

# SMD Power Inductor CDH2D09B



Halogen Free



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 3.0 × 2.8 × 1.0 mm Max.
- Product weight: 23mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## 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.

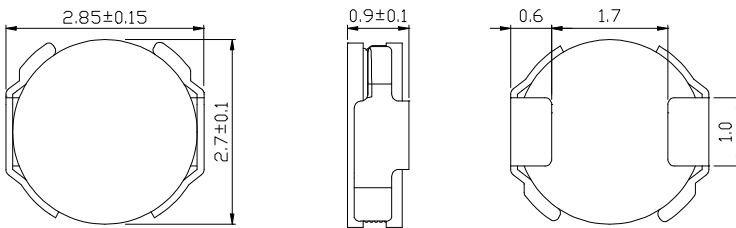
## Packaging

- Carrier tape and reel packaging
- 7.0" diameter reel
- 1500pcs per reel

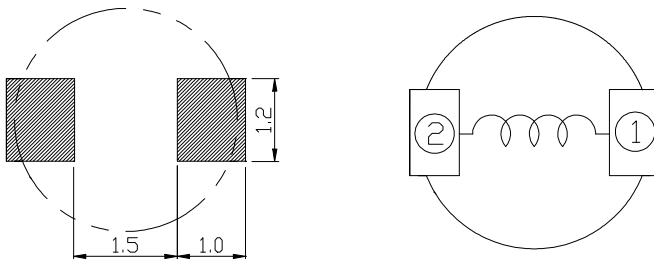
## Applications

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

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [ within ] ※1	D.C.R. (m $\Omega$ ) [Max.] (Typ.) (at 20°C)	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
CDH2D09BNP-2R4MC	E	2.4 ± 20%	160(128)	1.00	1.18
CDH2D09BNP-3R3MC	F	3.3 ± 20%	188(150)	0.85	1.06
CDH2D09BNP-4R7MC	G	4.7 ± 20%	273(218)	0.70	0.85
CDH2D09BNP-6R4MC	J	6.4 ± 20%	400(320)	0.60	0.64
CDH2D09BNP-100MC	L	10 ± 20%	588(470)	0.48	0.47
CDH2D09BNP-150MC	M	15 ± 20%	956(765)	0.38	0.39
CDH2D09BNP-220MC	P	22 ± 20%	1313(1050)	0.31	0.34

※1. Inductance measuring condition: at 100kHz.

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

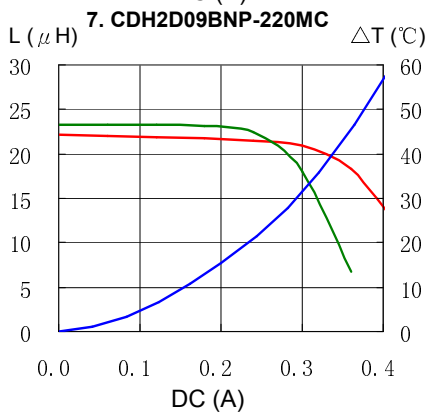
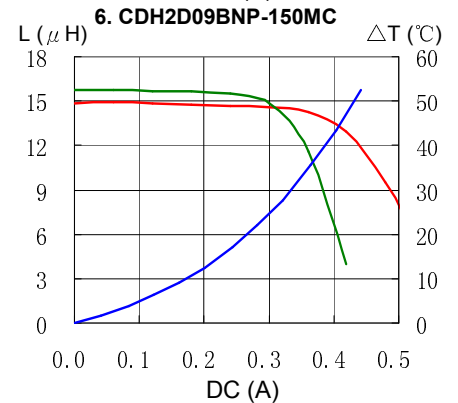
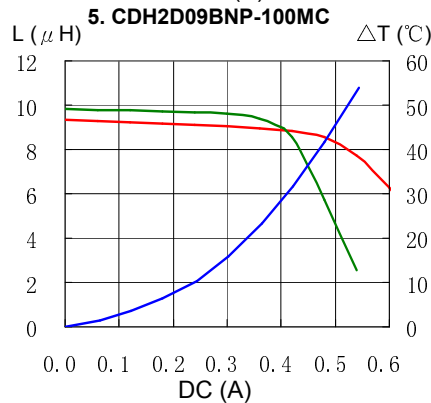
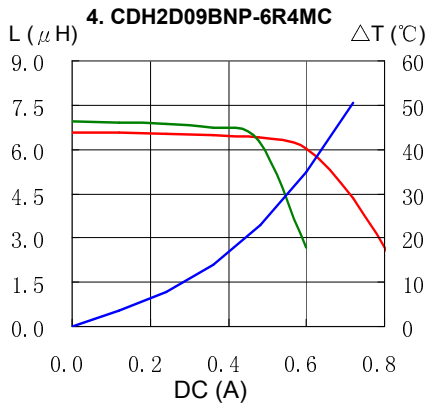
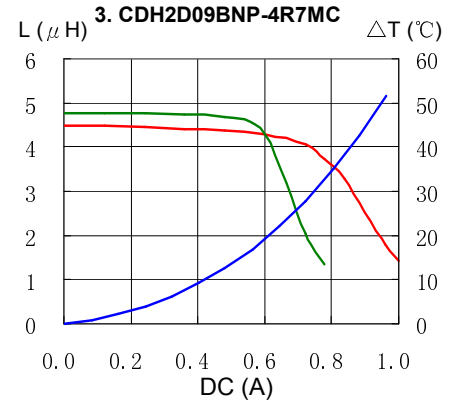
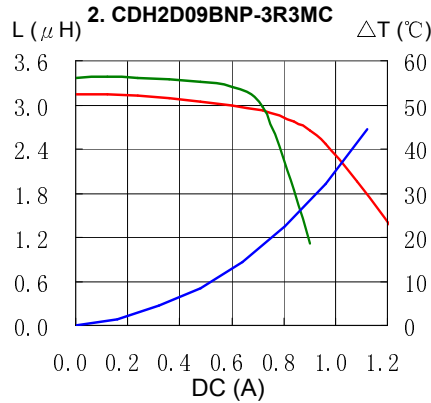
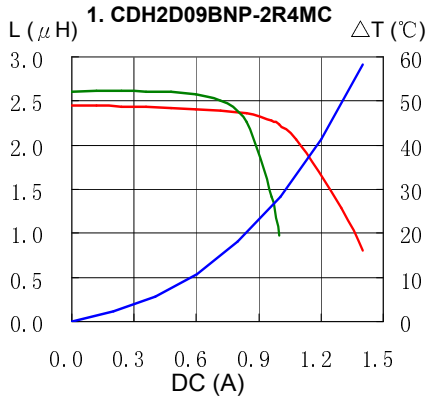
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

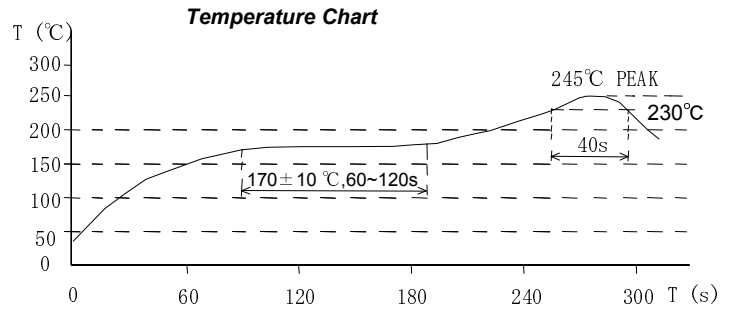
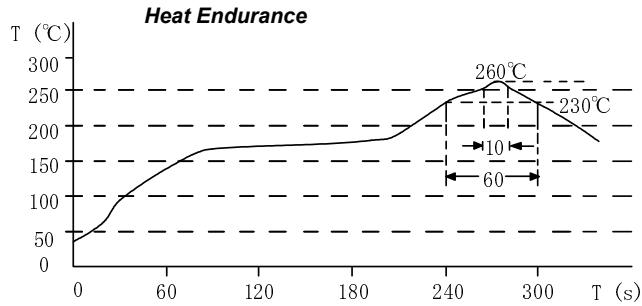
— L (20°C) — L (105°C) —  $\Delta T$



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## Solder Reflow Condition



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