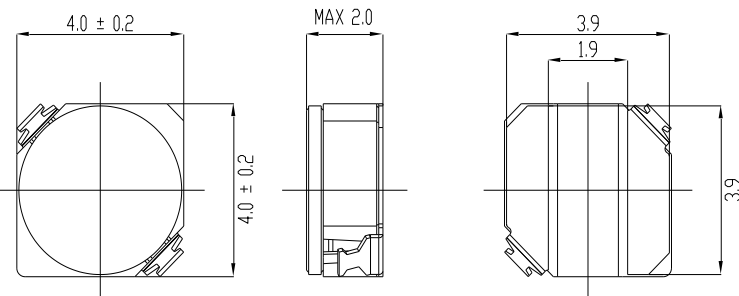
Packaging

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

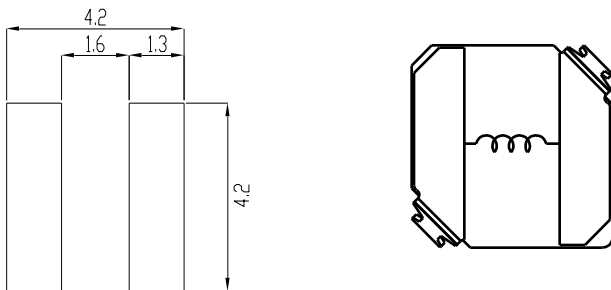
Applications

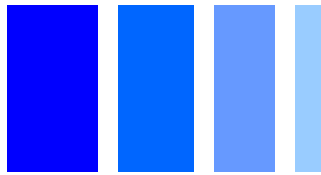
- Ideally used in Mobilephone, PDA, MP3, DSC/DVC, etc as DC-DC converter inductors.

Dimension - [mm]



Land pattern and Schematics - [mm]





Electrical Characteristics

Part No.	Stamp	Inductance (μH) [Within] ※1	D.C.R. ($\text{m}\Omega$) [Within] (At 20°C) ※2	Saturation current (A) (At 20°C) ※2	Temperature rise current (A) ※3
CDPH40D18NP-1R0PC	A	$1.0 \pm 25\%$	$30 \pm 20\%$	3.50	3.20
CDPH40D18NP-2R2PC	B	$2.2 \pm 25\%$	$55 \pm 20\%$	2.50	2.20
CDPH40D18NP-3R3MC	C	$3.3 \pm 20\%$	$78 \pm 20\%$	2.20	1.55
CDPH40D18NP-4R7MC	D	$4.7 \pm 20\%$	$103 \pm 20\%$	1.84	1.30
CDPH40D18NP-6R8MC	E	$6.8 \pm 20\%$	$170 \pm 20\%$	1.54	1.05
CDPH40D18NP-100MC	F	$10.0 \pm 20\%$	$231 \pm 20\%$	1.22	0.82
CDPH40D18NP-150MC	J	$15.0 \pm 20\%$	$339 \pm 20\%$	1.00	0.65
CDPH40D18NP-220MC	K	$22.0 \pm 20\%$	$512 \pm 20\%$	0.84	0.55
CDPH40D18NP-270MC	G	$27.0 \pm 20\%$	$695 \pm 20\%$	0.75	0.50
CDPH40D18NP-330MC	H	$33.0 \pm 20\%$	$764 \pm 20\%$	0.64	0.43

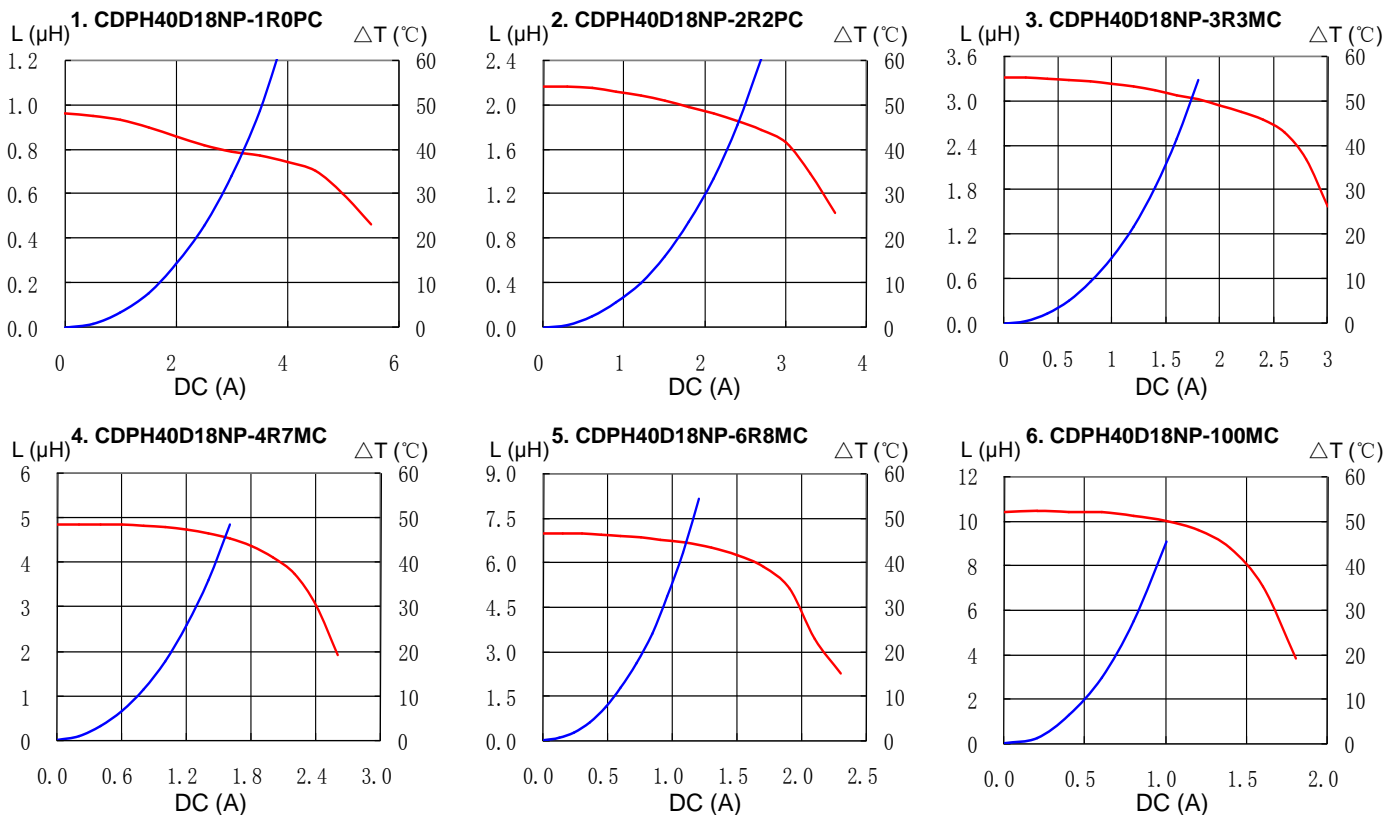
※1. Inductance measuring condition: at 100kHz.

※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 $\Delta t = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT



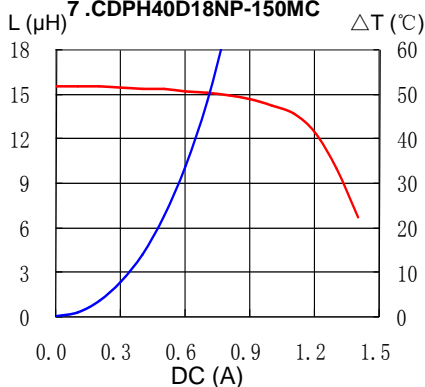
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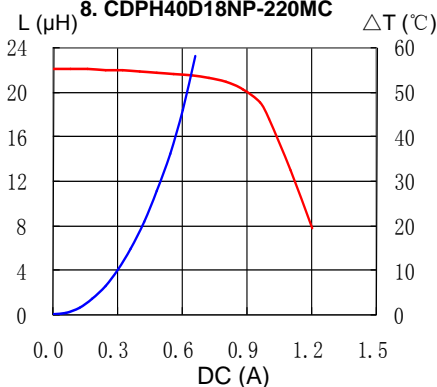
Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

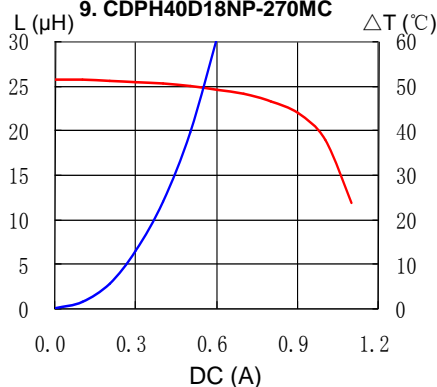
7. CDPH40D18NP-150MC



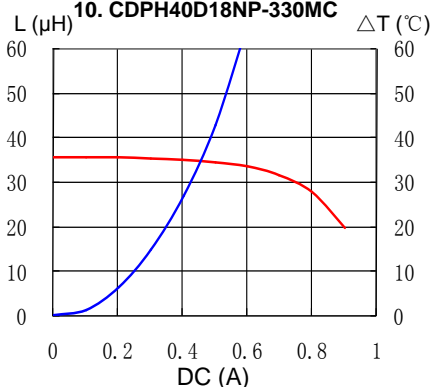
8. CDPH40D18NP-220MC



9. CDPH40D18NP-270MC

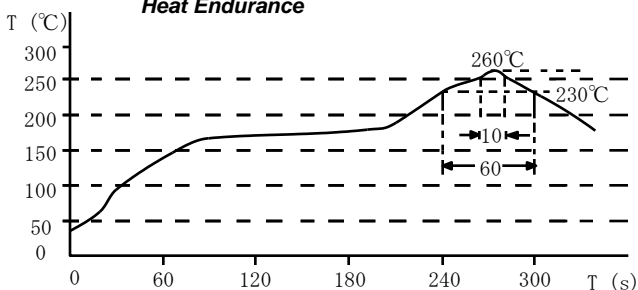


10. CDPH40D18NP-330MC

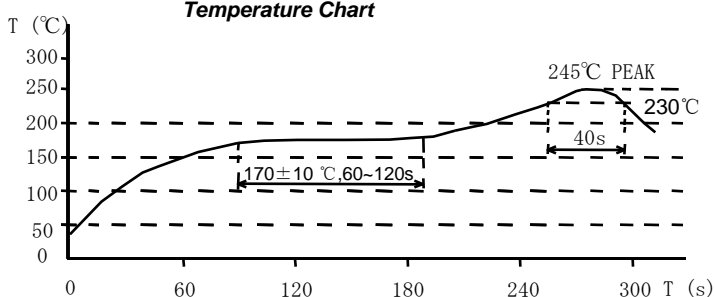


Solder Reflow Condition

Heat Endurance



Temperature Chart



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

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