

SMD Power Inductor

CDRH6D38



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 7.0 × 7.0 × 4.0 mm Max.
- Product weight: 0.7g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.



Environmental Data

- Operating temperature range: -40°C~+100°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+100°C
- Solder reflow temperature: 260 °C peak.

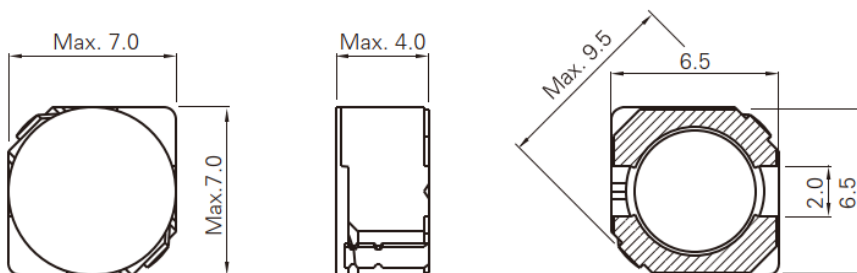
Packaging

- Carrier tape and reel packaging
- 13" diameter reel
- 1,000pcs per reel

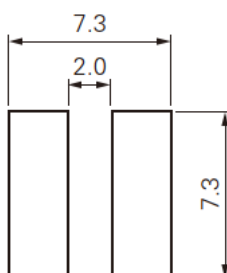
Applications

- Ideally used in Game machine, HDD, Notebook PC, Projector, PDA, etc as DC-DC converter inductors.

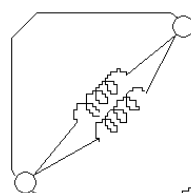
Dimension - [mm]



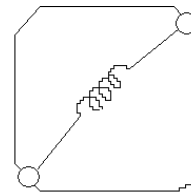
Land patterns - [mm]



Schematics



(3.3μH~15μH)



(18μH~100μH)

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

SMD Power Inductor

CDRH6D38



Electrical Characteristics

Part Name	Inductance (μH) [within] ※1	D.C.R.(m Ω) Max. (Typ.) (at 20°C)	Rated Current (A) Max. (Typ.) ※2	Temperature Rise Current (A) (Typ.) ※3
CDRH6D38NP-3R3NC	3.3 \pm 30%	20.0 (15.0)	3.50 (4.10)	(5.10)
CDRH6D38NP-5R0NC	5.0 \pm 30%	24.0 (18.0)	2.90 (3.50)	(4.60)
CDRH6D38NP-6R2NC	6.2 \pm 30%	27.0 (20.0)	2.50 (3.00)	(4.30)
CDRH6D38NP-7R4NC	7.4 \pm 30%	31.0 (23.0)	2.30 (2.80)	(4.00)
CDRH6D38NP-8R7NC	8.7 \pm 30%	34.0 (25.0)	2.20 (2.60)	(3.80)
CDRH6D38NP-100NC	10 \pm 30%	38.0 (28.0)	2.00 (2.44)	(3.60)
CDRH6D38NP-120NC	12 \pm 30%	53.0 (39.0)	1.70 (2.20)	(2.95)
CDRH6D38NP-150NC	15 \pm 30%	57.0 (42.0)	1.60 (2.00)	(2.85)
CDRH6D38NP-180NC	18 \pm 30%	92.0 (68.0)	1.50 (1.78)	(2.50)
CDRH6D38NP-220NC	22 \pm 30%	96.0 (71.0)	1.30 (1.68)	(2.30)
CDRH6D38NP-270NC	27 \pm 30%	109 (81.0)	1.20 (1.52)	(2.00)
CDRH6D38NP-330NC	33 \pm 30%	124 (92.0)	1.10 (1.30)	(1.95)
CDRH6D38NP-390NC	39 \pm 30%	138 (102)	1.00 (1.28)	(1.88)
CDRH6D38NP-470NC	47 \pm 30%	155 (115)	0.95 (1.12)	(1.75)
CDRH6D38NP-560NC	56 \pm 30%	202 (150)	0.85 (1.00)	(1.45)
CDRH6D38NP-680NC	68 \pm 30%	234 (173)	0.75 (0.95)	(1.35)
CDRH6D38NP-820NC	82 \pm 30%	324 (240)	0.70 (0.83)	(1.15)
CDRH6D38NP-101NC	100 \pm 30%	358 (265)	0.65 (0.74)	(1.10)

※1 Inductance measuring condition: at 100kHz.

※2 The saturation current: This indicates the value of DC current when the inductance decreases to 65% of its nominal value.

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

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

SMD Power Inductor

CDRH6D38



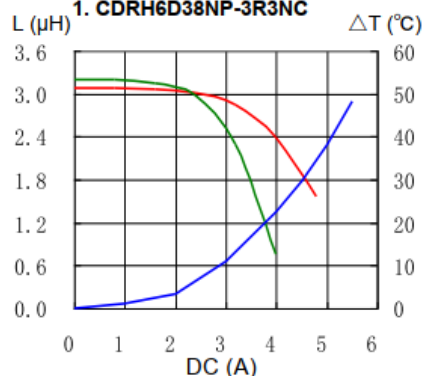
Saturation Current & Temperature Rise Graph

— L (20°C)

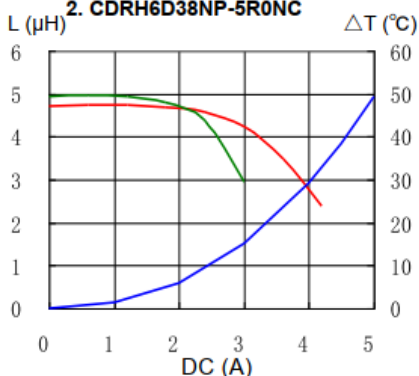
— L (100°C)

— ΔT

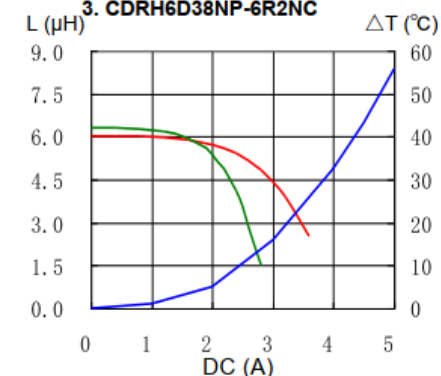
1. CDRH6D38NP-3R3NC



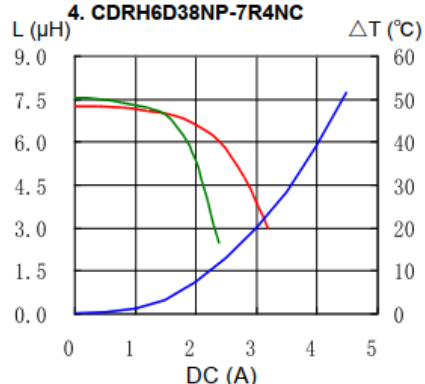
2. CDRH6D38NP-5R0NC



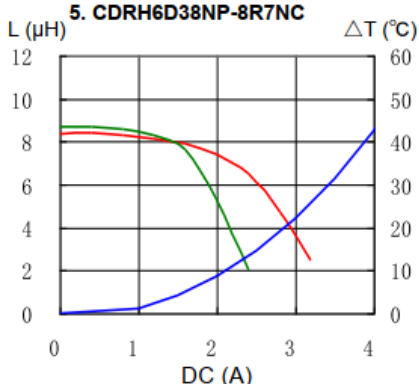
3. CDRH6D38NP-6R2NC



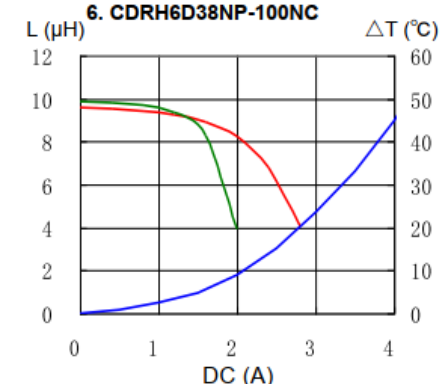
4. CDRH6D38NP-7R4NC



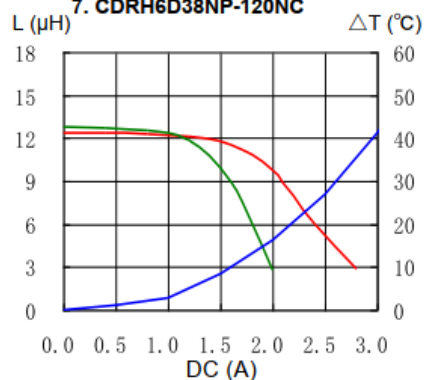
5. CDRH6D38NP-8R7NC



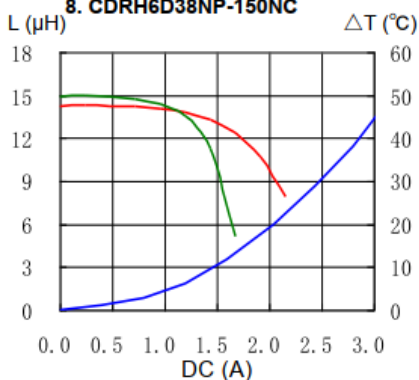
6. CDRH6D38NP-100NC



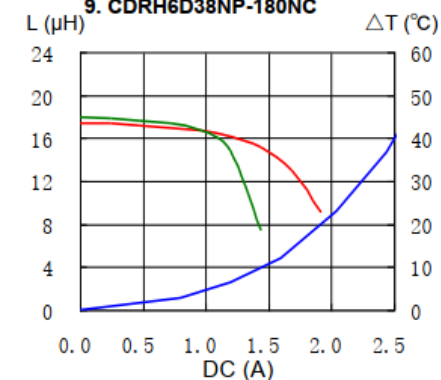
7. CDRH6D38NP-120NC



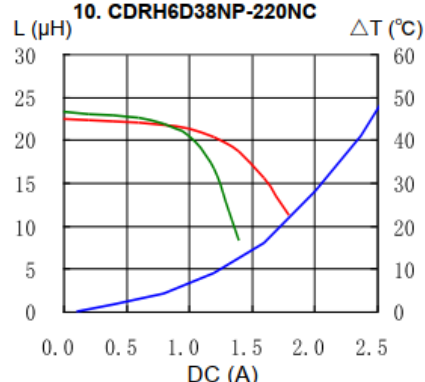
8. CDRH6D38NP-150NC



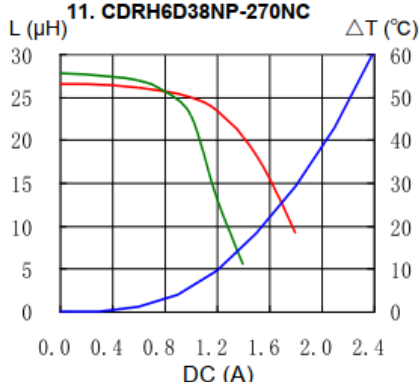
9. CDRH6D38NP-180NC



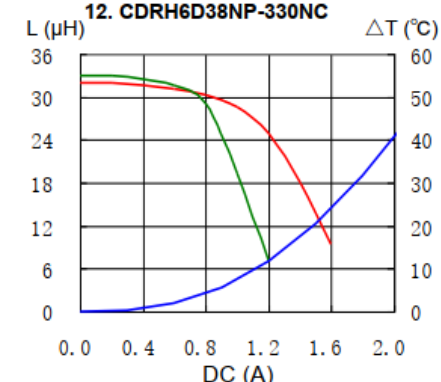
10. CDRH6D38NP-220NC



11. CDRH6D38NP-270NC



12. CDRH6D38NP-330NC



Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

SMD Power Inductor

CDRH6D38



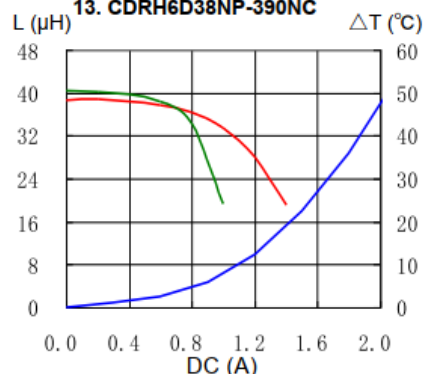
Saturation Current & Temperature Rise Graph

— L (20°C)

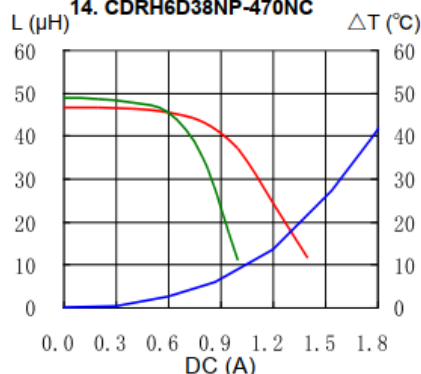
— L (100°C)

— ΔT

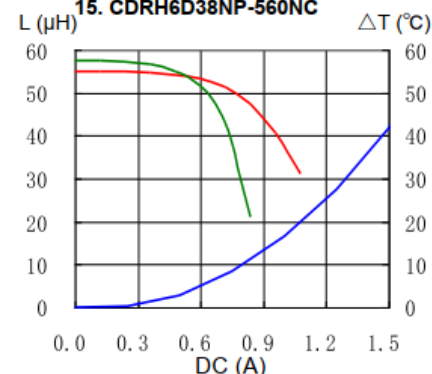
13. CDRH6D38NP-390NC



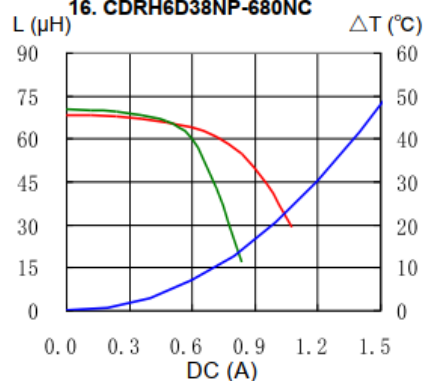
14. CDRH6D38NP-470NC



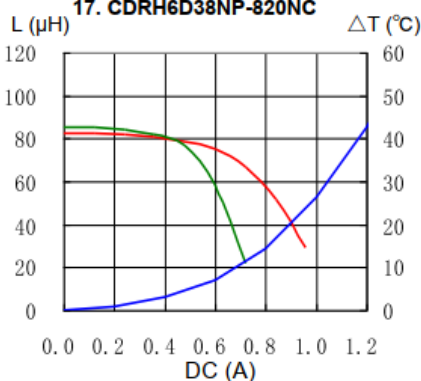
15. CDRH6D38NP-560NC



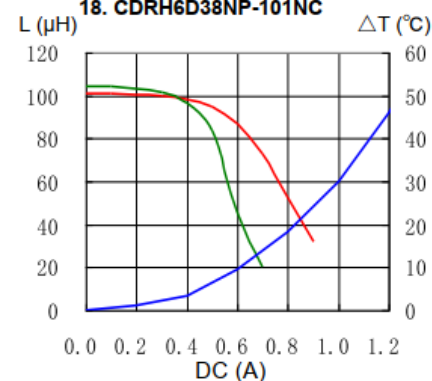
16. CDRH6D38NP-680NC



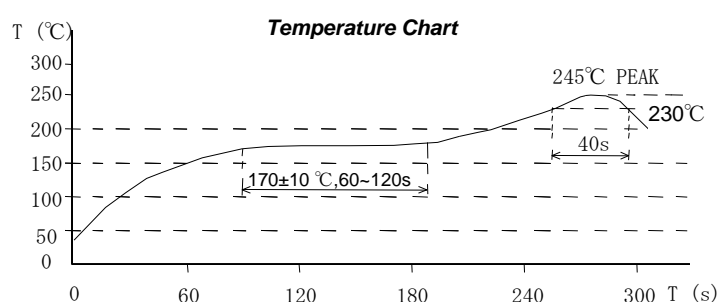
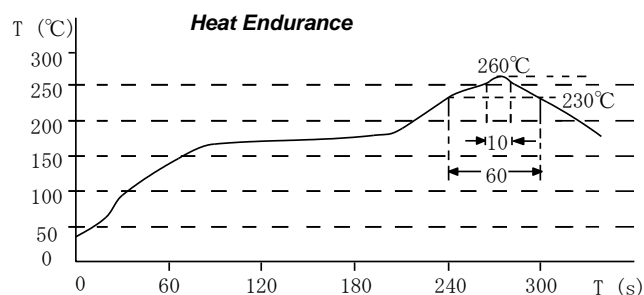
17. CDRH6D38NP-820NC



18. CDRH6D38NP-101NC



Solder Reflow Condition



For sales office information, please [click here](#) to visit our website.

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.