

# SMD Power Inductor CDH38D09/SLD



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 4.0 × 4.0 × 1.0mm Max.
- Product weight: 50mg(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.

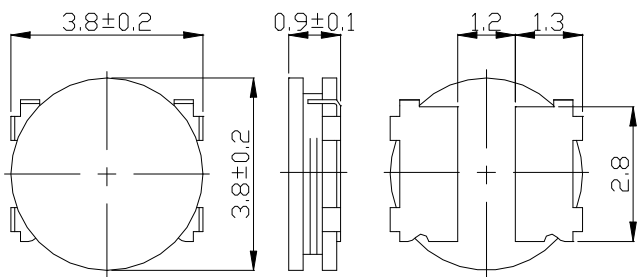
## Packaging

- Carrier tape and reel packaging.
- 7.0" diameter reel
- 1000pcs per reel

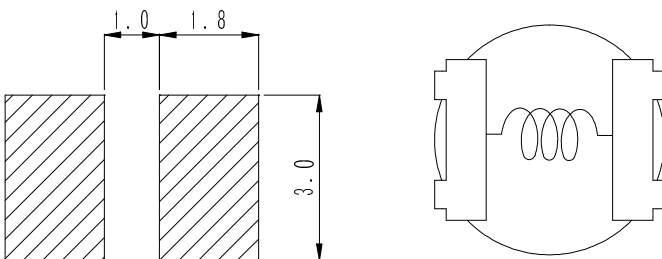
## Applications

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

## Dimension - [mm]



## Land pattern and Schematics - [mm]



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## Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [ within ] ※1	D.C.R. (m $\Omega$ ) [ within ] ( at 20°C )	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
CDH38D09SLDNP-2R7MC	2R7	2.7 $\pm$ 20%	98 $\pm$ 20%	1.08	1.70
CDH38D09SLDNP-3R3MC	3R3	3.3 $\pm$ 20%	110 $\pm$ 20%	0.90	1.60
CDH38D09SLDNP-3R9MC	3R9	3.9 $\pm$ 20%	125 $\pm$ 20%	0.80	1.48
CDH38D09SLDNP-4R7MC	4R7	4.7 $\pm$ 20%	140 $\pm$ 20%	0.76	1.40
CDH38D09SLDNP-5R4MC	5R4	5.4 $\pm$ 20%	175 $\pm$ 20%	0.74	1.20
CDH38D09SLDNP-6R4MC	6R4	6.4 $\pm$ 20%	195 $\pm$ 20%	0.70	1.16
CDH38D09SLDNP-6R8MC	6R8	6.8 $\pm$ 20%	210 $\pm$ 20%	0.66	1.12
CDH38D09SLDNP-8R2MC	8R2	8.2 $\pm$ 20%	274 $\pm$ 20%	0.60	0.98
CDH38D09SLDNP-100MC	100	10 $\pm$ 20%	320 $\pm$ 20%	0.57	0.92
CDH38D09SLDNP-120MC	120	12 $\pm$ 20%	385 $\pm$ 20%	0.50	0.85
CDH38D09SLDNP-150MC	150	15 $\pm$ 20%	439 $\pm$ 20%	0.46	0.78
CDH38D09SLDNP-180MC	180	18 $\pm$ 20%	588 $\pm$ 20%	0.42	0.68
CDH38D09SLDNP-220MC	220	22 $\pm$ 20%	650 $\pm$ 20%	0.37	0.62
CDH38D09SLDNP-270MC	270	27 $\pm$ 20%	930 $\pm$ 20%	0.33	0.55
CDH38D09SLDNP-330MC	330	33 $\pm$ 20%	1049 $\pm$ 20%	0.30	0.50

※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.

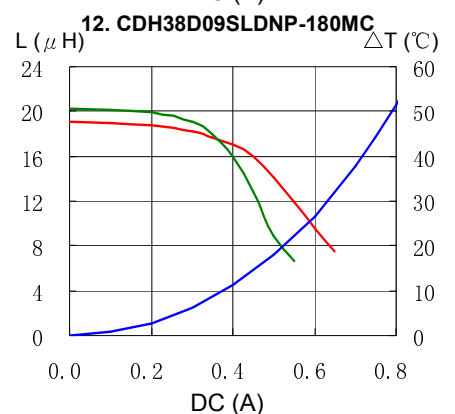
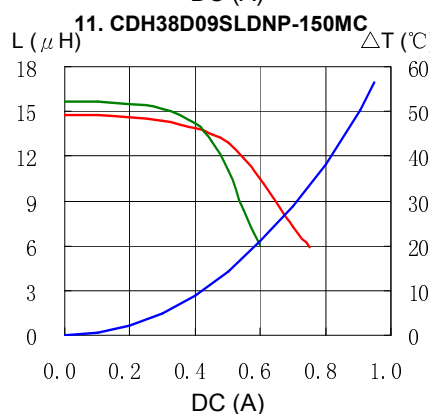
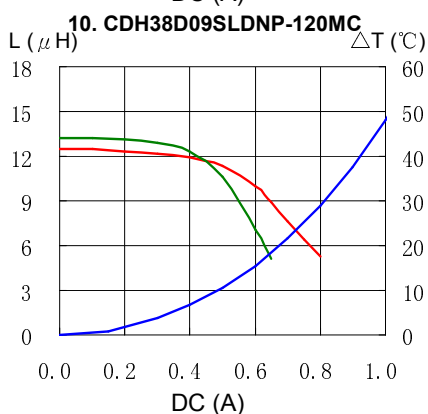
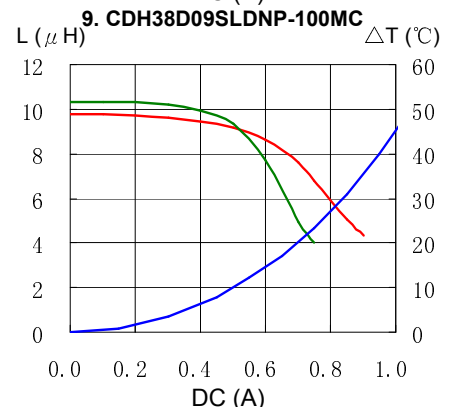
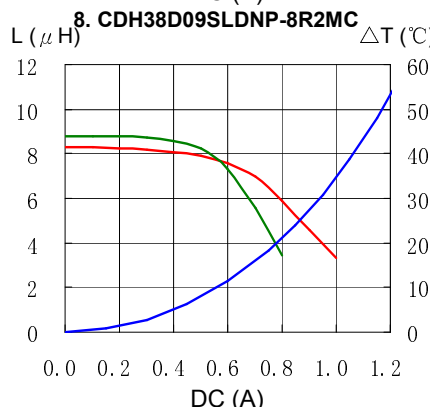
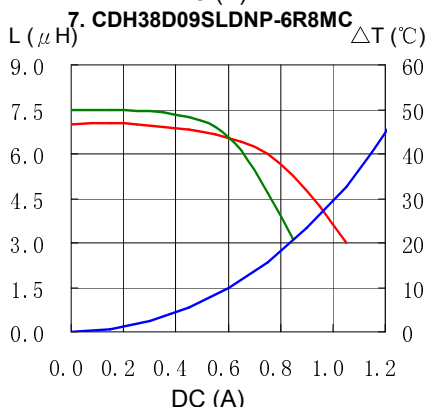
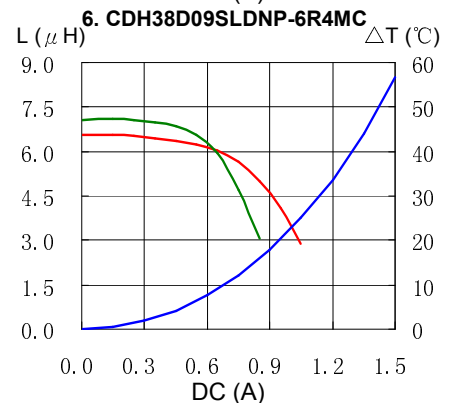
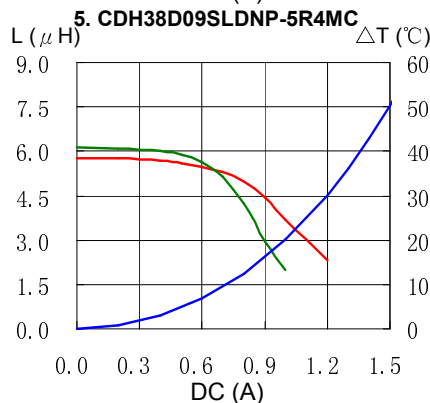
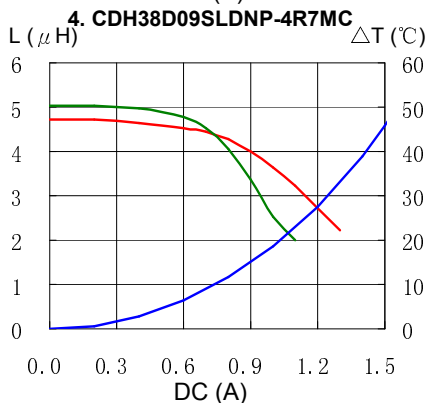
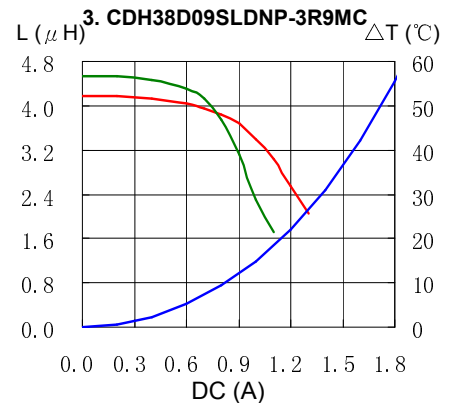
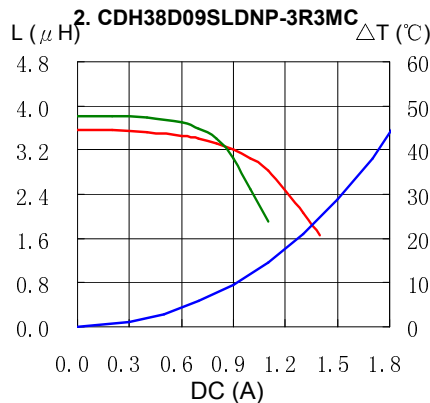
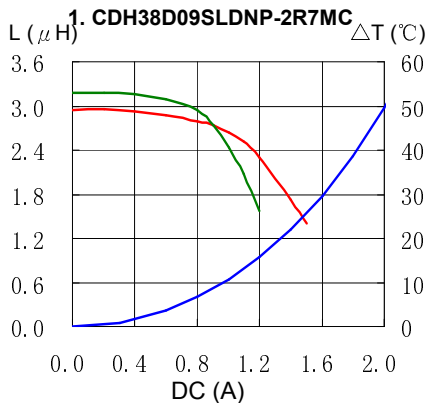
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

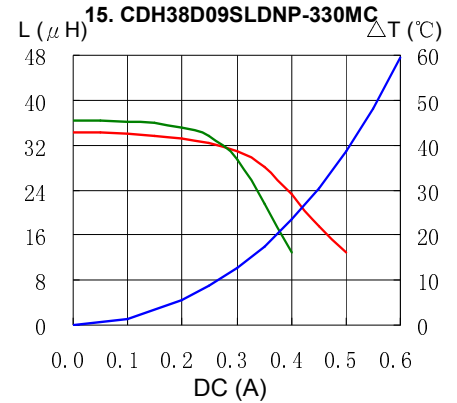
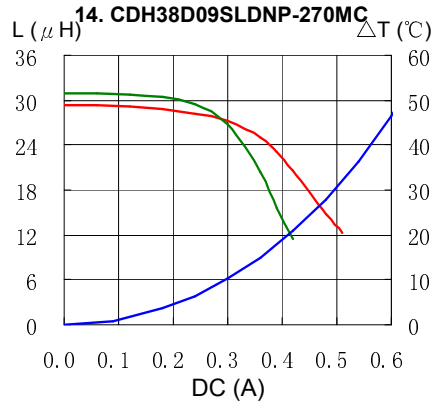
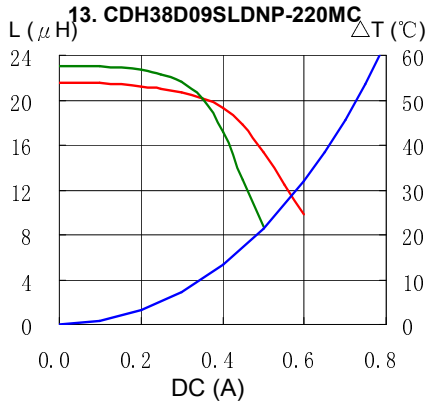


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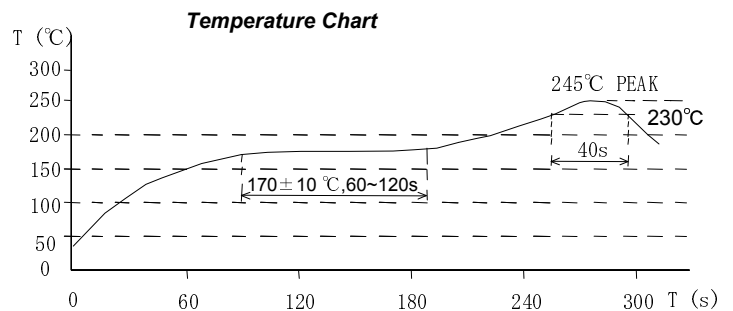
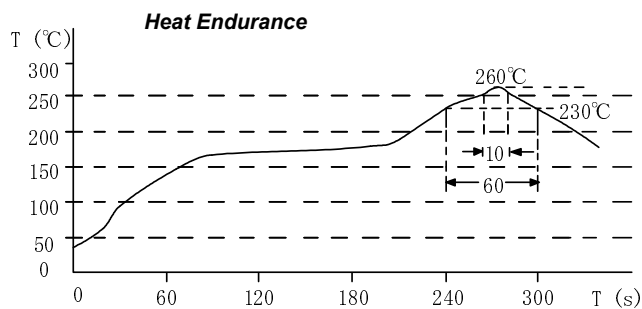


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$



## Solder Reflow Condition



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