THE DATASHEET OF

CDRH104RNP-680NC

SMD Power Inductor
CDRH104R

RoHS

Halogen Free

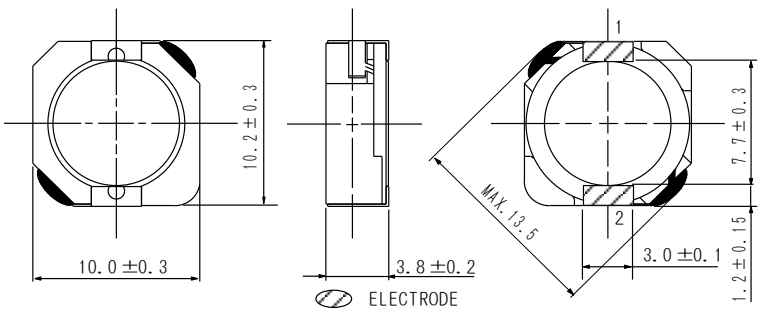
Description
- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H:10.5 × 10.3 × 4.0mm Max.
- Product weight: 1.5g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

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

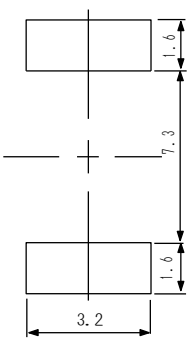
Packaging
- Carrier tape and reel packaging.
- 13"diameter reel.
- 1000pcs per reel.

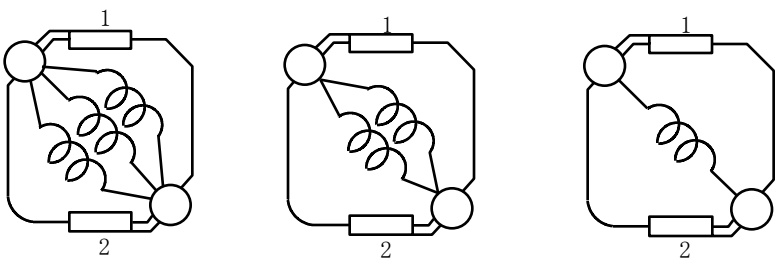
Applications
- Ideally used in Notebook PC, LCD TV,DVD, Game machine, STB ,Projector etc as DC-DC converter inductors.

Dimension - [mm]



Land pattern and Schematics - [mm]





(1.5μH～5.2μH, 10μH) (7.0μH、12μH～33μH) (39μH～330μH)

Revised: 6-Jan-17

Electrical Characteristics

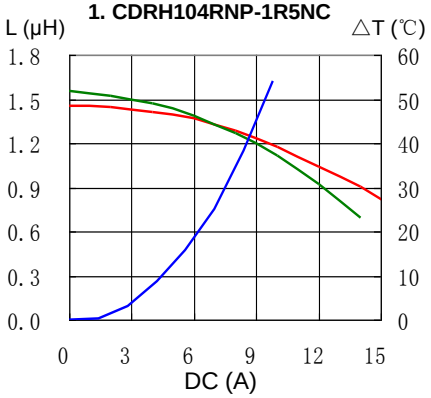
PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.] (TYP.) (at 20℃)	SATURATION CURRENT (A) MAX. (TYP.) ※2	TEMPERATURE RISE CURRENT (A) ※3
CDRH104RNP-1R5NC	1R5	1.5μH±30%	8.1 (6.0)	10.0(12.5)	8.50
CDRH104RNP-2R5NC	2R5	2.5μH±30%	10.5(7.8)	7.90(9.90)	7.70
CDRH104RNP-3R8NC	3R8	3.8μH±30%	13.0(9.6)	7.00(8.80)	7.40
CDRH104RNP-5R2NC	5R2	5.2μH±30%	22(16)	5.60(7.00)	6.00
CDRH104RNP-7R0NC	7R0	7.0μH±30%	27(20)	5.25(6.60)	5.30
CDRH104RNP-100NC	100	10μH±30%	35(26)	4.48(5.60)	4.50
CDRH104RNP-120NC	120	12μH±30%	46(34)	4.00(5.00)	3.80
CDRH104RNP-150NC	150	15μH±30%	50(37)	3.50(4.40)	3.70
CDRH104RNP-180NC	180	18μH±30%	69(51)	3.25(4.10)	3.10
CDRH104RNP-220NC	220	22μH±30%	73(54)	2.85(3.60)	2.80
CDRH104RNP-270NC	270	27μH±30%	88(65)	2.60(3.28)	2.70
CDRH104RNP-330NC	330	33μH±30%	93(69)	2.30(2.90)	2.60
CDRH104RNP-390NC	390	39μH±30%	127(94)	2.10(2.62)	2.40
CDRH104RNP-470NC	470	47μH±30%	128(95)	1.95(2.44)	2.30
CDRH104RNP-560NC	560	56μH±30%	188(139)	1.74(2.18)	1.75
CDRH104RNP-680NC	680	68μH±30%	213(158)	1.66(2.08)	1.68
CDRH104RNP-820NC	820	82μH±30%	283(218)	1.50(1.88)	1.48
CDRH104RNP-101NC	101	100μH±30%	304(225)	1.33(1.66)	1.42
CDRH104RNP-121NC	121	120μH±30%	375(278)	1.25(1.56)	1.20
CDRH104RNP-151NC	151	150μH±30%	506(375)	1.12(1.40)	1.15
CDRH104RNP-181NC	181	180μH±30%	568(421)	0.99(1.24)	1.00
CDRH104RNP-221NC	221	220μH±30%	756(560)	0.95(1.19)	0.88
CDRH104RNP-271NC	271	270μH±30%	853(632)	0.85(1.06)	0.68
CDRH104RNP-331NC	331	330μH±30%	1090(810)	0.74(0.92)	0.66

※1 Measuring frequency at 100kHz
※2 Saturation current: this indicates the value of D.C. current when the inductance becomes 35% lower than its initial value. (Ta＝20℃)
※3 Temperature rise current: the actual value of D.C. current when the temperature of coil becomes △T=40℃ (Ta＝20℃).

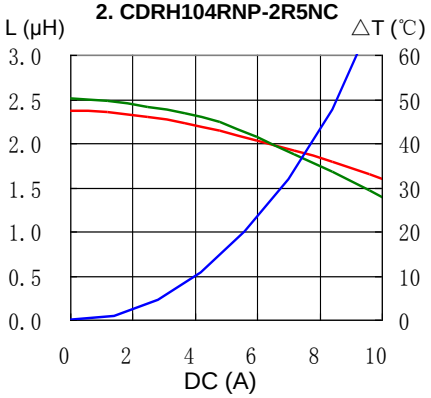
Saturation Current & Temperature Rise Graph

L (20℃) L (105℃) △T

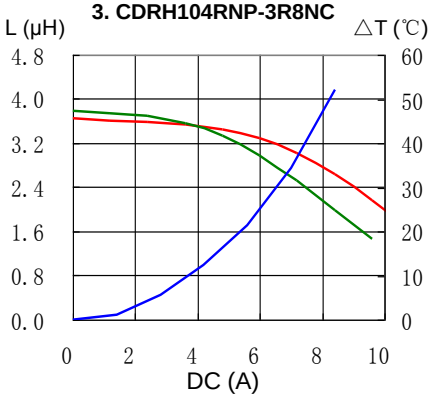
1. CDRH104RNP-1R5NC



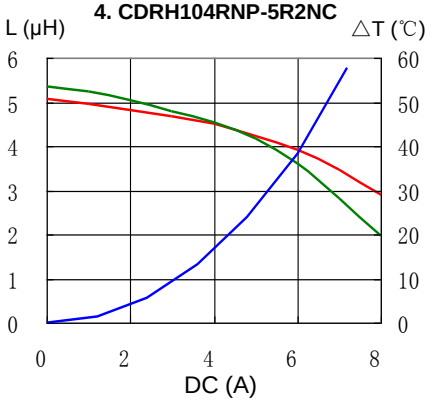
2. CDRH104RNP-2R5NC



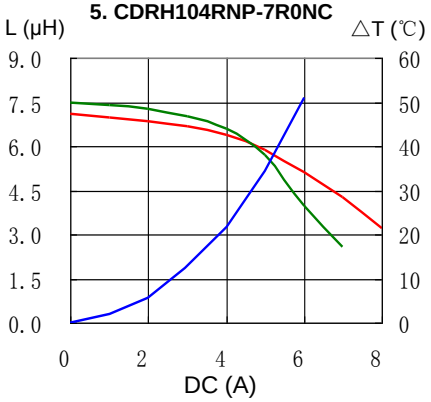
3. CDRH104RNP-3R8NC



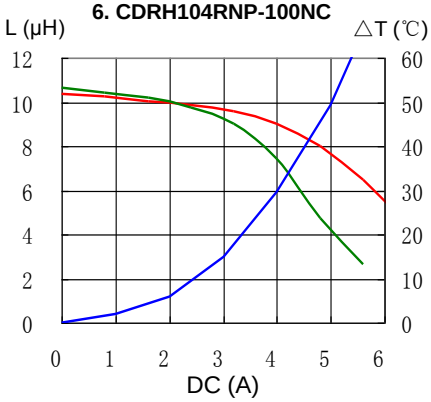
4. CDRH104RNP-5R2NC



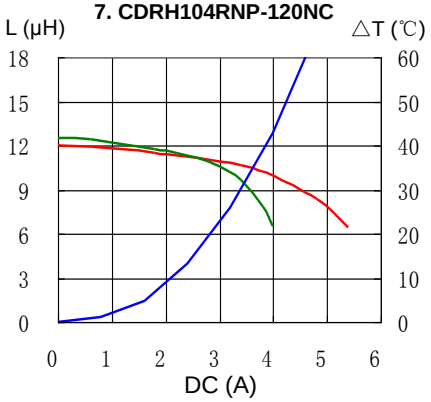
5. CDRH104RNP-7R0NC



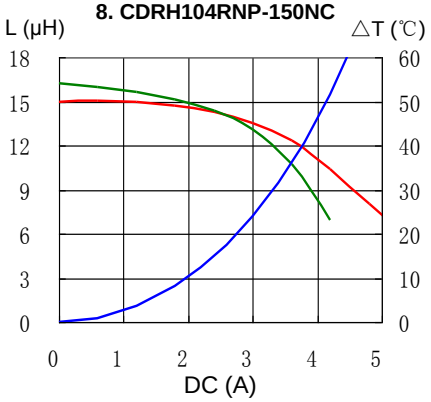
6. CDRH104RNP-100NC



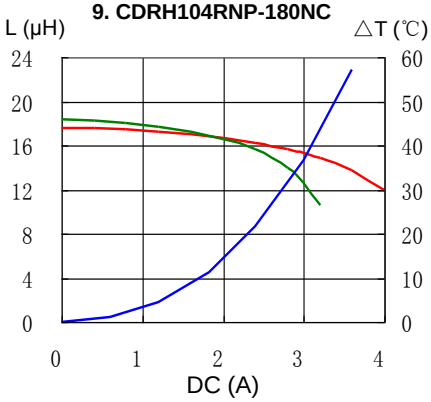
7. CDRH104RNP-120NC



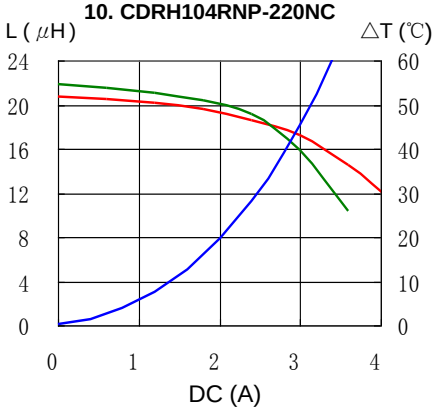
8. CDRH104RNP-150NC



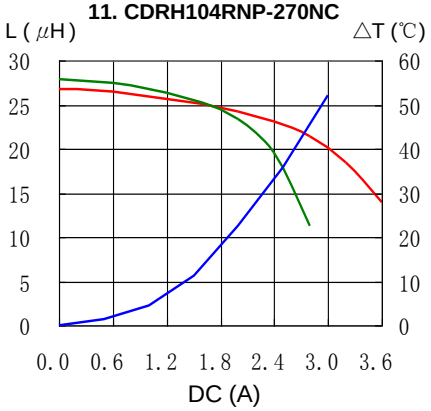
9. CDRH104RNP-180NC



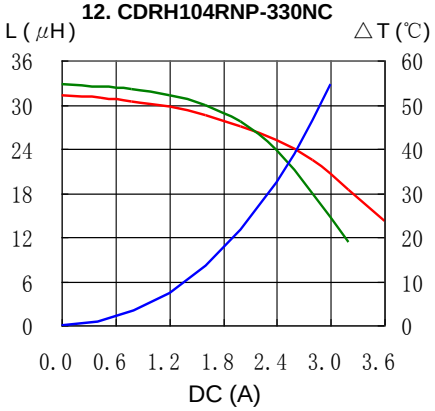
10. CDRH104RNP-220NC



11. CDRH104RNP-270NC



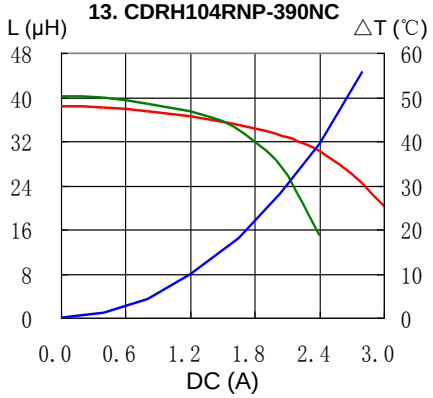
12. CDRH104RNP-330NC



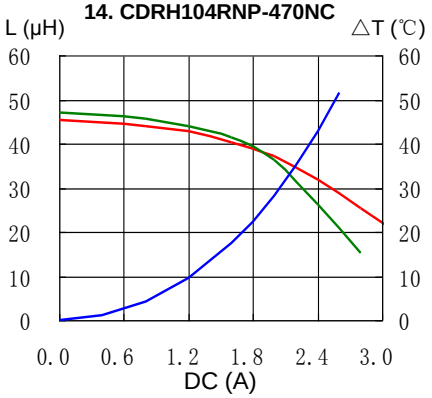
Saturation Current & Temperature Rise Graph

L (20℃) L (105℃) △T

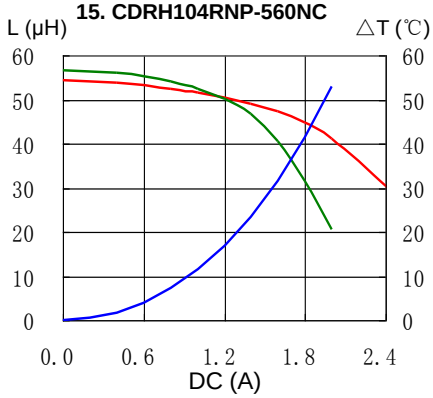
13. CDRH104RNP-390NC



14. CDRH104RNP-470NC



15. CDRH104RNP-560NC



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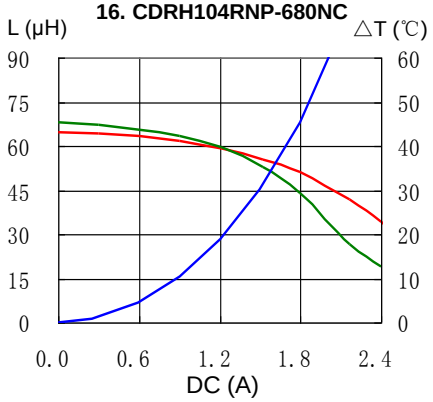
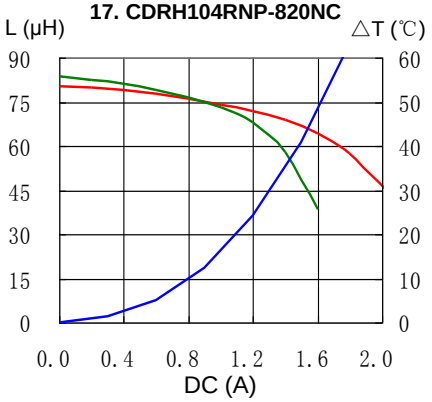
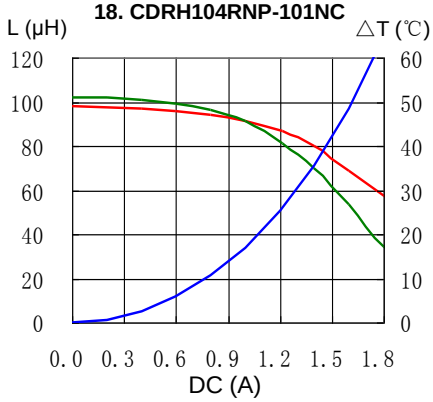


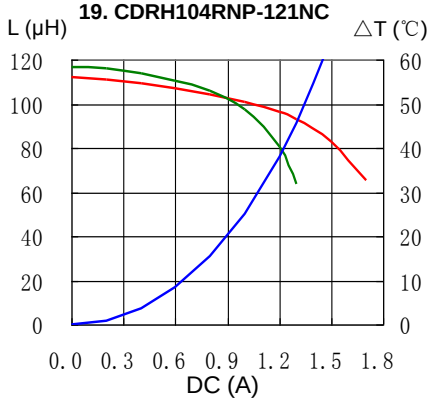
17. CDRH104RNP-820NC



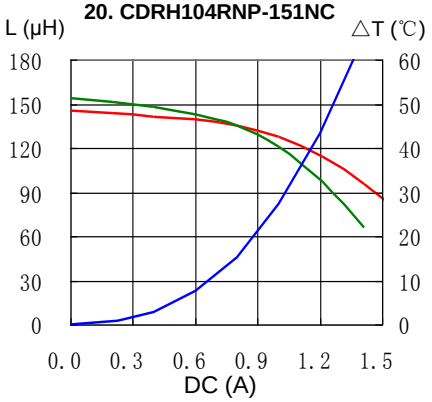
18. CDRH104RNP-101NC



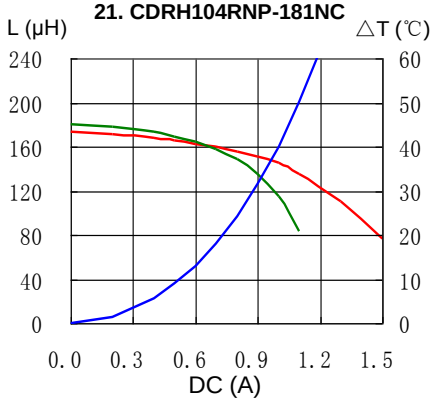
19. CDRH104RNP-121NC



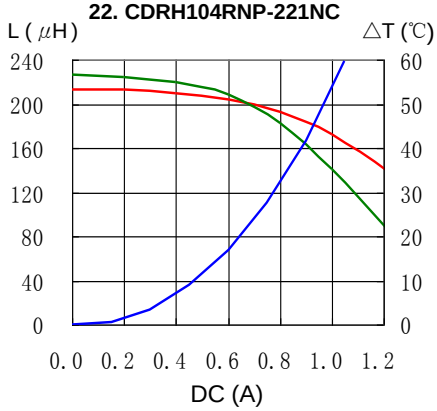
20. CDRH104RNP-151NC



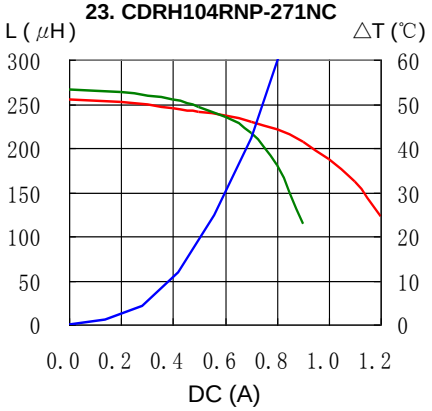
21. CDRH104RNP-181NC



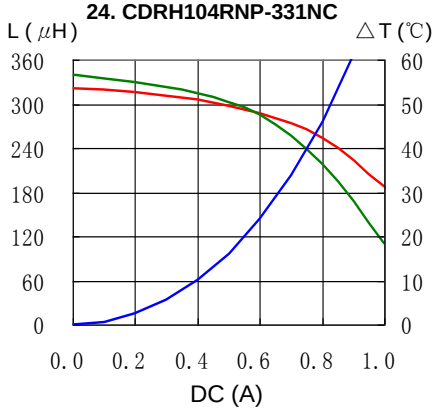
22. CDRH104RNP-221NC



23. CDRH104RNP-271NC

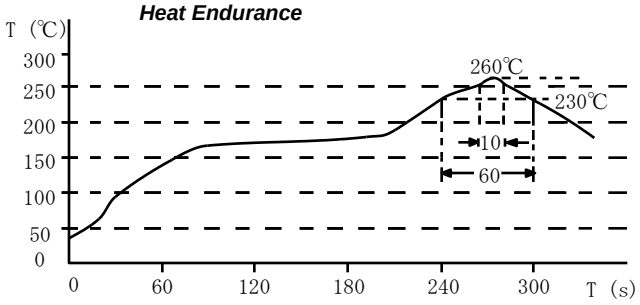


24. CDRH104RNP-331NC

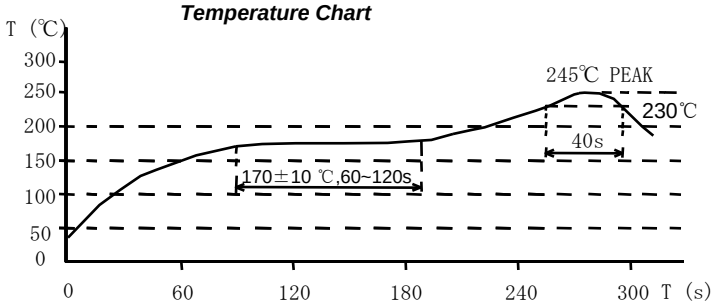


Solder Reflow Condition

Heat Endurance



Temperature Chart



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