



**THE DATASHEET OF  
RCR1010NP-100M**



# PIN Power Inductor RCR1010



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.5 × 10.5mm Max.
- Product weight: 2.9 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -40°C~+105°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C

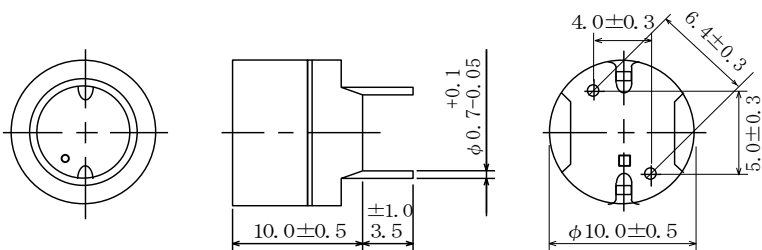
## Packaging

- Box packaging.

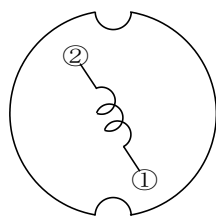
## Applications

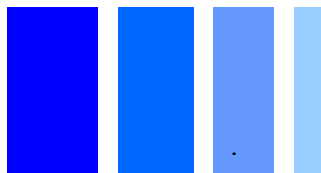
- Ideally used in Printers, LCD TV, DVD, Copy Machine, Mainboard of the compounding machines etc. as DC-DC Converter inductors.

## Dimension - [mm]



## Schematics - [mm]





### Electrical Characteristics

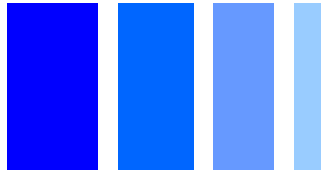
PART No.	STAMP	INDUCTANCE <WITHIN> ※1	D.C.R. (mΩ) Max.(Typ.) (at 20°C)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE (A) ※3
				Max.(Typ.) (at 20°C)	Max.(Typ.) (at 105°C)	
RCR1010NP-100M	100M	10μH±20%	25.1(20.1)	4.8(6.0)	3.8(4.8)	4.3
RCR1010NP-120M	120M	12μH±20%	26.6(21.3)	4.5(5.5)	3.5(4.3)	4.2
RCR1010NP-150M	150M	15μH±20%	31.3(25.1)	4.0(5.0)	3.2(3.9)	4.1
RCR1010NP-180M	180M	18μH±20%	33.8(27.1)	3.8(4.6)	2.9(3.5)	4.0
RCR1010NP-220M	220M	22μH±20%	38.3(30.6)	3.4(4.2)	2.6(3.2)	3.8
RCR1010NP-270M	270M	27μH±20%	40.9(32.7)	3.0(3.8)	2.5(3.0)	3.6
RCR1010NP-330M	330M	33μH±20%	53.8(43.1)	2.7(3.3)	2.2(2.65)	3.2
RCR1010NP-390M	390M	39μH±20%	73.4(58.7)	2.5(3.0)	2.0(2.45)	2.5
RCR1010NP-470M	470M	47μH±20%	102.1(81.7)	2.2(2.7)	1.8(2.15)	2.2
RCR1010NP-560M	560M	56μH±20%	111.3(89.0)	2.1(2.5)	1.7(2.05)	2.1
RCR1010NP-680M	680M	68μH±20%	137.5(110.0)	1.8(2.3)	1.4(1.8)	1.9
RCR1010NP-820M	820M	82μH±20%	160.0(128.0)	1.7(2.0)	1.3(1.6)	1.8
RCR1010NP-101M	101M	100μH±20%	175.3(140.2)	1.5(1.8)	1.2(1.45)	1.7
RCR1010NP-121M	121M	120μH±20%	193.8(155.0)	1.4(1.7)	1.1(1.35)	1.6
RCR1010NP-151M	151M	150μH±20%	225.6(180.5)	1.2(1.5)	1.0(1.2)	1.5
RCR1010NP-181M	181M	180μH±20%	275.3(220.2)	1.1(1.4)	0.9(1.14)	1.4
RCR1010NP-221M	221M	220μH±20%	313.0(250.5)	1.0(1.25)	0.8(1.05)	1.3
RCR1010NP-271M	271M	270μH±20%	450.6(360.5)	0.95(1.15)	0.74(0.9)	1.0
RCR1010NP-331M	331M	330μH±20%	500.6(400.5)	0.88(1.05)	0.64(0.8)	0.98
RCR1010NP-391M	391M	390μH±20%	563.0(450.5)	0.78(0.95)	0.60(0.75)	0.94
RCR1010NP-471M	471M	470μH±20%	748.8(599.0)	0.72(0.90)	0.58(0.7)	0.80
RCR1010NP-561M	561M	560μH±20%	848.8(682.9)	0.68(0.80)	0.55(0.63)	0.75
RCR1010NP-681M	681M	680μH±20%	1202(962.0)	0.60(0.70)	0.48(0.56)	0.63
RCR1010NP-821M	821M	820μH±20%	1342(1074)	0.57(0.65)	0.45(0.52)	0.60
RCR1010NP-102M	102M	1.0mH±20%	1490(1192)	0.48(0.60)	0.39(0.45)	0.55

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 80% of its nominal value.

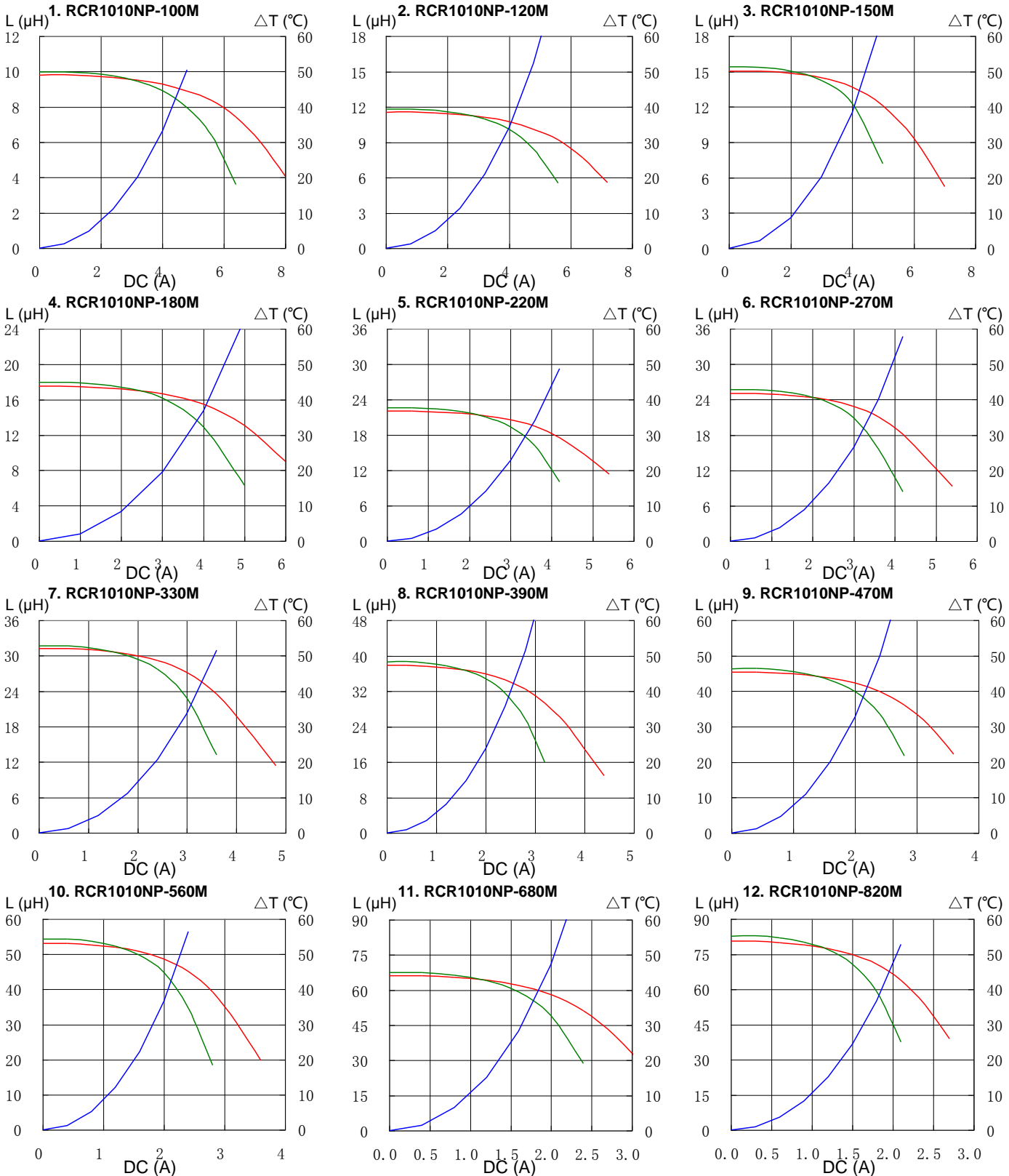
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^{\circ}\text{C}$  ( $T_a = 20^{\circ}\text{C}$ ).

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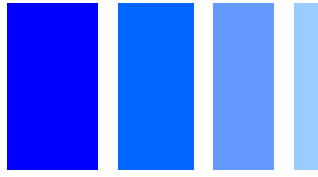


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

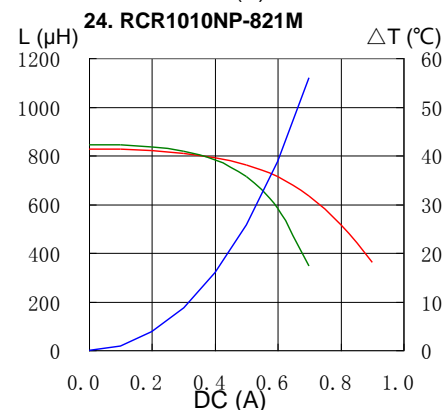
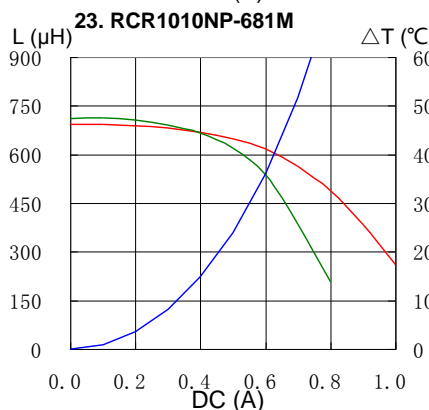
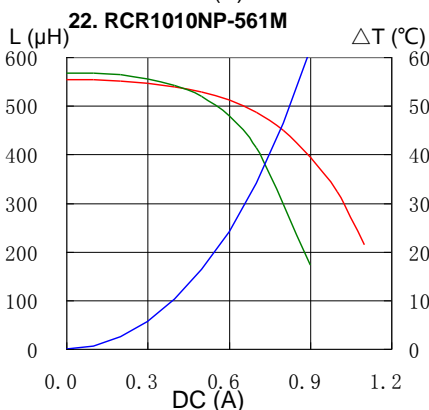
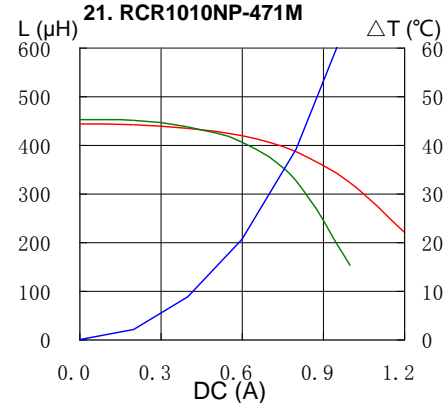
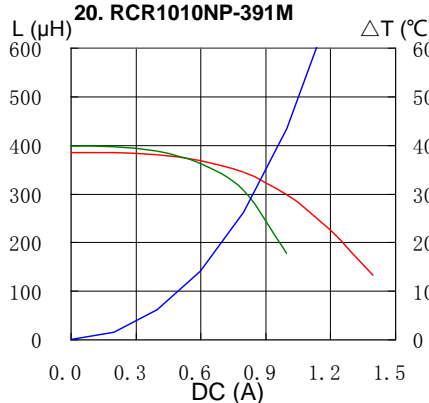
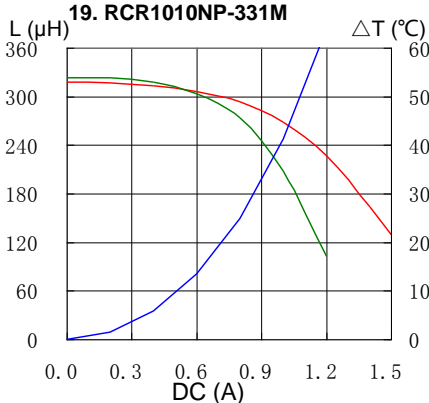
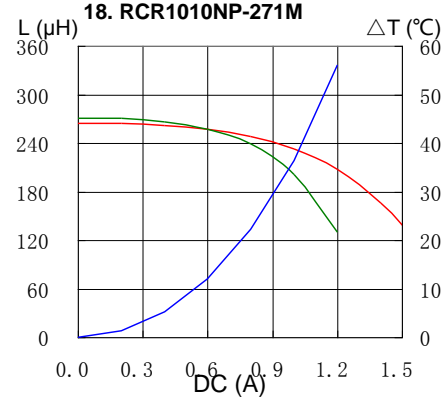
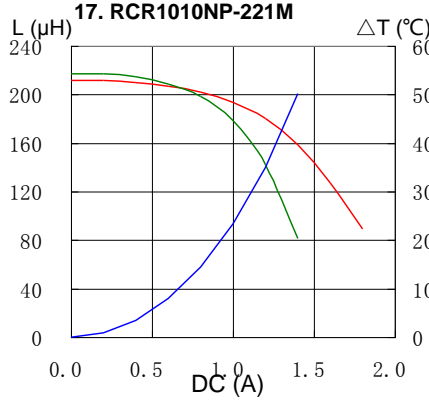
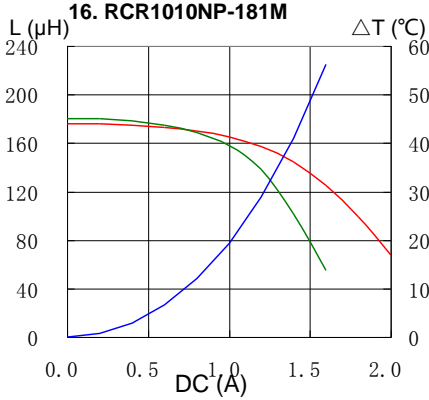
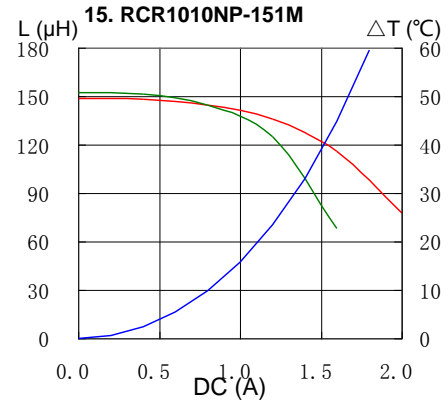
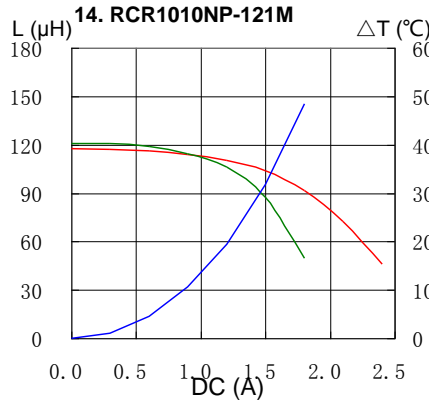
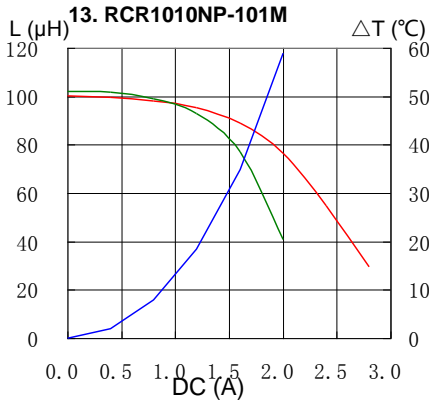


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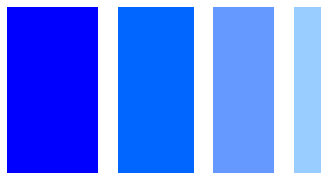


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

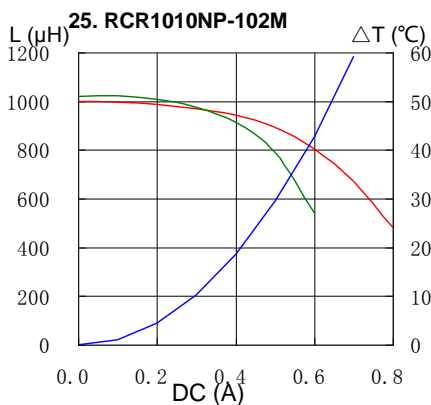


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



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