

SMD Power Inductor CDH38D09



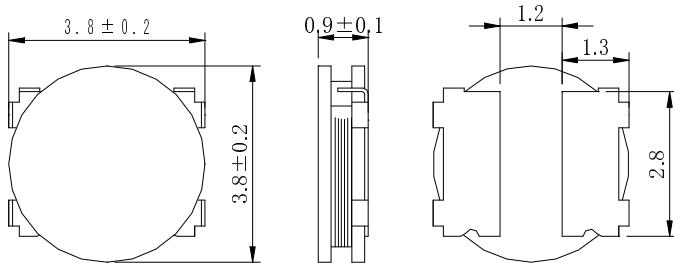
Halogen Free



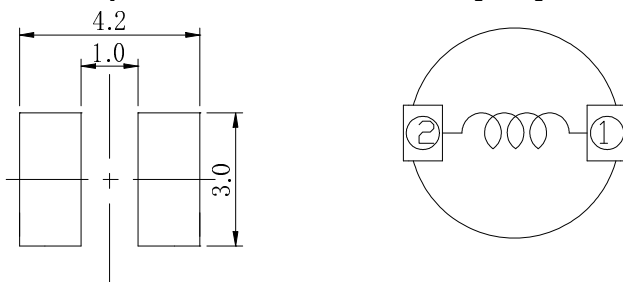
Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 4.0 × 4.0 × 1.0mm Max.
- Product weight: 42mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Dimension - [mm]



Land pattern and Schematics - [mm]



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.

Electrical Characteristics

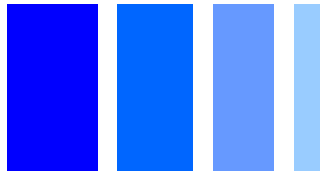
Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R.(Ω) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 105°C	
CDH38D09NP-1R2MC	1R2	1.2 ± 20%	0.14(0.11)	1.90	1.60	1.35
CDH38D09NP-1R5MC	1R5	1.5 ± 20%	0.16(0.13)	1.70	1.40	1.25
CDH38D09NP-2R2MC	2R2	2.2 ± 20%	0.19(0.15)	1.50	1.25	1.15
CDH38D09NP-2R7MC	2R7	2.7 ± 20%	0.21(0.17)	1.35	1.15	1.10
CDH38D09NP-3R3MC	3R3	3.3 ± 20%	0.24(0.19)	1.25	1.00	1.00
CDH38D09NP-4R7MC	4R7	4.7 ± 20%	0.30(0.24)	1.10	0.85	0.95
CDH38D09NP-6R8MC	6R8	6.8 ± 20%	0.39(0.31)	0.90	0.72	0.85
CDH38D09NP-8R2MC	8R2	8.2 ± 20%	0.50(0.40)	0.80	0.65	0.75
CDH38D09NP-100MC	100	10.0 ± 20%	0.58(0.47)	0.7	0.60	0.70
CDH38D09NP-150MC	150	15.0 ± 20%	0.87(0.69)	0.60	0.50	0.55
CDH38D09NP-220MC	220	22.0 ± 20%	1.14(0.91)	0.50	0.40	0.45

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

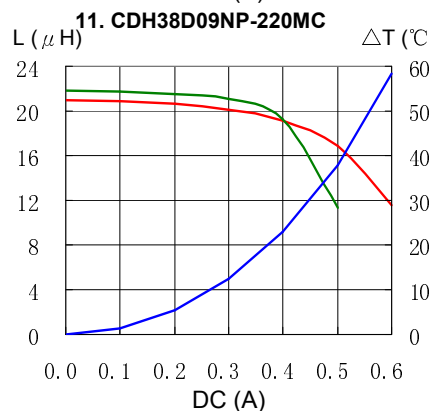
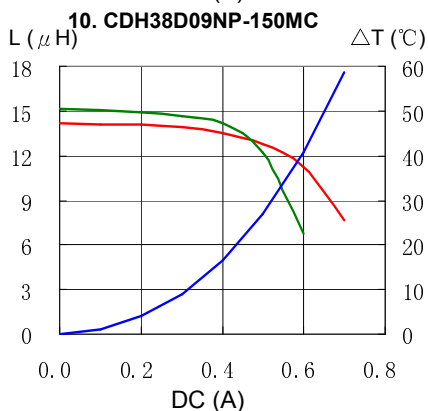
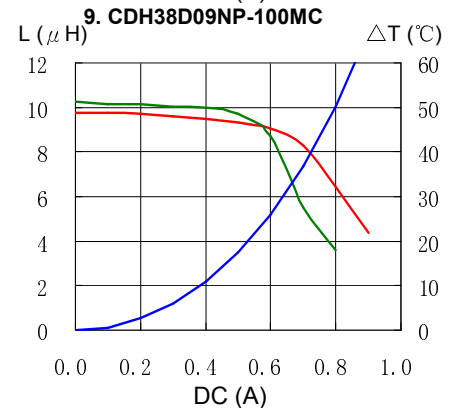
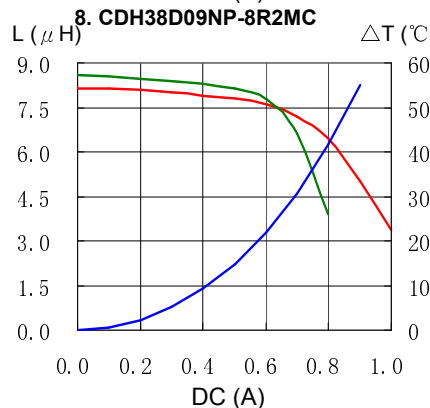
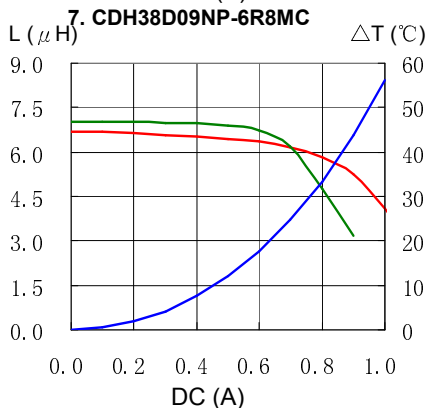
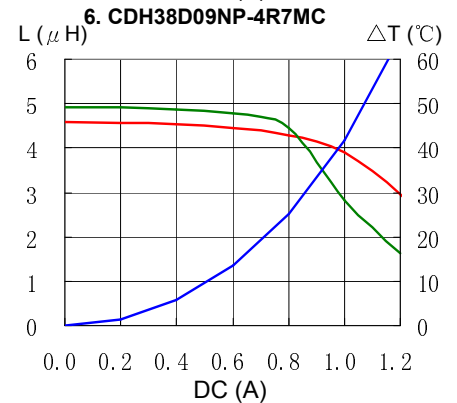
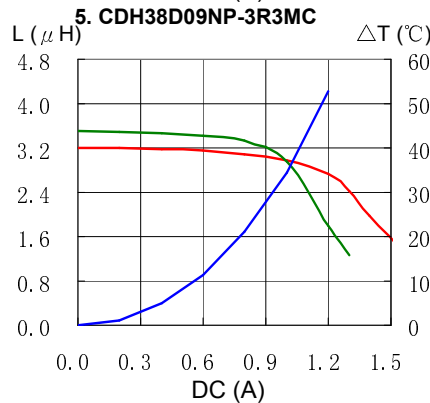
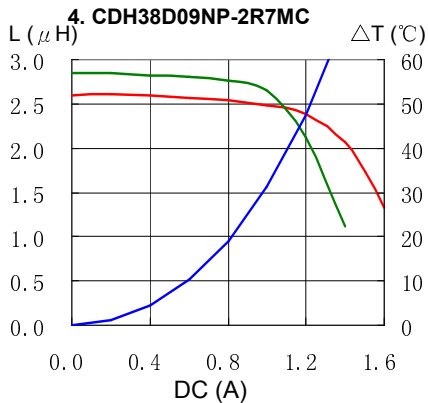
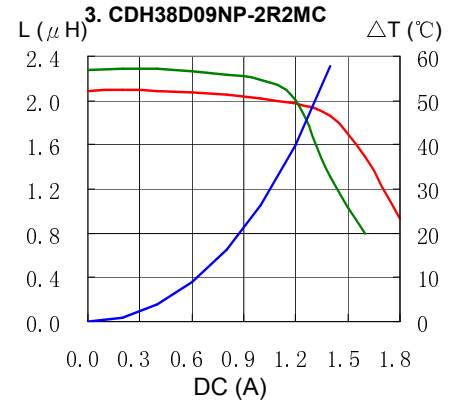
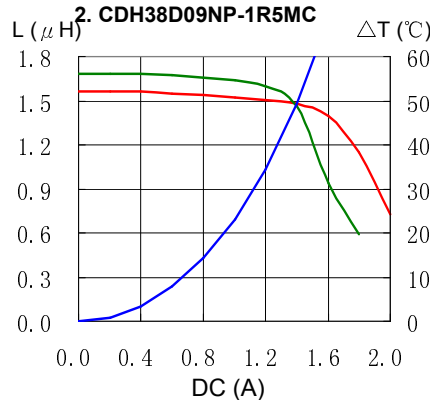
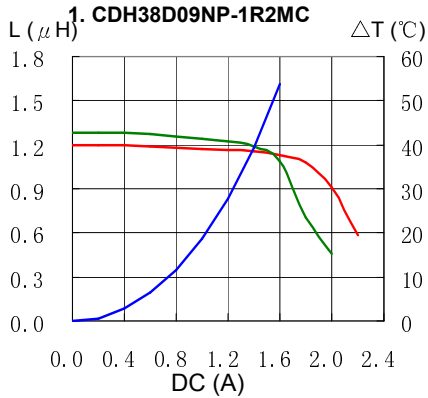
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

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Saturation Current & Temperature Rise Graph

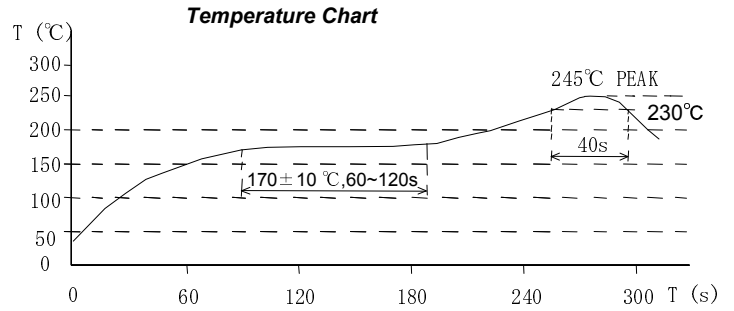
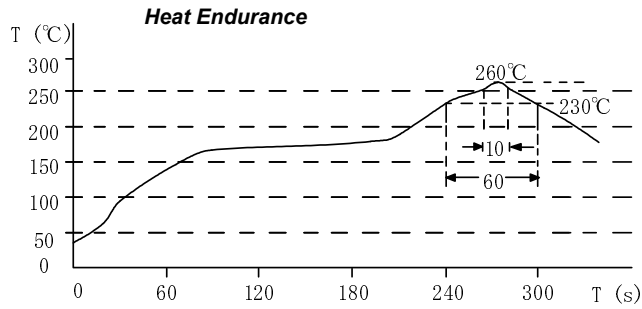
— L (20°C) — L (105°C) — ΔT



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Solder Reflow Condition



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

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