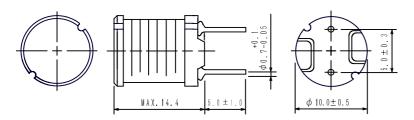
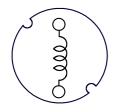




### Dimension - [mm]



#### Schematics - [mm]



#### **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.
- Halogen Free available.

#### **Environmental Data**

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

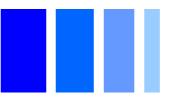
### **Packaging**

· Box packaging.

### **Applications**

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

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### **Electrical Characteristics**

Part Name	Stamp	Inductance ( μ H ) (Within)] ※ 1	D.C.R. $(\Omega)$ Max. (Typ.) at $20^{\circ}\mathrm{C}$	Rated Current (A) **2
RCH114NP-6R3MB	6R3	6.3 μ H ± 20 %	26m(20)m	4.3
RCH114NP-7R5MB	7R5	7.5 μ H ± 20 %	29m(22m)	4.2
RCH114NP-8R8MB	8R8	8.8 μ H ± 20 %	30m(23m)	4.1
RCH114NP-100KB	100	10 $\mu$ H $\pm$ 10 $\%$	33m(25m)	4.0
RCH114NP-120KB	120	12 $\mu$ H $\pm$ 10 $\%$	35m(27m)	3.9
RCH114NP-150KB	150	15 $\mu$ H $\pm$ 10 $\%$	39m(30m)	3.7
RCH114NP-180KB	180	18 $\mu$ H $\pm$ 10 $\%$	47m(36m)	3.5
RCH114NP-220KB	220	22 $\mu$ H $\pm$ 10 $\%$	51m(39m)	3.3
RCH114NP-270KB	270	27 $\mu$ H $\pm$ 10 $\%$	57m(44m)	3.1
RCH114NP-330KB	330	$33\mu ext{H}\pm10~\% \ 39\mu ext{H}\pm10~\% \ 47\mu ext{H}\pm10~\%$	64m(49m)	2.9
RCH114NP-390KB	390		74m(57m)	2.7
RCH114NP-470KB	470		83m(64m)	2.5
RCH114NP-560KB	560	$56~\mu H~\pm~10~\% \ 68~\mu H~\pm~10~\% \ 82~\mu H~\pm~10~\%$	104m(80m)	2.3
RCH114NP-680KB	680		117m(90m)	2.1
RCH114NP-820KB	820		130m(100m)	1.9
RCH114NP-101KB	101	$100\mu\mathrm{H}\pm10~\%$ $120\mu\mathrm{H}\pm10~\%$ $150\mu\mathrm{H}\pm10~\%$	143m(110m)	1.7
RCH114NP-121KB	121		195m(150m)	1.5
RCH114NP-151KB	151		221m(170m)	1.4
RCH114NP-181KB	181	$\begin{array}{c} \textbf{180}\mu\textbf{H}\pm\textbf{10}\%\\ \textbf{220}\mu\textbf{H}\pm\textbf{10}\%\\ \textbf{270}\mu\textbf{H}\pm\textbf{10}\% \end{array}$	0.26(0.20)	1.3
RCH114NP-221KB	221		0.35(0.27)	1.2
RCH114NP-271KB	271		0.39(0.30)	1.1
RCH114NP-331KB	331	$330\muH\pm10~\% \ 390\muH\pm10~\% \ 470\muH\pm10~\%$	0.52(0.40)	1.0
RCH114NP-391KB	391		0.57(0.44)	0.92
RCH114NP-471KB	471		0.65(0.50)	0.84
RCH114NP-561KB	561	$560\muH\pm10~\% \ 680\muH\pm10~\% \ 820\muH\pm10~\%$	0.79(0.61)	0.75
RCH114NP-681KB	681		0.96(0.74)	0.69
RCH114NP-821KB	821		1.22(0.94)	0.62
RCH114NP-102KB	102	1.0 mH $\pm$ 10 $\%$ 1.2 mH $\pm$ 10 $\%$ 1.5 mH $\pm$ 10 $\%$	1.6(1.3)	0.52
RCH114NP-122KB	122		2.2(1.8)	0.46
RCH114NP-152KB	152		2.5(2.0)	0.41
RCH114NP-182KB	182	1.8 mH $\pm$ 10 $\%$ 2.2 mH $\pm$ 10 $\%$ 2.7 mH $\pm$ 10 $\%$	2.9(2.3)	0.36
RCH114NP-222KB	222		3.2(2.6)	0.32
RCH114NP-272KB	272		3.7(3.0)	0.29
RCH114NP-332KB	332	3.3 mH $\pm$ 10 $\%$ 3.9 mH $\pm$ 10 $\%$ 4.7 mH $\pm$ 10 $\%$	5.0(4.0)	0.27
RCH114NP-392KB	392		5.6(4.5)	0.25
RCH114NP-472KB	472		7.4(5.9)	0.23
RCH114NP-562KB	562	5.6 mH $\pm$ 10 $\%$	8.2(6.6)	0.21
RCH114NP-682KB	682	6.8 mH $\pm$ 10 $\%$	11.9(9.5)	0.19
RCH114NP-822KB	822	8.2 mH $\pm$ 10 $\%$	14(11)	0.17
RCH114NP-103KB	103	10 mH $\pm$ 10 $\%$	16(13)	0.16
RCH114NP-123KB	123	12 mH $\pm$ 10 $\%$	21(17)	0.15
RCH114NP-153KB	153	15 mH $\pm$ 10 $\%$	24(19)	0.14
RCH114NP-183KB	183	18 mH $\pm$ 10 $\%$	27(22)	0.13
RCH114NP-223KB	223	22 mH $\pm$ 10 $\%$	34(27)	0.12
RCH114NP-273KB	273	27 mH $\pm$ 10 $\%$	39(31)	0.11
RCH114NP-333KB	333	33 mH $\pm$ 10 $\%$ 39 mH $\pm$ 10 $\%$	51(41)	0.10
RCH114NP-393KB	393		58(46)	0.09

<sup>%</sup> 1 : Inductance measuring condition :  $\phantom{0}6.3~\mu$  H  $\sim$  8 . 8  $\mu$  H  $\phantom{0}$  a t  $\phantom{0}7.9~6$  MH z  $\phantom{0}1~0~\mu$  H  $\sim$  3 9 mH  $\phantom{0}$  a t  $\phantom{0}1.0~k$  H z

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<sup>%</sup>2 : Rated current: The DC current at which the inductance decreases 90% of it's initial value or when  $\triangle$ t=40 $^{\circ}$ C, whichever is lower (Ta=20 $^{\circ}$ C)





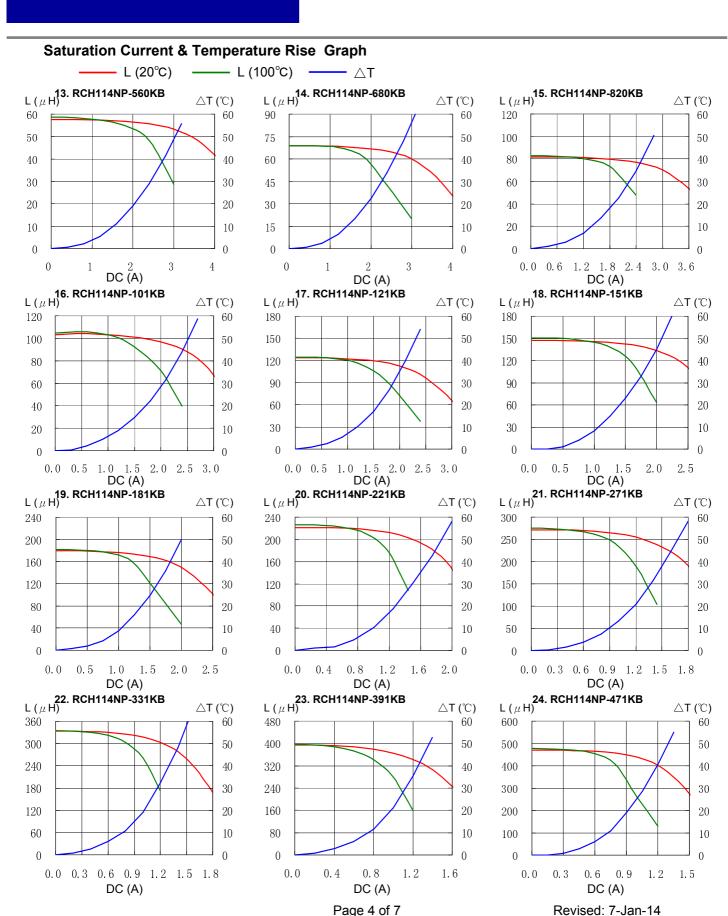
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#### **Saturation Current & Temperature Rise Graph** - L (20°C) — L (100°C) L (μH). RCH114NP-6R3MB L (μ H) 2. RCH114NP-7R5MB L (μ H)<sup>3.</sup> RCH114NP-8R8MB $\triangle T (\mathcal{C})$ △T (°C) $\triangle T$ (°C) 9.0 7.5 6.0 4.5 3.0 1.5 0.0 4DC (A) DC (A) DC (A) **4. RCH114NP-100KB** L (μ H) 5. RCH114NP-120KB L (μ H) 6. RCH114NP-150KB $\triangle T$ (°C) $\triangle T$ ( $\mathbb{C}$ ) △T (°C) DC (A) DC (A) DC (A) 7. RCH114NP-180KB 8. RCH114NP-220KB 9. RCH114NP-270KB L (μ H) $\triangle T$ (°C) $\triangle T$ (°C) △T (°C) DC (A) DC (A) DC (A) 10. RCH114NP-330KB L (μ H) 11. RCH114NP-390KB L (μ H) 12. RCH114NP-470KB L (μH) $\triangle T (\mathcal{C})$ $\triangle \mathsf{T}(\mathbb{C})$ $\triangle T (\mathcal{C})$ DC (A) DC (A) DC (A)

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DC (A)





DC (A)

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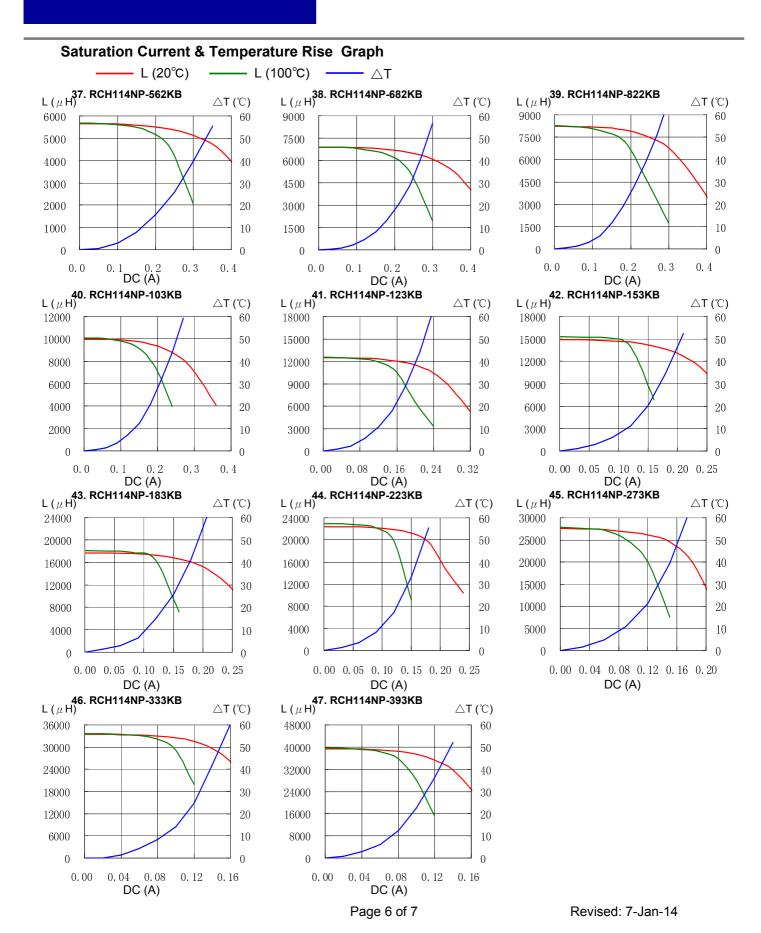
#### **Saturation Current & Temperature Rise Graph** - L (20°C) — L (100°C) **25. RCH114NP-561KB** L (μH) **26. RCH114NP-681KB** L (μ H) L (μ H)<sup>27.</sup> RCH114NP-821KB $\triangle T$ (°C) △T (°C) $\triangle T$ (°C) 0.2 0.4 0.6 0.8 1.0 1.2 0.0 0.2 0.4 0.6 0.8 1.0 1.2 0.0 0.2 0.4 0.6 0.8 1.0 DC (A) DC (A) DC (A) 28. RCH114NP-102KB L (μ H) **29. RCH114NP-122KB** L (μ H) 30. RCH114NP-152KB L (μ H) $\triangle T$ (°C) $\triangle T$ ( $\mathbb{C}$ ) $\triangle T$ (°C) 0.4 0.6 0.8 1.0 0.0 0.4 0.8 0.4 0.8 0.0 0.2 DC (A) DC (A) DC (A) 32. RCH114NP-222KB L (μ H) 33. RCH114NP-272KB L (μ H) 31. RCH114NP-182KB L (μ H) $\triangle T$ (°C) △T (°C) $\triangle T$ (°C) $0. \ 0 \ 0.1 \ 0.2 \ 0.3 \ 0.4 \ 0.5 \ 0.6$ 0.2 0.8 $0. \ 0 \ 0.1 \ 0.2 \ 0.3 \ 0.4 \ 0.5 \ 0.6$ 0.0 0.4 0.6 DC (A) DC (A) DC (A) 35. RCH114NP-392KB L (μH) 34. RCH114NP-332KB L (μ H) 36. RCH114NP-472KB L (μ H) $\triangle T$ (°C) $\triangle T (^{\circ}C)$ $\triangle T (^{\circ}C)$ 0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.0 0.0

DC (A)

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