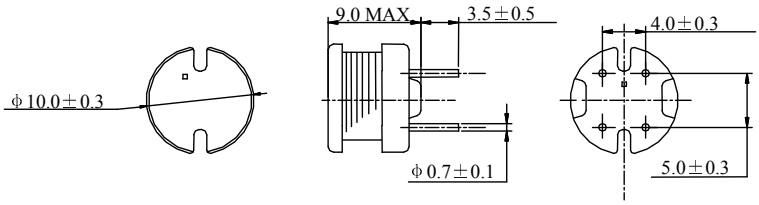
PIN Power Inductor
RCH109

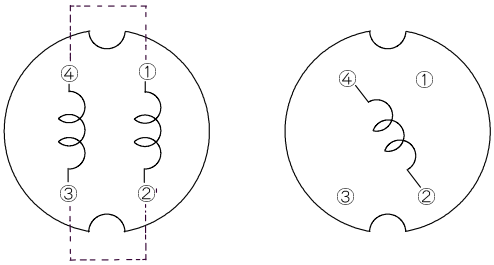
RoHS

Halogen Free

Dimension - [mm]



Schematics - [mm]



(10μH～27μH) (33μH～1.0mH)

Description
- Ferrite drum core construction.
- Magnetically unshielded.
- L×W×H: 10.3×10.3×9.0mm Max.
- Product weight: 2.3g(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℃

Packaging
- Box packaging.

Applications
- Ideally used in Printers, LCD TV, DVD, Copy Machine, Main board of the compounding machines etc. as DC-DC Converter inductors.

Revised: 30-Jan-13

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Electrical Characteristics

Part Name	Stamp	Inductance [Within]	D.C.R. (Ω) Max. (Typ.) at 20℃	Saturation current (A) ※1		Temperature Rise Current (A) ※2
				at 20℃	at 100℃	
RCH109NP-100M	100	10 μH ±20%	25m(19m)	4.50	3.40	4.50
RCH109NP-120M	120	12 μH ±20%	29m(23m)	4.00	2.95	4.10
RCH109NP-150M	150	15 μH ±20%	35m(28m)	3.65	2.55	3.75
RCH109NP-180M	180	18 μH ±20%	43m(34m)	3.20	2.35	2.85
RCH109NP-220M	220	22 μH ±20%	47m(37m)	3.05	2.00	2.70
RCH109NP-270M	270	27 μH ±20%	54m(43m)	2.70	1.85	2.50
RCH109NP-330K	330	33 μH ±10%	72m(57m)	2.45	1.70	2.40
RCH109NP-390K	390	39 μH ±10%	78m(62m)	2.10	1.50	2.20
RCH109NP-470K	470	47 μH ±10%	92m(74m)	2.00	1.40	2.05
RCH109NP-560K	560	56 μH ±10%	116m(93m)	1.75	1.30	1.80
RCH109NP-680K	680	68 μH ±10%	130m(104m)	1.65	1.25	1.60
RCH109NP-820K	820	82 μH ±10%	150m(120m)	1.50	1.15	1.50
RCH109NP-101K	101	100 μH ±10%	200m(160m)	1.35	1.00	1.40
RCH109NP-121K	121	120 μH ±10%	225m(180m)	1.25	0.92	1.25
RCH109NP-151K	151	150 μH ±10%	288m(230m)	1.10	0.82	1.05
RCH109NP-181K	181	180 μH ±10%	0.34(0.27)	1.00	0.76	1.00
RCH109NP-221K	221	220 μH ±10%	0.42(0.33)	0.94	0.70	0.92
RCH109NP-271K	271	270 μH ±10%	0.57(0.45)	0.85	0.65	0.77
RCH109NP-331K	331	330 μH ±10%	0.65(0.52)	0.77	0.60	0.67
RCH109NP-391K	391	390 μH ±10%	0.73(0.58)	0.71	0.51	0.63
RCH109NP-471K	471	470 μH ±10%	0.95(0.76)	0.65	0.45	0.59
RCH109NP-561K	561	560 μH ±10%	1.08(0.86)	0.60	0.40	0.52
RCH109NP-681K	681	680 μH ±10%	1.24(0.99)	0.54	0.38	0.50
RCH109NP-821K	821	820 μH ±10%	1.59(1.32)	0.48	0.36	0.42
RCH109NP-102K	102	1.0mH ±10%	1.84(1.53)	0.44	0.34	0.40

※1. Inductance measuring condition: 1kHz
※2. Saturation current: The DC current at which the inductance decreases to 90% of it's initial value.
※3. Temperature rise current: The DC current at which the temperature rise is △t=40℃.(Ta=20℃).

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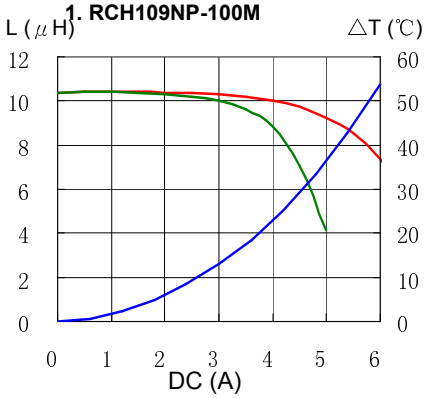
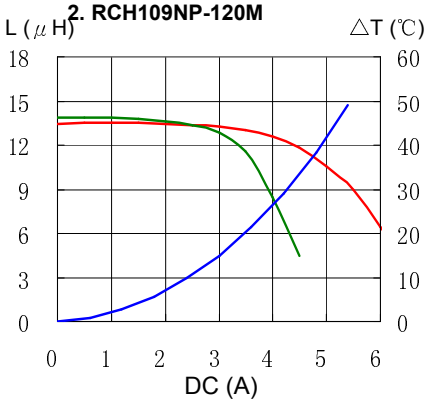
Saturation Current & Temperature Rise Graph

L (20℃) L (105℃) △T

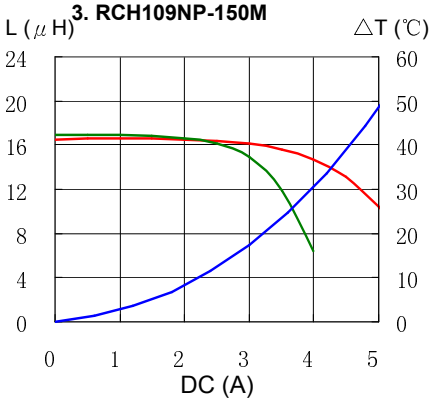
1. RCH109NP-100M



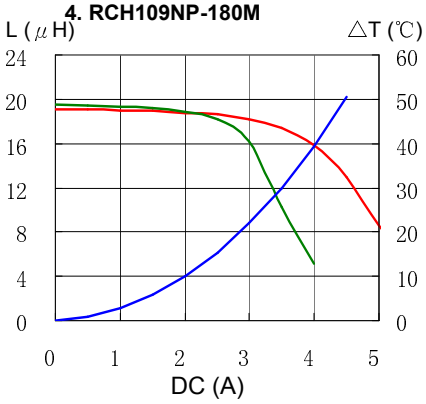
2. RCH109NP-120M



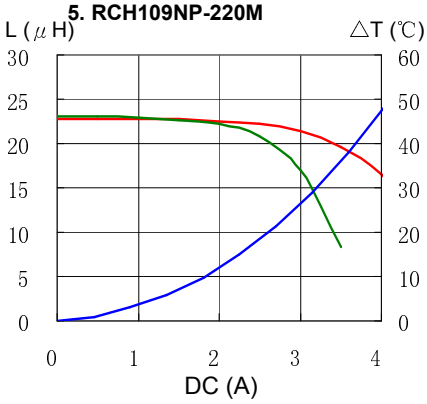
3. RCH109NP-150M



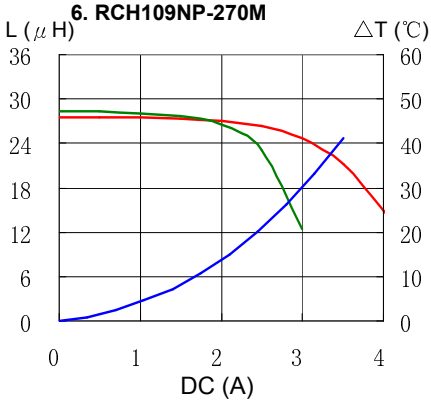
4. RCH109NP-180M



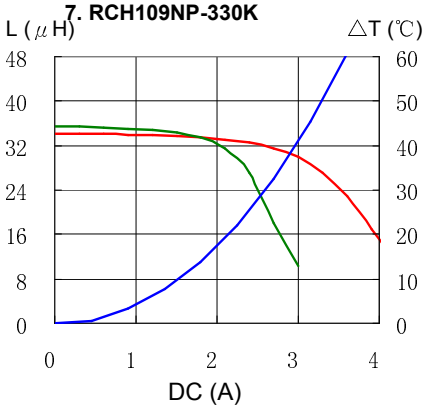
5. RCH109NP-220M



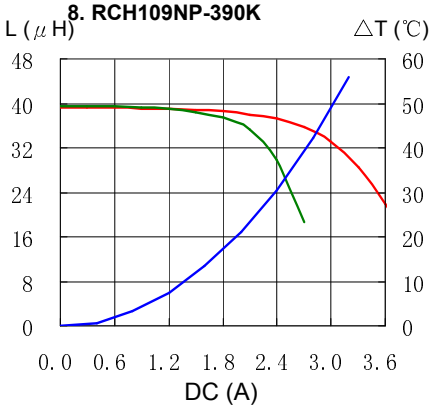
6. RCH109NP-270M



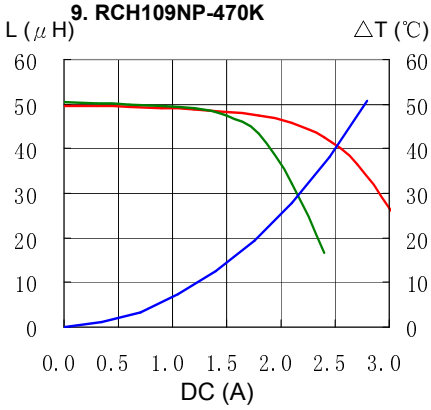
7. RCH109NP-330K



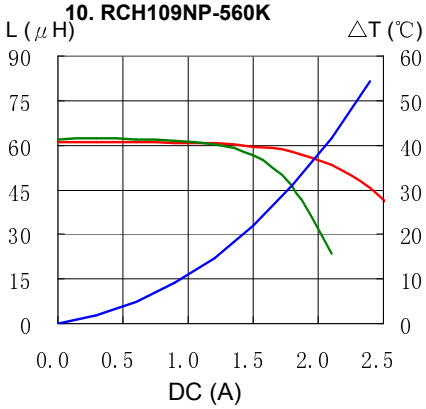
8. RCH109NP-390K



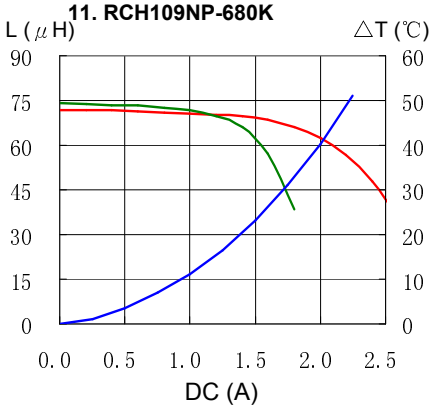
9. RCH109NP-470K



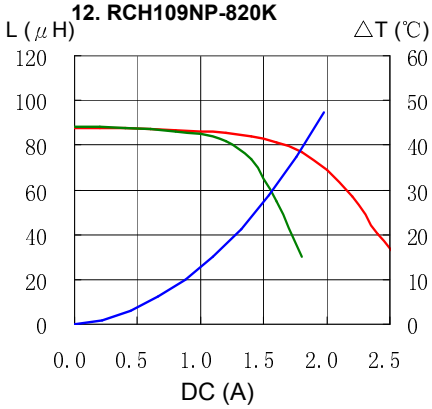
10. RCH109NP-560K



11. RCH109NP-680K



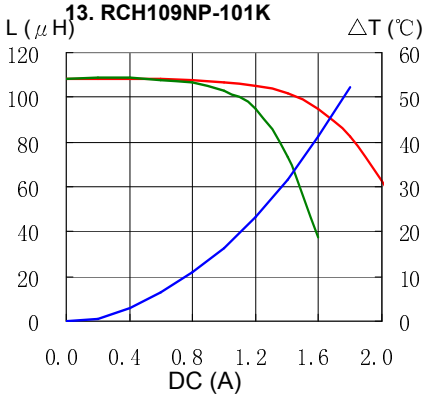
12. RCH109NP-820K



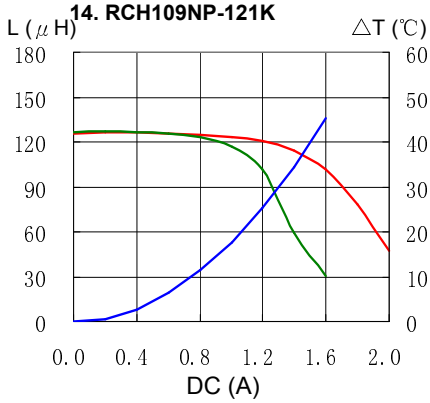
Saturation Current & Temperature Rise Graph

L (20℃) L (105℃) △T

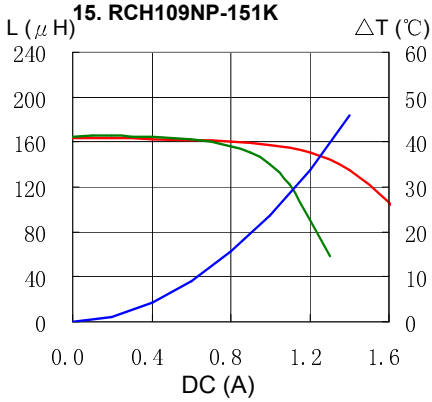
13. RCH109NP-101K



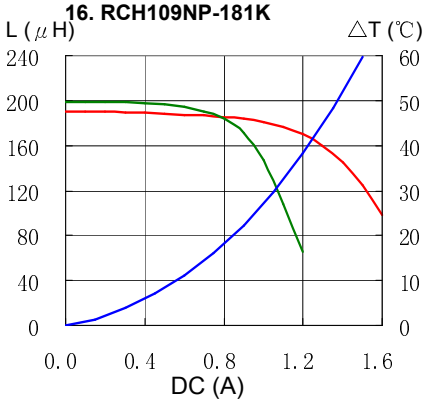
14. RCH109NP-121K



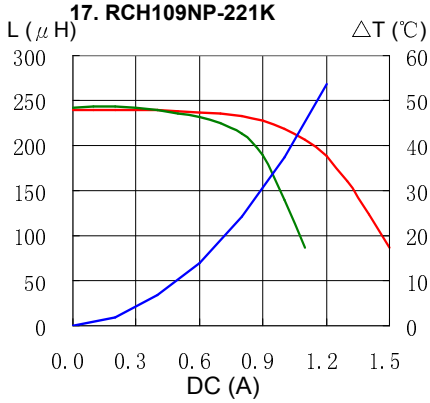
15. RCH109NP-151K



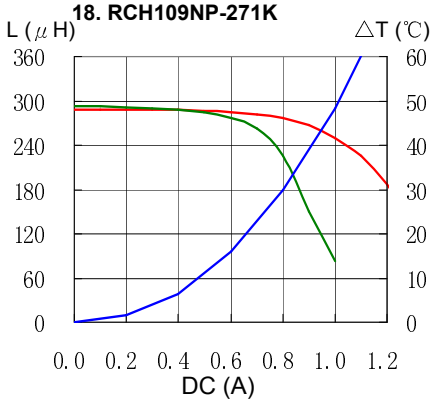
16. RCH109NP-181K



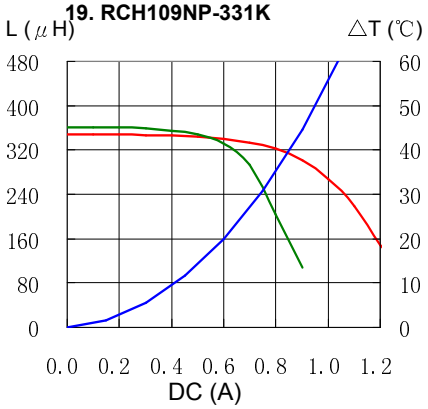
17. RCH109NP-221K



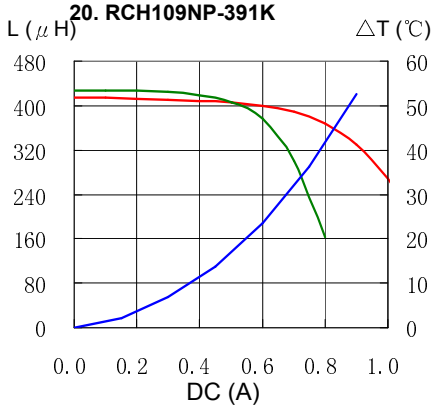
18. RCH109NP-271K



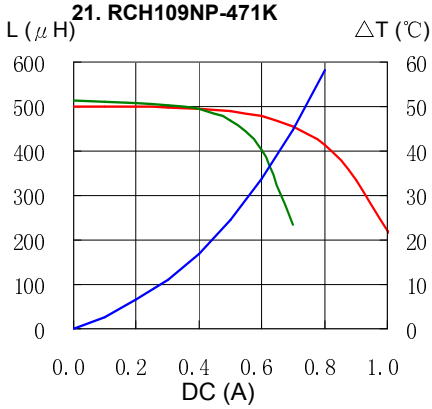
19. RCH109NP-331K



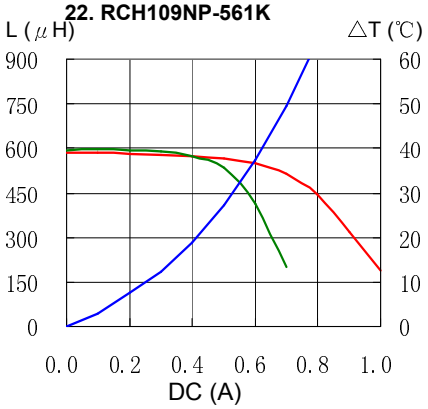
20. RCH109NP-391K



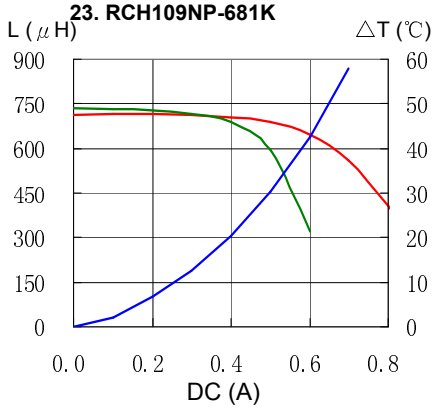
21. RCH109NP-471K



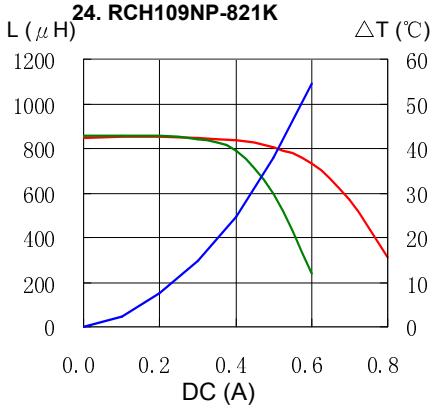
22. RCH109NP-561K



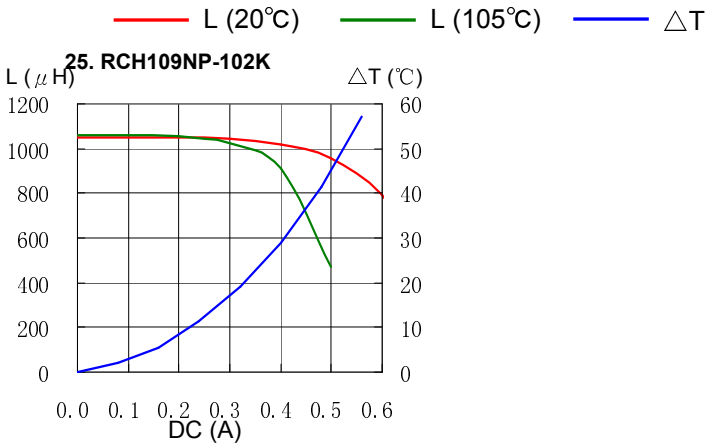
23. RCH109NP-681K



24. RCH109NP-821K



Saturation Current & Temperature Rise Graph



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