RCH114NP-6R3MB Datasheet

DiGi Electronics Part Number	RCH114NP-6R3MB-DG
Manufacturer	Sumida America Components Inc.
Manufacturer Product Number	RCH114NP-6R3MB
Description	INDUCTOR
Detailed Description	6.3 µH Unshielded Drum Core, Wirewound Inductor 5.6 A 26mOhm Max Radial

https://www.DiGi-Electronics.com

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
RCH114NP-6R3MB	Sumida America Components Inc.
Series:	Product Status:
RCH114	Active
Type:	Material - Core:
Drum Core, Wirewound	Ferrite
Inductance:	Tolerance:
6.3 µH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
5.6 A	8.2A
Shielding:	DC Resistance (DCR):
Unshielded	26mOhm Max
Q @ Freq:	Frequency - Self Resonant:
-	-
Ratings:	Operating Temperature:
-	-40°C ~ 100°C
Inductance Frequency - Test:	Features:
7.96 MHz	-
Mounting Type:	Package / Case:
Through Hole	Radial
Supplier Device Package:	Size / Dimension:
Radial	0.394" Dia (10.00mm)
Height - Seated (Max):	
-	

PIN Power Inductor
RCH114

RoHS

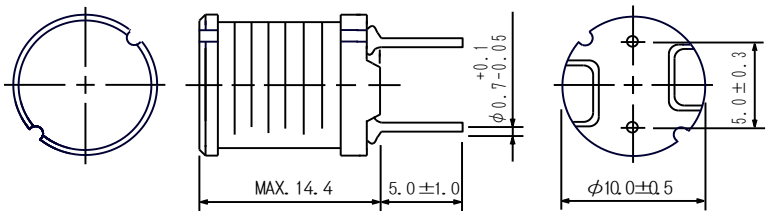
Description
- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 10.5 × 10.5 × 14.4mm Max.
- Product weight: 4.1g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

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

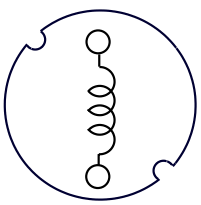
Packaging
- Box packaging.

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

Dimension - [mm]



Schematics - [mm]



PIN Power Inductor
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Electrical Characteristics

Part Name	Stamp	Inductance (μH) (Within)] ※1	D.C.R.(Ω) Max. (Typ.) at 20℃	Rated Current （A） ※2
RCH114NP-6R3MB RCH114NP-7R5MB RCH114NP-8R8MB	6R3 7R5 8R8	6.3μH ± 20 % 7.5μH ± 20 % 8.8μH ± 20 %	26m(20)m 29m(22m) 30m(23m)	4.3 4.2 4.1
RCH114NP-100KB RCH114NP-120KB RCH114NP-150KB	100 120 150	10μH ± 10 % 12μH ± 10 % 15μH ± 10 %	33m(25m) 35m(27m) 39m(30m)	4.0 3.9 3.7
RCH114NP-180KB RCH114NP-220KB RCH114NP-270KB	180 220 270	18μH ± 10 % 22μH ± 10 % 27μH ± 10 %	47m(36m) 51m(39m) 57m(44m)	3.5 3.3 3.1
RCH114NP-330KB RCH114NP-390KB RCH114NP-470KB	330 390 470	33μH ± 10 % 39μH ± 10 % 47μH ± 10 %	64m(49m) 74m(57m) 83m(64m)	2.9 2.7 2.5
RCH114NP-560KB RCH114NP-680KB RCH114NP-820KB	560 680 820	56μH ± 10 % 68μH ± 10 % 82μH ± 10 %	104m(80m) 117m(90m) 130m(100m)	2.3 2.1 1.9
RCH114NP-101KB RCH114NP-121KB RCH114NP-151KB	101 121 151	100μH ± 10 % 120μH ± 10 % 150μH ± 10 %	143m(110m) 195m(150m) 221m(170m)	1.7 1.5 1.4
RCH114NP-181KB RCH114NP-221KB RCH114NP-271KB	181 221 271	180μH ± 10 % 220μH ± 10 % 270μH ± 10 %	0.26(0.20) 0.35(0.27) 0.39(0.30)	1.3 1.2 1.1
RCH114NP-331KB RCH114NP-391KB RCH114NP-471KB	331 391 471	330μH ± 10 % 390μH ± 10 % 470μH ± 10 %	0.52(0.40) 0.57(0.44) 0.65(0.50)	1.0 0.92 0.84
RCH114NP-561KB RCH114NP-681KB RCH114NP-821KB	561 681 821	560μH ± 10 % 680μH ± 10 % 820μH ± 10 %	0.79(0.61) 0.96(0.74) 1.22(0.94)	0.75 0.69 0.62
RCH114NP-102KB RCH114NP-122KB RCH114NP-152KB	102 122 152	1.0 mH ± 10 % 1.2 mH ± 10 % 1.5 mH ± 10 %	1.6(1.3) 2.2(1.8) 2.5(2.0)	0.52 0.46 0.41
RCH114NP-182KB RCH114NP-222KB RCH114NP-272KB	182 222 272	1.8 mH ± 10 % 2.2 mH ± 10 % 2.7 mH ± 10 %	2.9(2.3) 3.2(2.6) 3.7(3.0)	0.36 0.32 0.29
RCH114NP-332KB RCH114NP-392KB RCH114NP-472KB	332 392 472	3.3 mH ± 10 % 3.9 mH ± 10 % 4.7 mH ± 10 %	5.0(4.0) 5.6(4.5) 7.4(5.9)	0.27 0.25 0.23
RCH114NP-562KB RCH114NP-682KB RCH114NP-822KB	562 682 822	5.6 mH ± 10 % 6.8 mH ± 10 % 8.2 mH ± 10 %	8.2(6.6) 11.9(9.5) 14(11)	0.21 0.19 0.17
RCH114NP-103KB RCH114NP-123KB RCH114NP-153KB	103 123 153	10 mH ± 10 % 12 mH ± 10 % 15 mH ± 10 %	16(13) 21(17) 24(19)	0.16 0.15 0.14
RCH114NP-183KB RCH114NP-223KB RCH114NP-273KB	183 223 273	18 mH ± 10 % 22 mH ± 10 % 27 mH ± 10 %	27(22) 34(27) 39(31)	0.13 0.12 0.11
RCH114NP-333KB RCH114NP-393KB	333 393	33 mH ± 10 % 39 mH ± 10 %	51(41) 58(46)	0.10 0.09

※1 : Inductance measuring condition : ６.３μH～８.８μH ａｔ ７.９６ＭＨｚ
１０μH～３９ｍH ａｔ １.０ｋＨｚ

※2 : Rated current: The DC current at which the inductance decreases 90% of it's initial value or when △t=40℃, whichever is lower (Ta＝20℃)

PIN Power Inductor
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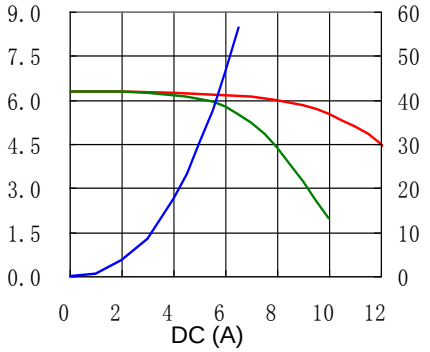
Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

1. RCH114NP-6R3MB



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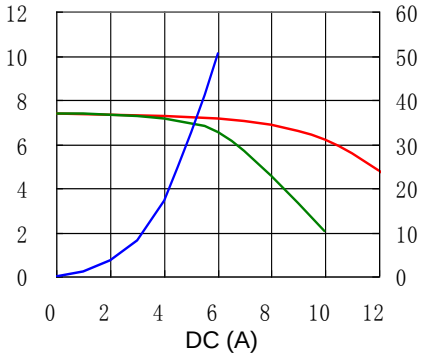

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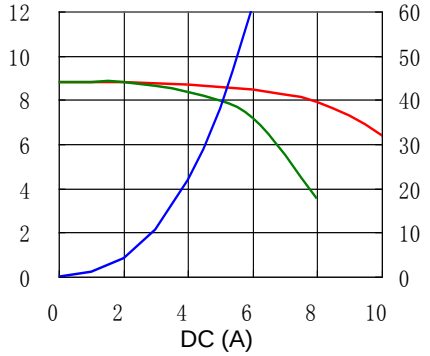
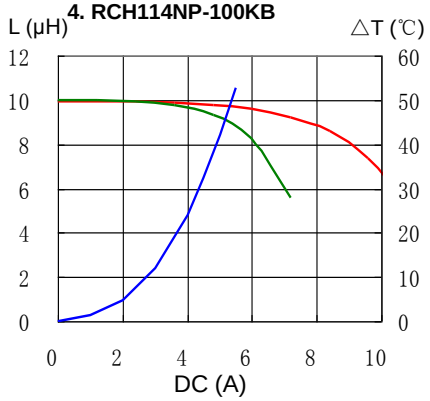


4. RCH114NP-100KB



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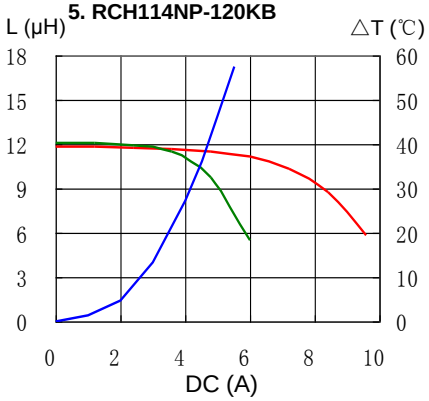

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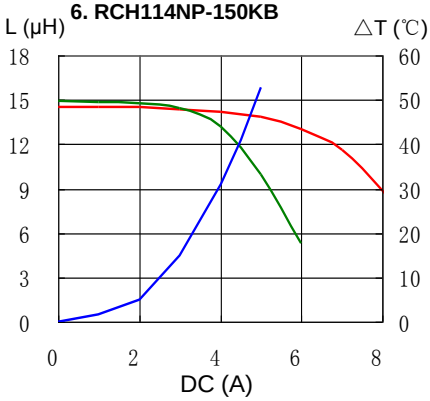

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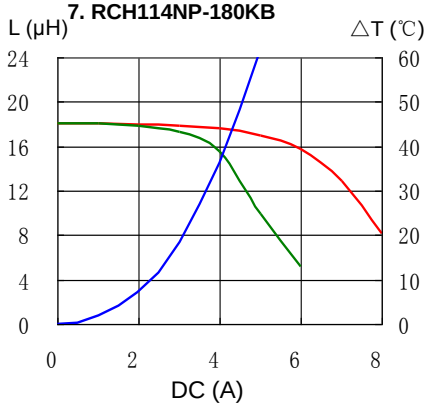

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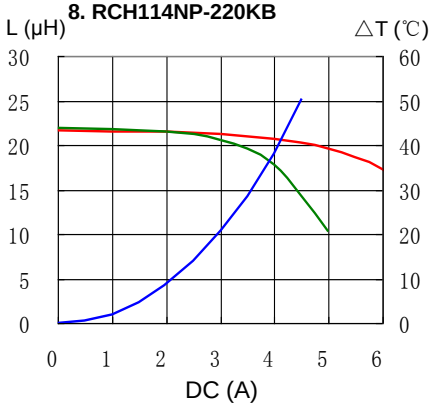

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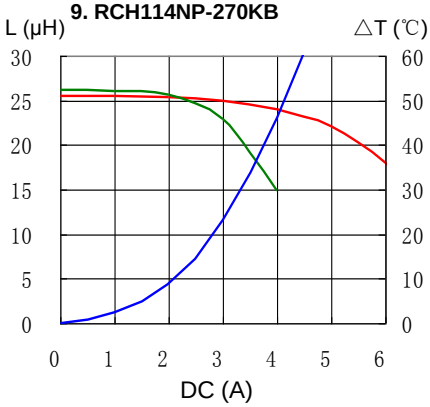

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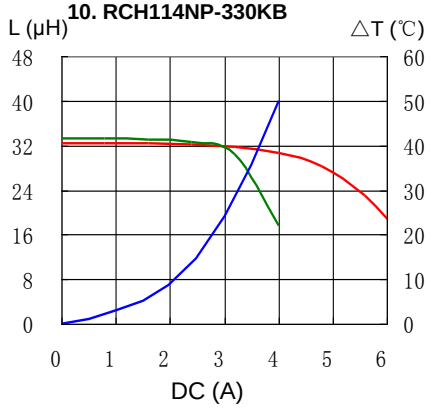

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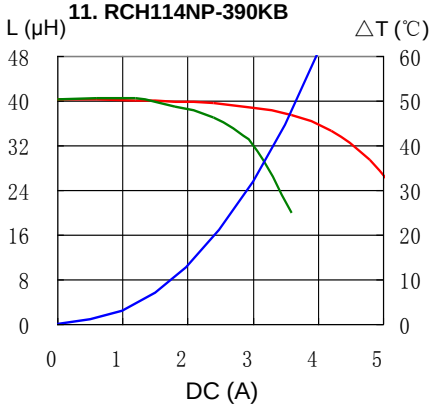
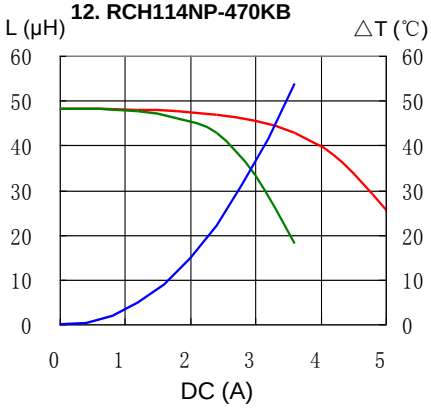


12. RCH114NP-470KB



PIN Power Inductor
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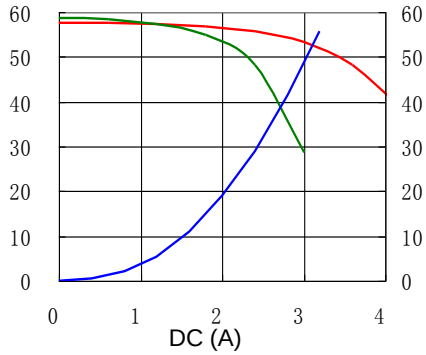
Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

13. RCH114NP-560KB



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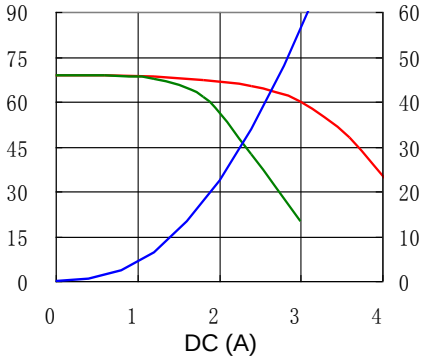

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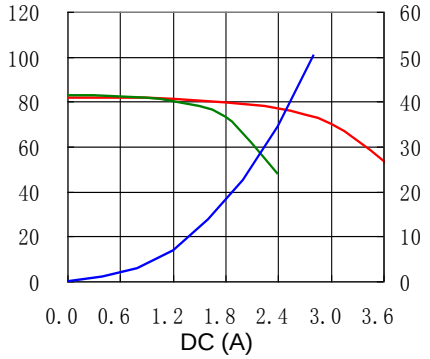

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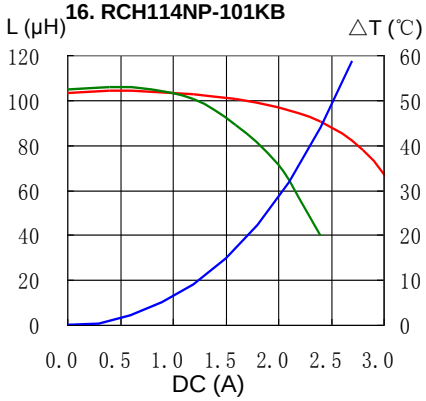

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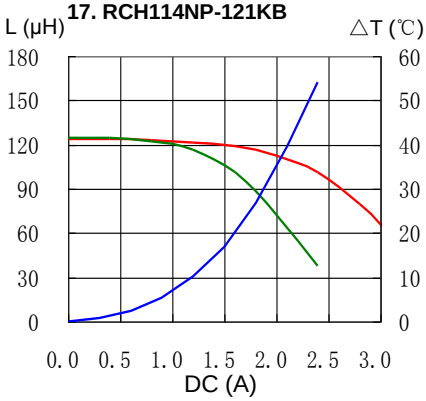

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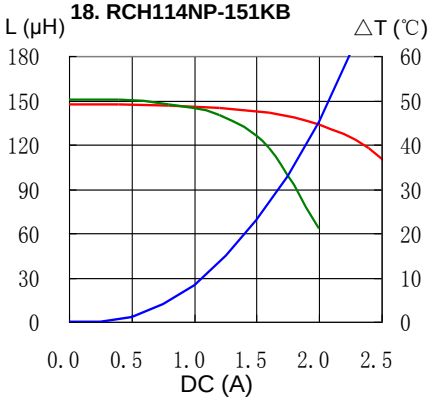

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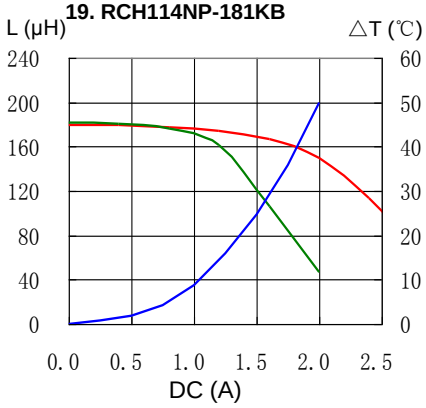

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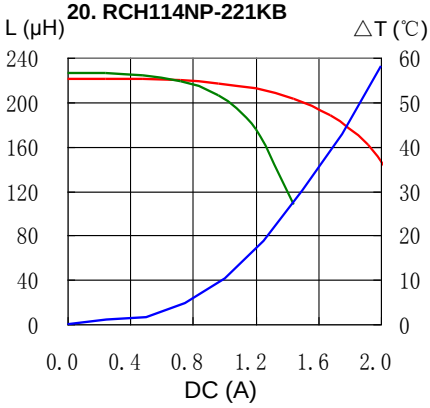

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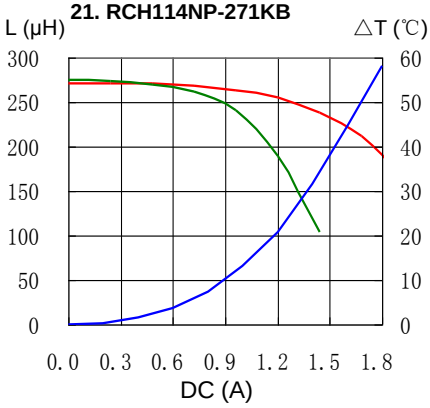

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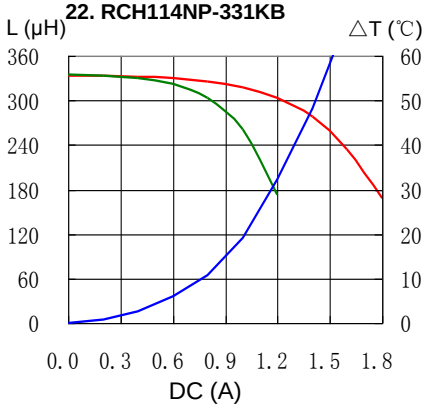
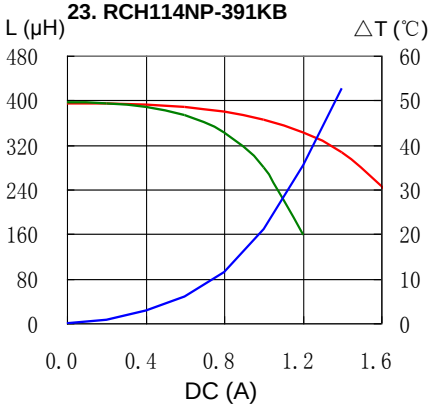
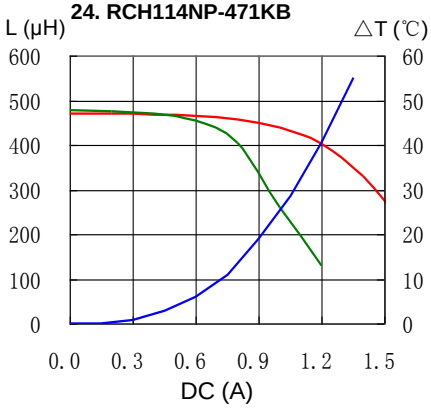


23. RCH114NP-391KB



24. RCH114NP-471KB



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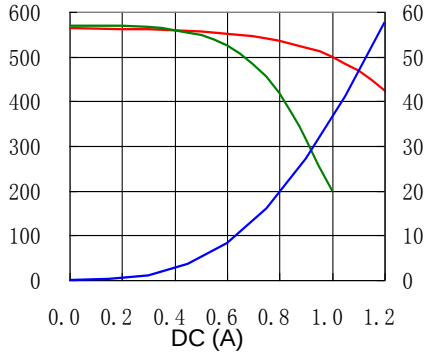
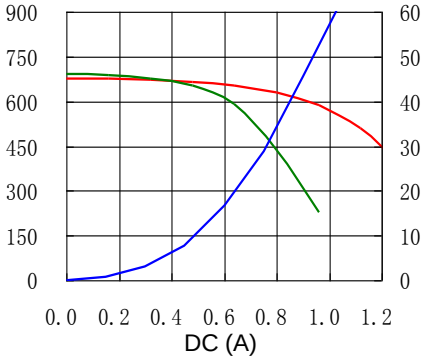
Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

25. RCH114NP-561KB



26. RCH114NP-681KB



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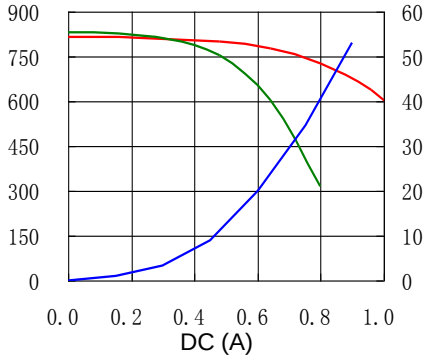
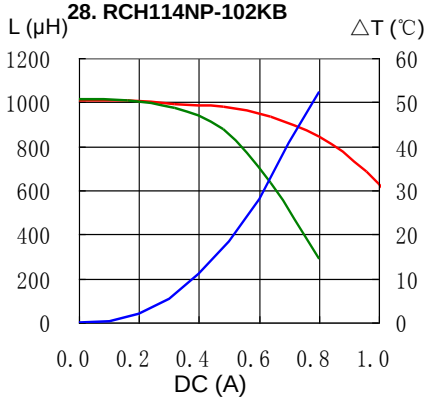


28. RCH114NP-102KB



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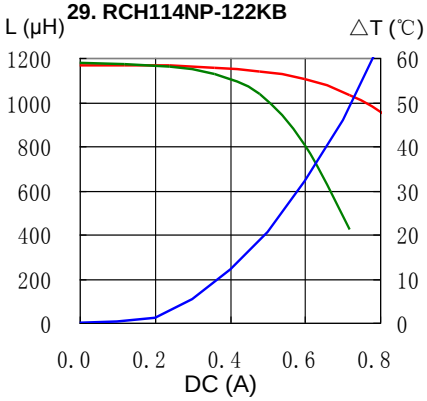

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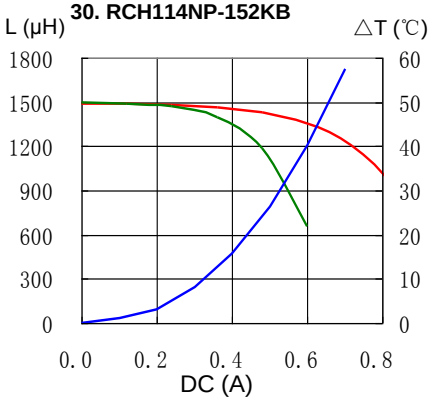
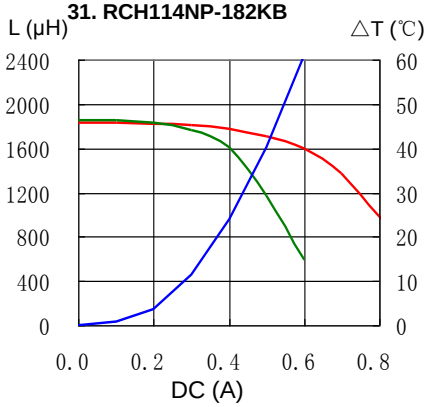
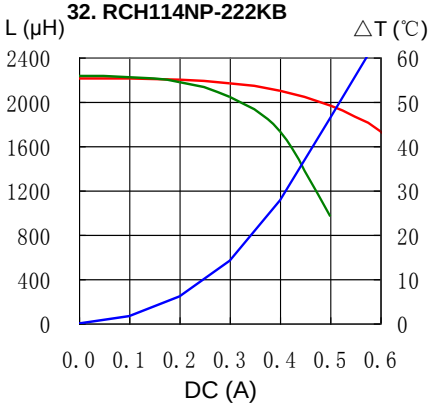


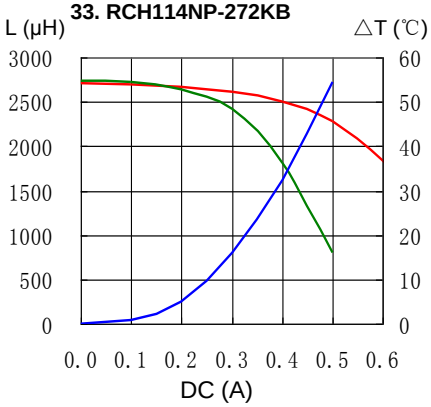
31. RCH114NP-182KB



32. RCH114NP-222KB



33. RCH114NP-272KB



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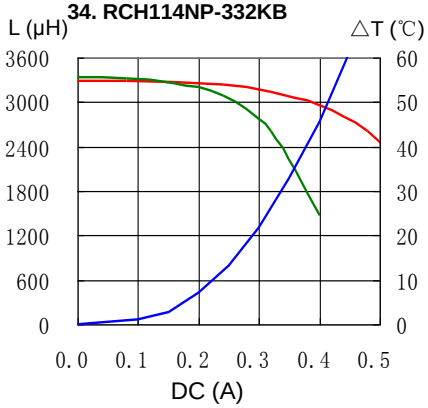
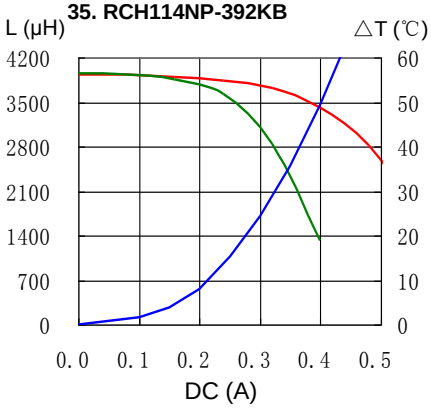
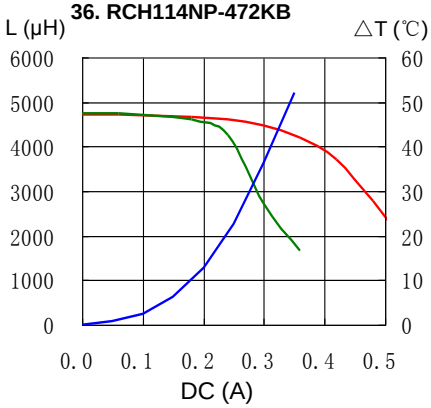


35. RCH114NP-392KB



36. RCH114NP-472KB



PIN Power Inductor
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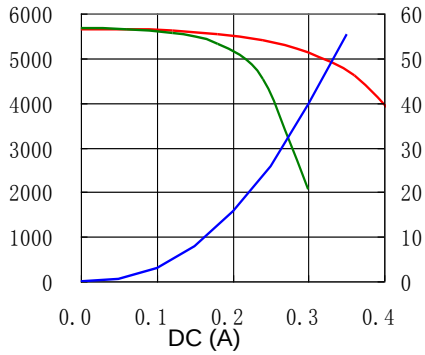
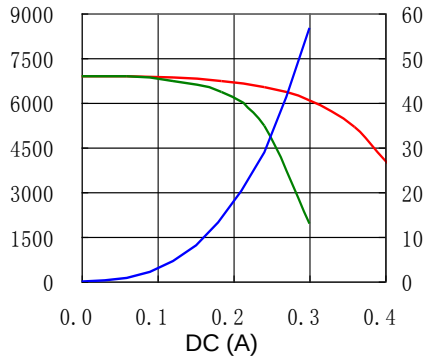
Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

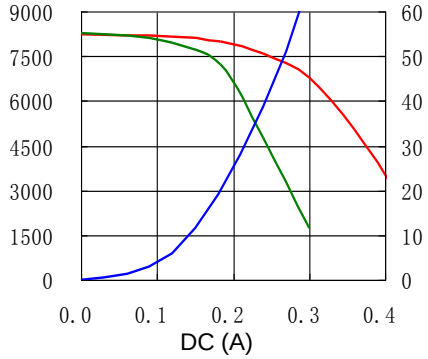
37. RCH114NP-562KB



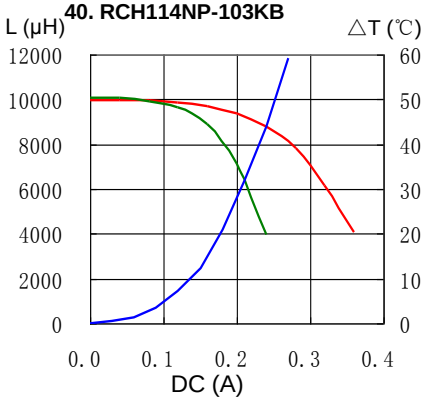
38. RCH114NP-682KB



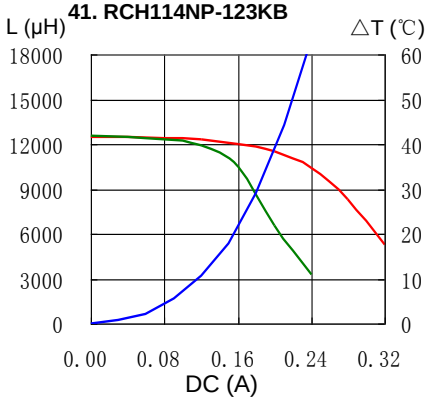
39. RCH114NP-822KB



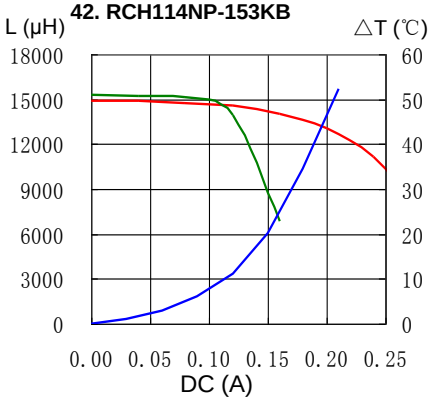
40. RCH114NP-103KB



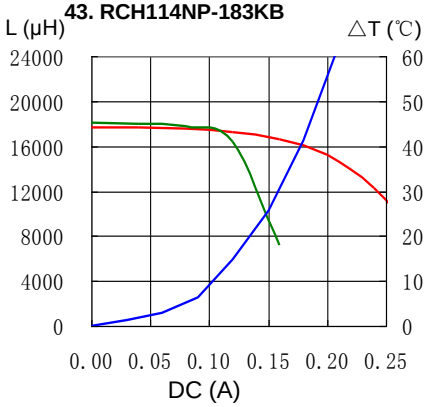
41. RCH114NP-123KB



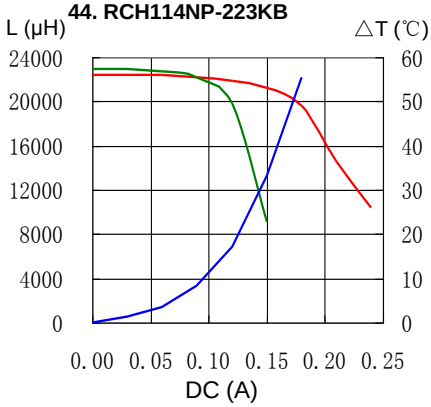
42. RCH114NP-153KB



43. RCH114NP-183KB



44. RCH114NP-223KB



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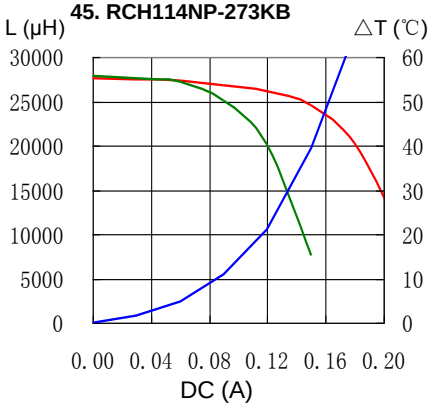
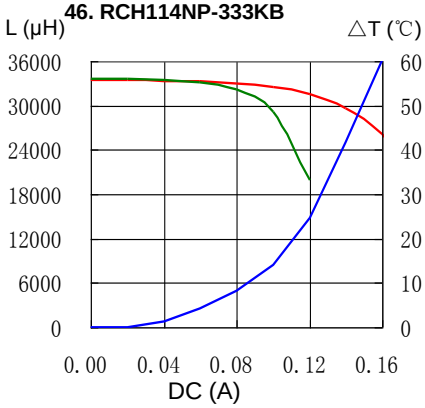
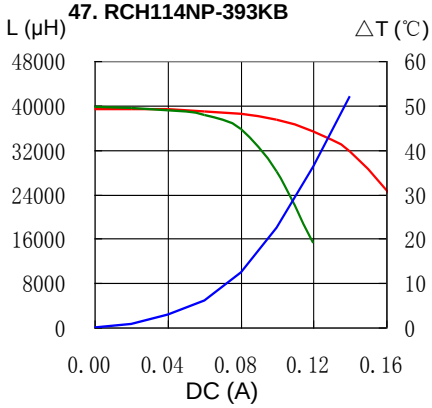


46. RCH114NP-333KB



47. RCH114NP-393KB



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