



**THE DATASHEET OF  
RCH875NP-470K**



# PIN Power Inductor RCH-875



Halogen  
Free



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 8.3 × 8.3 × 7.5mm Max.
- Product weight: 1.13g(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

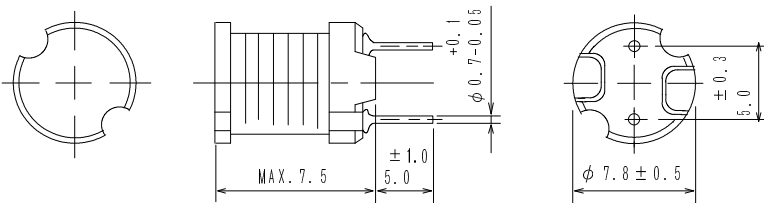
## Packaging

- Box packaging.

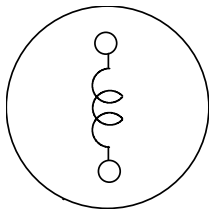
## Applications

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

## Dimension - [mm]



## Schematics - [mm]



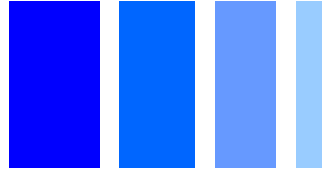
# PIN Power Inductor RCH-875



## Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [ within ] ※ 1	D.C.R ( $\Omega$ ) [Max.] (at20°C)	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
RCH875NP-2R2M	2R2M	2.2 $\pm$ 20%	13.7m	5.8	3.0
RCH875NP-2R8M	2R8M	2.8 $\pm$ 20%	15.3m	5.0	2.9
RCH875NP-3R5M	3R5M	3.5 $\pm$ 20%	17.2m	4.7	2.8
RCH875NP-4R4M	4R4M	4.4 $\pm$ 20%	19.1m	4.5	2.7
RCH875NP-5R1M	5R1M	5.1 $\pm$ 20%	21.2m	4.2	2.6
RCH875NP-6R0M	6R0M	6.0 $\pm$ 20%	22.2m	4.0	2.5
RCH875NP-7R1M	7R1M	7.1 $\pm$ 20%	24.2m	3.4	2.3
RCH875NP-8R2M	8R2M	8.2 $\pm$ 20%	26.5m	3.1	2.2
RCH875NP-100M	100M	10 $\pm$ 20%	0.05	2.9	2.1
RCH875NP-120M	120M	12 $\pm$ 20%	0.06	2.5	1.8
RCH875NP-150K	150K	15 $\pm$ 10%	0.07	2.2	1.4
RCH875NP-180K	180K	18 $\pm$ 10%	0.08	1.9	1.3
RCH875NP-220K	220K	22 $\pm$ 10%	0.09	1.8	1.2
RCH875NP-270K	270K	27 $\pm$ 10%	0.11	1.7	1.0
RCH875NP-330K	330K	33 $\pm$ 10%	0.13	1.5	1.0
RCH875NP-390K	390K	39 $\pm$ 10%	0.14	1.3	0.95
RCH875NP-470K	470K	47 $\pm$ 10%	0.15	1.3	0.90
RCH875NP-560K	560K	56 $\pm$ 10%	0.18	1.2	0.73
RCH875NP-680K	680K	68 $\pm$ 10%	0.20	1.1	0.68
RCH875NP-820K	820K	82 $\pm$ 10%	0.24	1.0	0.63
RCH875NP-101K	101K	100 $\pm$ 10%	0.35	0.89	0.59
RCH875NP-121K	121K	120 $\pm$ 10%	0.36	0.81	0.50
RCH875NP-151K	151K	150 $\pm$ 10%	0.42	0.72	0.46
RCH875NP-181K	181K	180 $\pm$ 10%	0.57	0.66	0.41
RCH875NP-221K	221K	220 $\pm$ 10%	0.63	0.57	0.38
RCH875NP-271K	271K	270 $\pm$ 10%	0.88	0.51	0.32
RCH875NP-331K	331K	330 $\pm$ 10%	1.05	0.46	0.30
RCH875NP-391K	391K	390 $\pm$ 10%	1.17	0.44	0.29

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## Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [ within ] ※ 1	D.C.R. ( $\Omega$ ) [ Max. ] (at20°C)	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
RCH875NP-471K	471K	470 $\pm$ 10%	1.34	0.41	0.28
RCH875NP-561K	561K	560 $\pm$ 10%	1.72	0.36	0.23
RCH875NP-681K	681K	680 $\pm$ 10%	1.96	0.33	0.22
RCH875NP-821K	821K	820 $\pm$ 10%	2.56	0.30	0.19
RCH875NP-102K	102K	1.0mH $\pm$ 10%	2.94	0.27	0.18
RCH875NP-122K	122K	1.2mH $\pm$ 10%	4.04	0.24	0.16
RCH875NP-152K	152K	1.5mH $\pm$ 10%	4.70	0.22	0.15
RCH875NP-182K	182K	1.8mH $\pm$ 10%	5.05	0.20	0.14
RCH875NP-222K	222K	2.2mH $\pm$ 10%	6.25	0.18	0.13
RCH875NP-272K	272K	2.7mH $\pm$ 10%	8.72	0.16	0.10
RCH875NP-332K	332K	3.3mH $\pm$ 10%	10.6	0.15	95m
RCH875NP-392K	392K	3.9mH $\pm$ 10%	14.2	0.14	81m
RCH875NP-472K	472K	4.7mH $\pm$ 10%	16.7	0.12	74m
RCH875NP-562K	562K	5.6mH $\pm$ 10%	18.7	0.11	69m
RCH875NP-682K	682K	6.8mH $\pm$ 10%	21.8	0.10	67m
RCH875NP-822K	822K	8.2mH $\pm$ 10%	28.7	93m	63m
RCH875NP-103K	103K	10mH $\pm$ 10%	33.0	84m	54m

※1: Inductance measuring frequency: 2.2  $\mu$  H ~ 8.2  $\mu$  H at 7.96MHz  
 10  $\mu$  H ~ 82  $\mu$  H at 2.52MHz  
 100  $\mu$  H ~ 10mH at 1 kHz

※2: Saturation current: The DC current at which the inductance decreases to 90% of it's initial value.

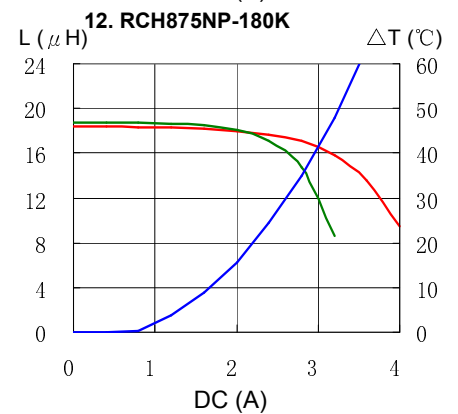
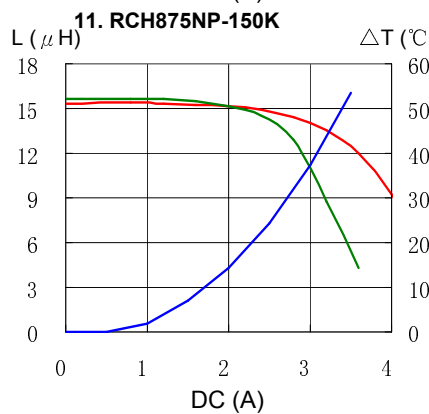
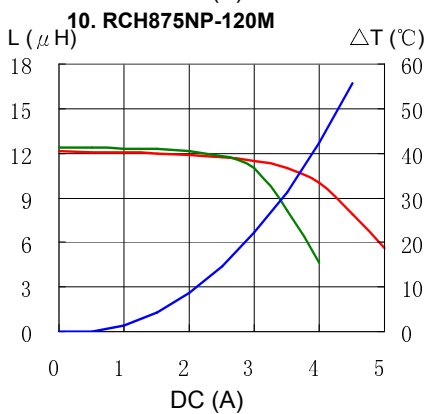
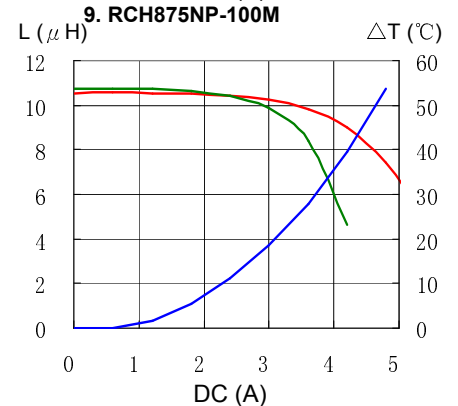
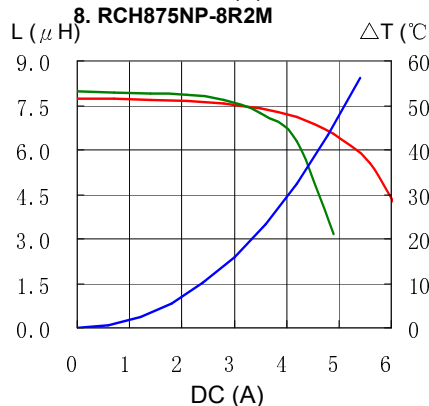
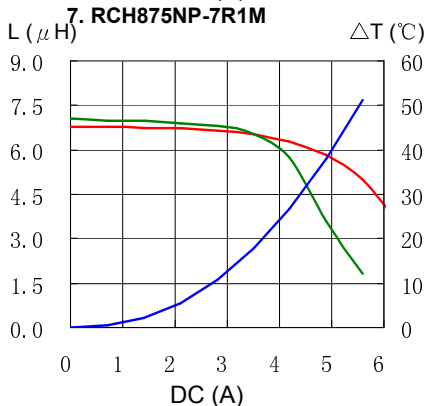
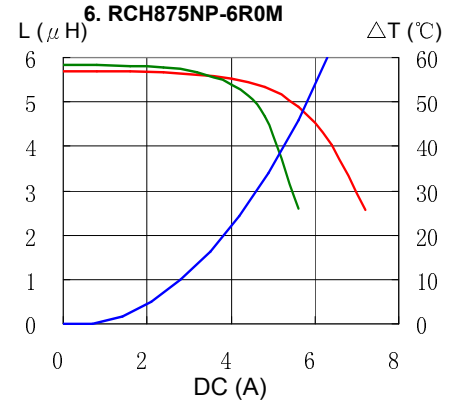
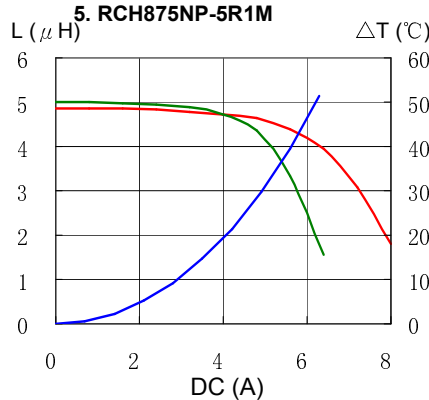
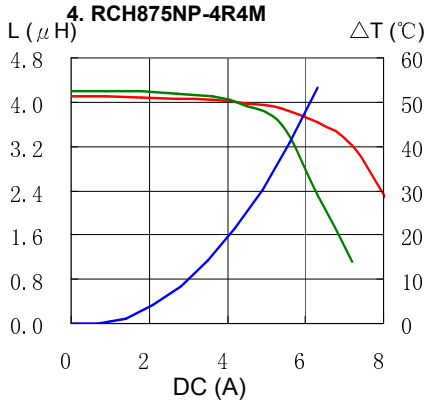
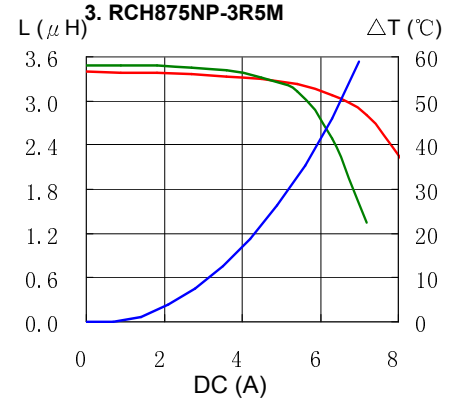
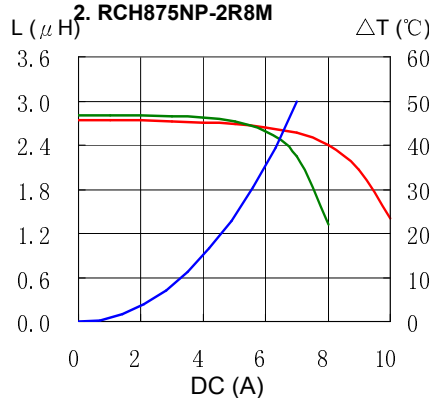
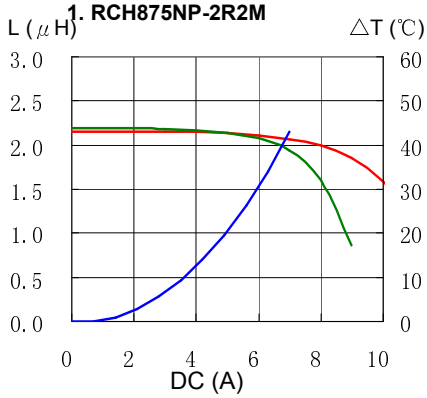
※3: Temperature rise current: The DC current at which the temperature rise is  $\Delta t = 20^\circ\text{C}$ . ( $T_a = 20^\circ\text{C}$ ).

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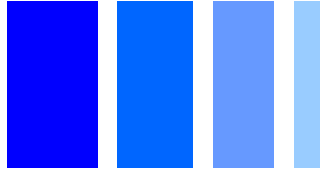


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

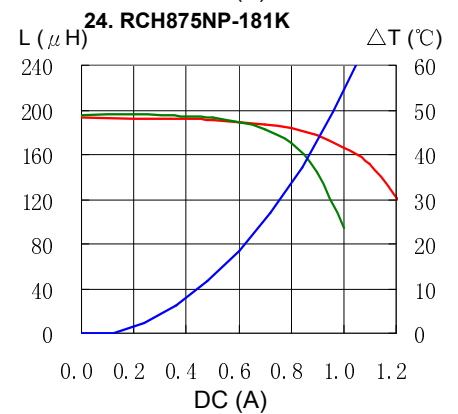
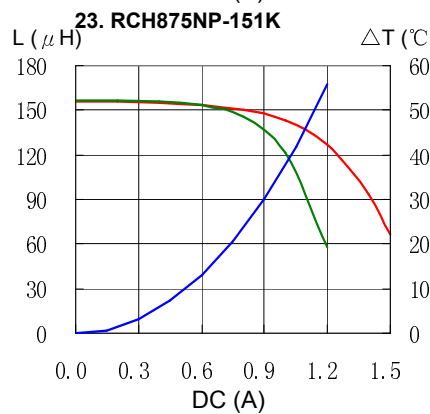
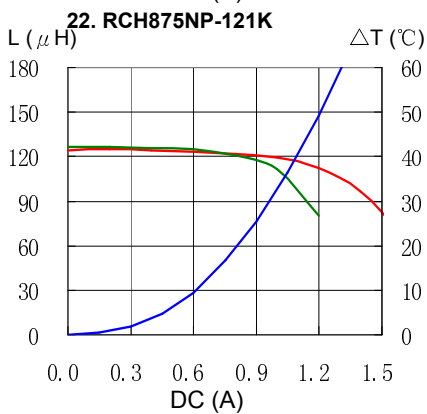
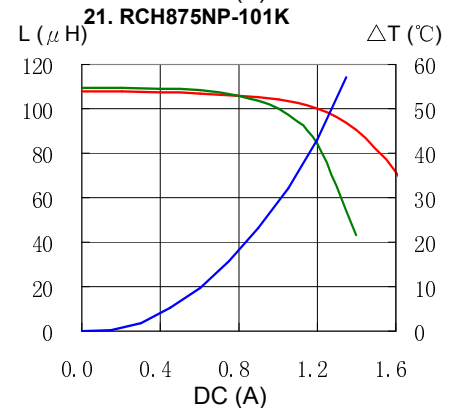
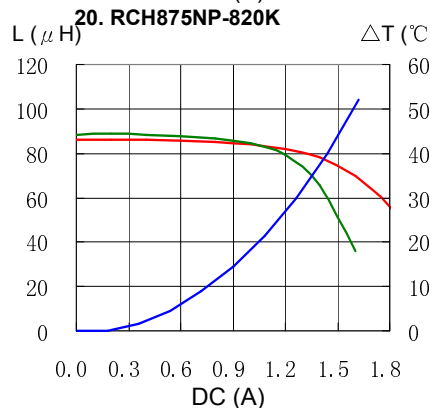
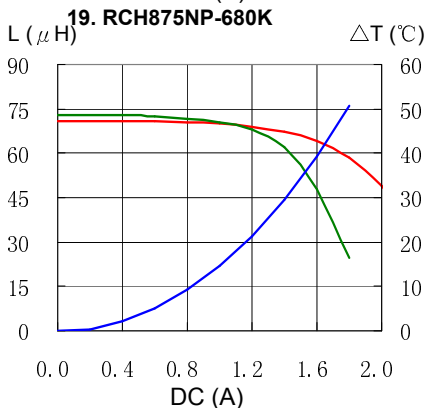
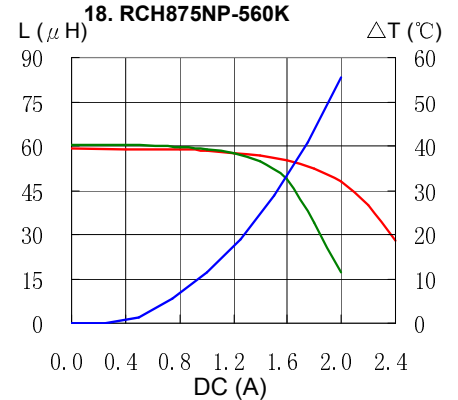
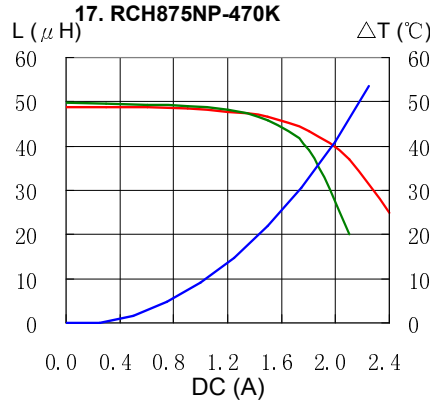
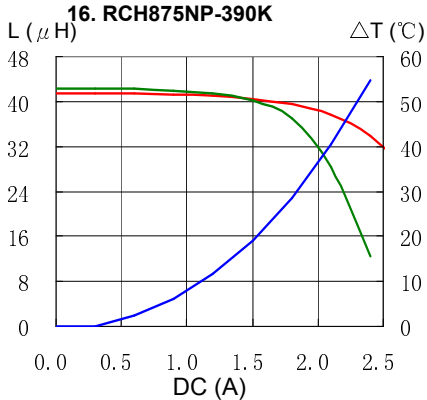
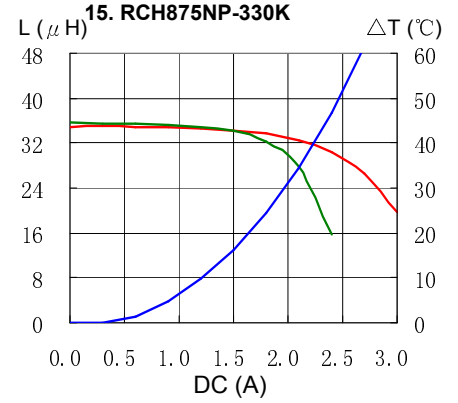
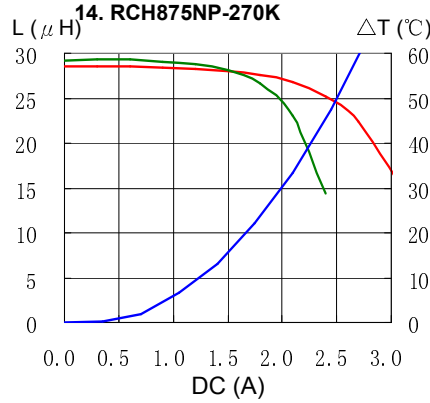
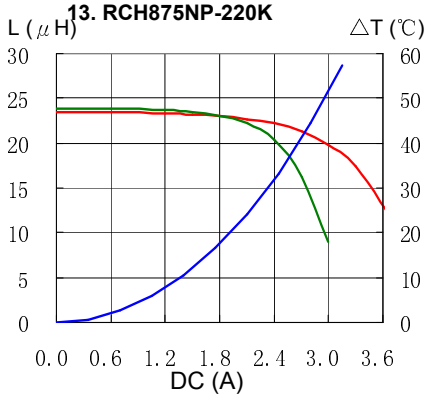


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

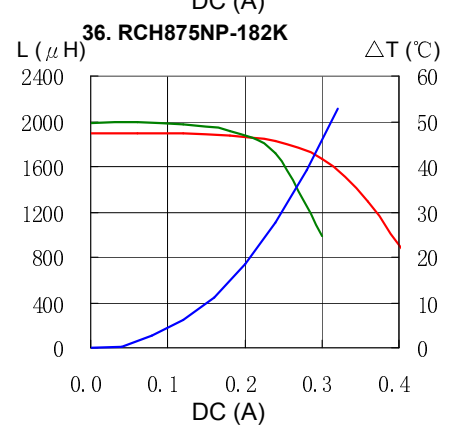
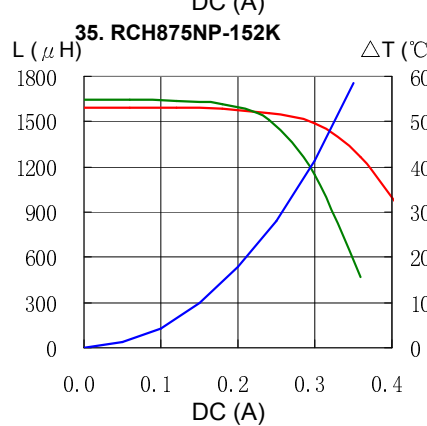
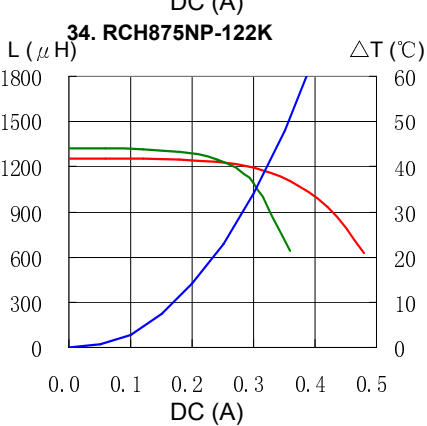
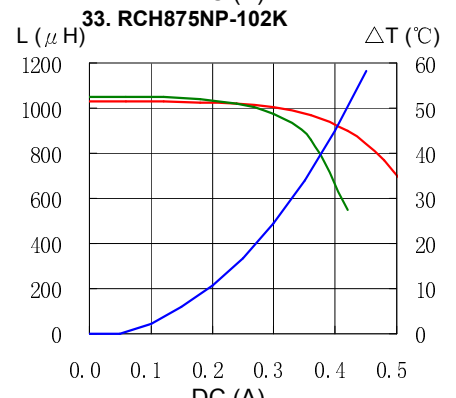
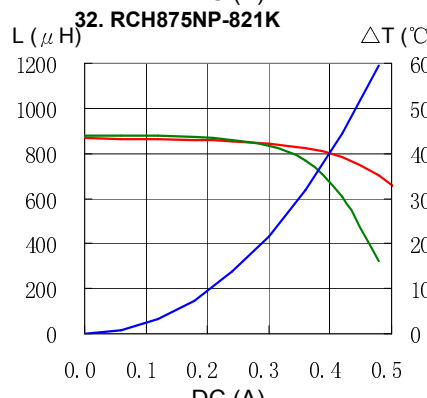
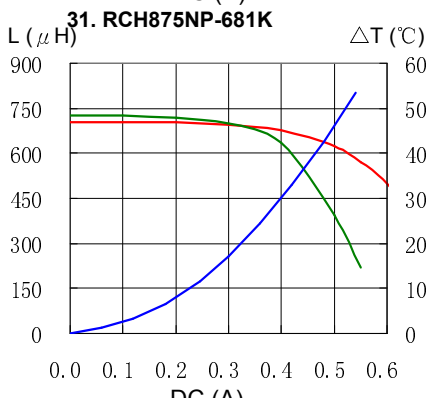
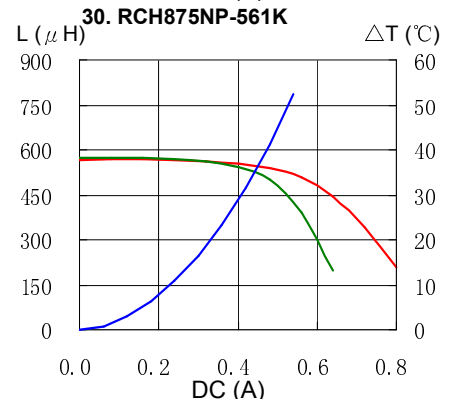
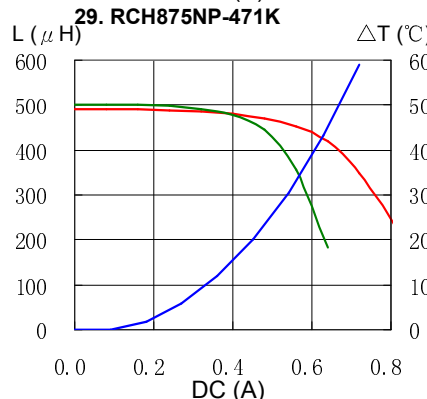
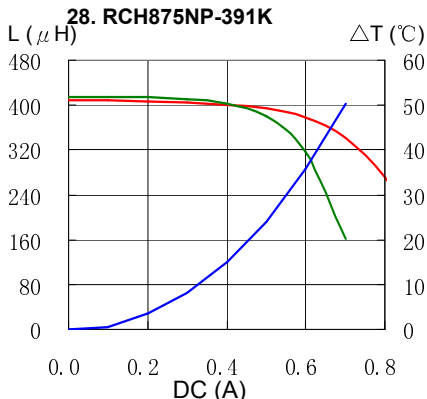
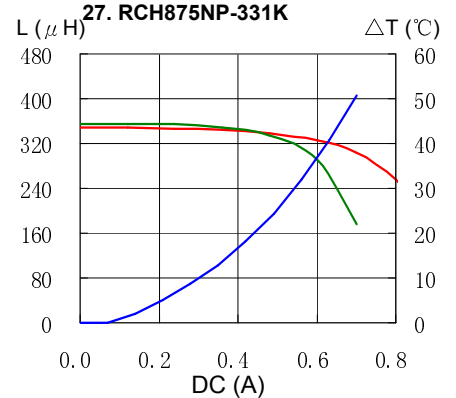
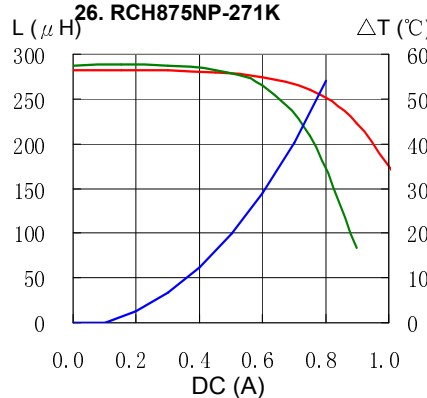
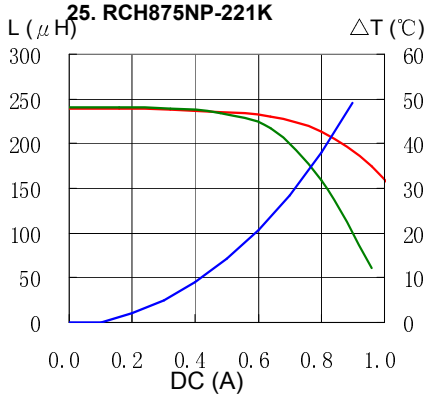


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

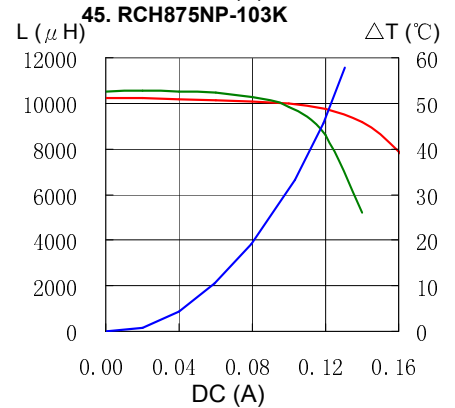
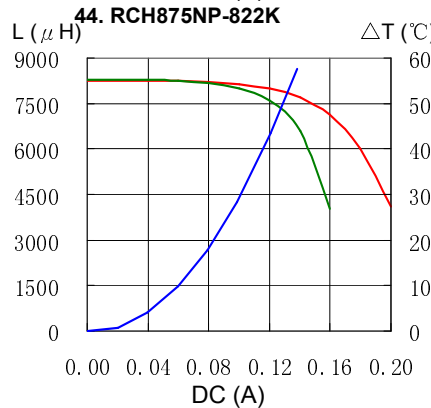
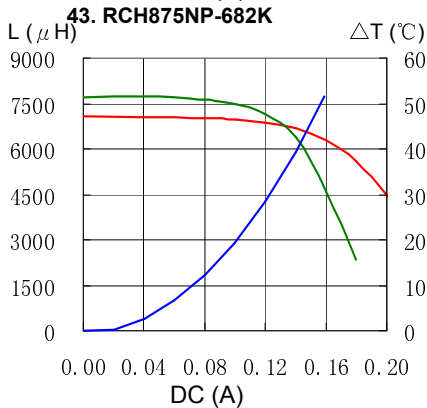
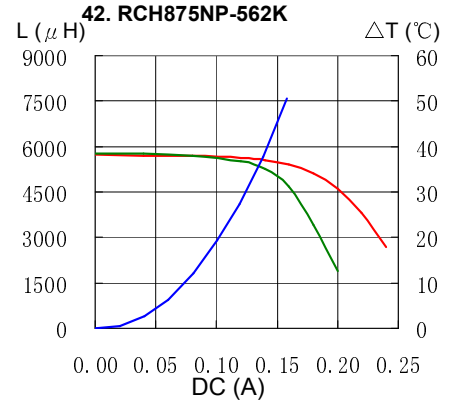
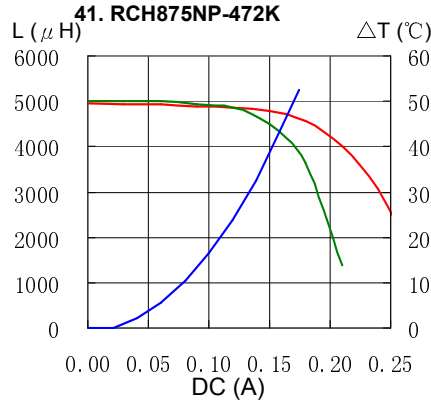
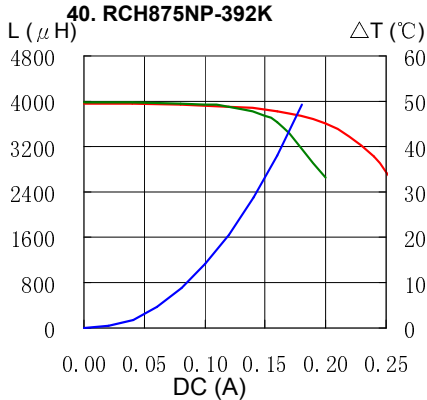
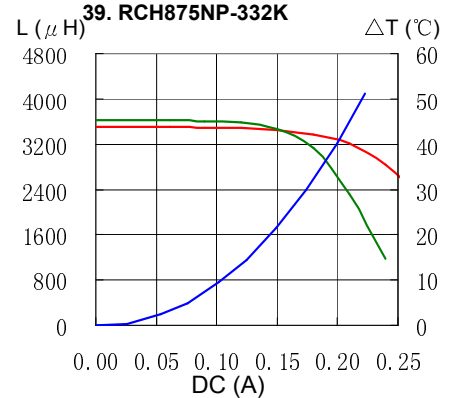
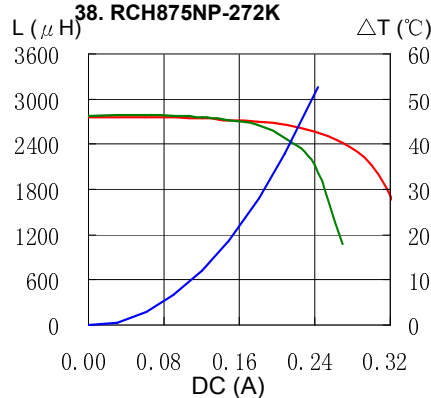
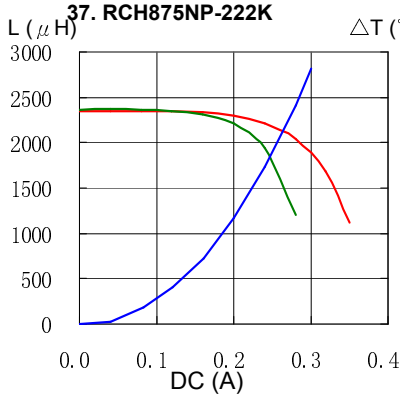


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



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