

PIN Power Inductor RCH-855



Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 8.3 × 8.3 × 5.5mm Max.
- Product weight: 0.9g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

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

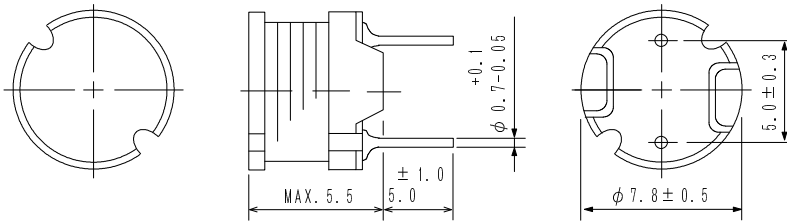
Packaging

- Box packaging.

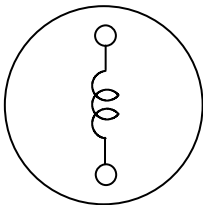
Applications

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

Dimension - [mm]



Schematics - [mm]



PIN Power Inductor

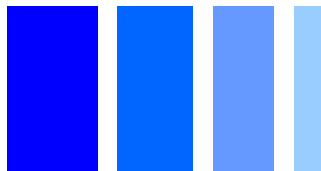
RCH-855



Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [Within] ※ 1	D.C.R(Ω) (Max.) (at20℃)	Saturation Current (A) ※2	Temperature rise current (A) ※3
RCH855NP-2R5M	2R5M	2.5 $\pm$ 20%	23m	4.5	3.1
RCH855NP-3R3M	3R3M	3.3 $\pm$ 20%	26m	4.0	2.7
RCH855NP-4R1M	4R1M	4.1 $\pm$ 20%	31m	3.6	2.5
RCH855NP-5R0M	5R0M	5.0 $\pm$ 20%	34m	3.4	2.4
RCH855NP-5R9M	5R9M	5.9 $\pm$ 20%	39m	3.2	2.2
RCH855NP-6R8M	6R8M	6.8 $\pm$ 20%	42m	2.9	2.1
RCH855NP-8R2M	8R2M	8.2 $\pm$ 20%	45m	2.7	1.9
RCH855NP-100M	100M	10 $\pm$ 20%	70m	2.5	1.3
RCH855NP-120M	120M	12 $\pm$ 20%	80m	2.4	1.1
RCH855NP-150M	150M	15 $\pm$ 20%	90m	2.1	0.95
RCH855NP-180M	180M	18 $\pm$ 20%	100m	2.0	0.90
RCH855NP-220K	220K	22 $\pm$ 10%	120m	1.7	0.77
RCH855NP-270K	270K	27 $\pm$ 10%	140m	1.6	0.72
RCH855NP-330K	330K	33 $\pm$ 10%	170m	1.4	0.67
RCH855NP-390K	390K	39 $\pm$ 10%	210m	1.3	0.59
RCH855NP-470K	470K	47 $\pm$ 10%	240m	1.2	0.57
RCH855NP-560K	560K	56 $\pm$ 10%	0.31	1.1	0.50
RCH855NP-680K	680K	68 $\pm$ 10%	0.34	1.0	0.47
RCH855NP-820K	820K	82 $\pm$ 10%	0.40	0.93	0.43
RCH855NP-101K	101K	100 $\pm$ 10%	0.52	0.81	0.37
RCH855NP-121K	121K	120 $\pm$ 10%	0.59	0.76	0.36
RCH855NP-151K	151K	150 $\pm$ 10%	0.71	0.67	0.32
RCH855NP-181K	181K	180 $\pm$ 10%	0.89	0.62	0.30
RCH855NP-221K	221K	220 $\pm$ 10%	1.04	0.54	0.28
RCH855NP-271K	271K	270 $\pm$ 10%	1.28	0.49	0.25
RCH855NP-331K	331K	330 $\pm$ 10%	1.47	0.44	0.23
RCH855NP-391K	391K	390 $\pm$ 10%	1.67	0.41	0.22
RCH855NP-471K	471K	470 $\pm$ 10%	1.95	0.38	0.20
RCH855NP-561K	561K	560 $\pm$ 10%	2.83	0.35	0.16
RCH855NP-681K	681K	680 $\pm$ 10%	3.25	0.32	0.15
RCH855NP-821K	821K	820 $\pm$ 10%	3.82	0.31	0.14

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Electrical Characteristics

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RCH855NP-102K	102K	1000 $\pm$ 10%	5.28	0.25	0.12
RCH855NP-122K	122K	1200 $\pm$ 10%	6.03	0.23	0.11
RCH855NP-152K	152K	1500 $\pm$ 10%	7.15	0.21	99m
RCH855NP-182K	182K	1800 $\pm$ 10%	8.26	0.20	90m
RCH855NP-222K	222K	2200 $\pm$ 10%	11.1	0.18	81m
RCH855NP-272K	272K	2700 $\pm$ 10%	13.1	0.16	77m
RCH855NP-332K	332K	3300 $\pm$ 10%	15.9	0.14	68m
RCH855NP-392K	392K	3900 $\pm$ 10%	18.0	0.13	65m
RCH855NP-472K	472K	4700 $\pm$ 10%	23.9	0.12	56m
RCH855NP-562K	562K	5600 $\pm$ 10%	26.8	0.11	53m
RCH855NP-682K	682K	6800 $\pm$ 10%	31.7	98m	49m
RCH855NP-822K	822K	8200 $\pm$ 10%	46.5	88m	40m
RCH855NP-103K	103K	10000 $\pm$ 10%	55.7	81m	37m

※1: Inductance Measuring frequency: 2.5 μ H $\sim$ 8.2 μ H at 7.96MHz; 10 μ H $\sim$ 82 μ H at 2.52MHz; 100 μ H $\sim$ 10 mH at 1 kHz

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

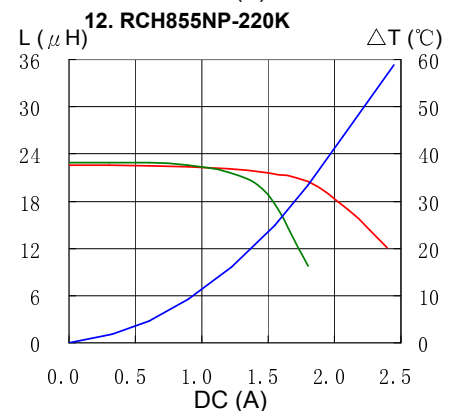
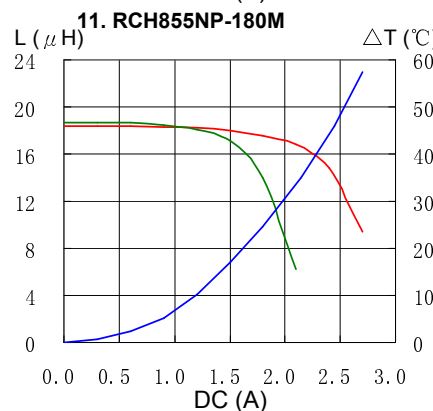
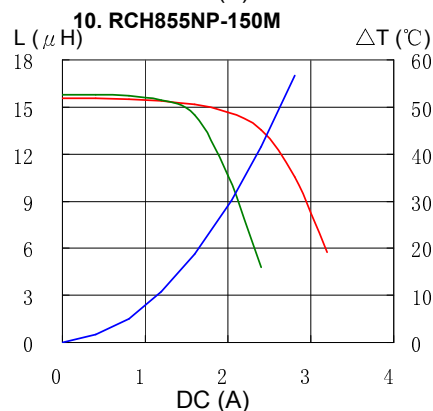
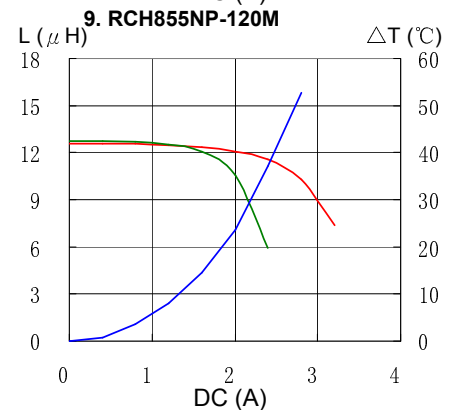
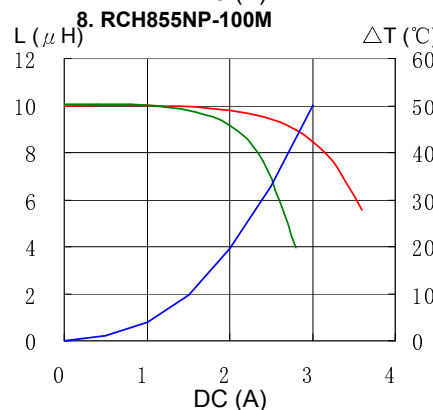
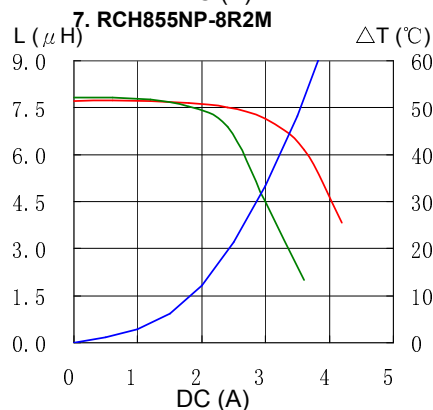
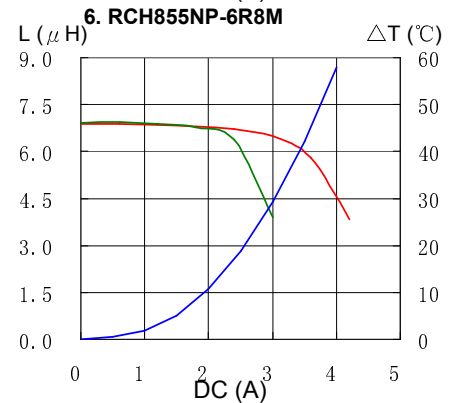
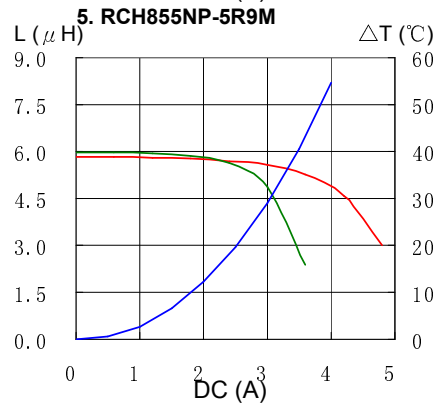
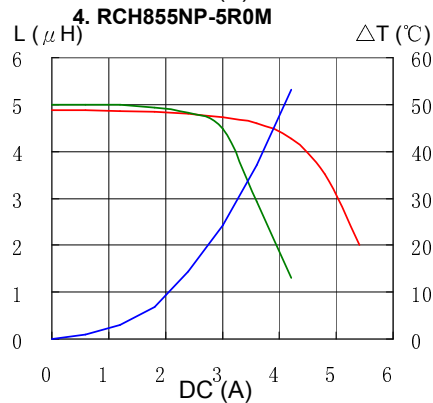
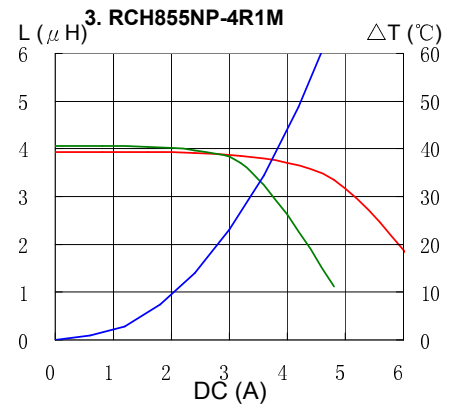
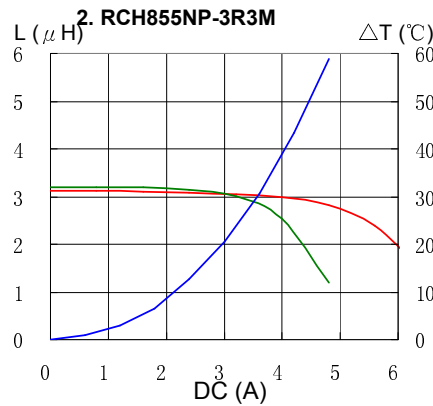
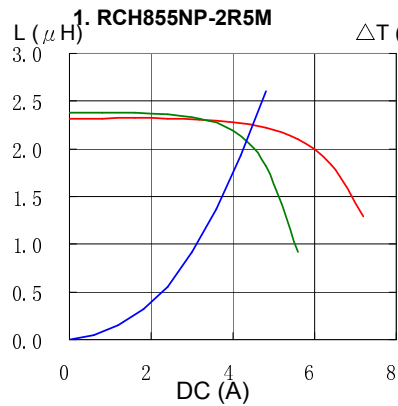
※3: Temperature rise current: The DC current at which the temperature rise is $\Delta t=20^{\circ}\text{C}$. ($T_a=20^{\circ}\text{C}$).

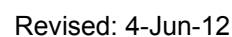
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Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT



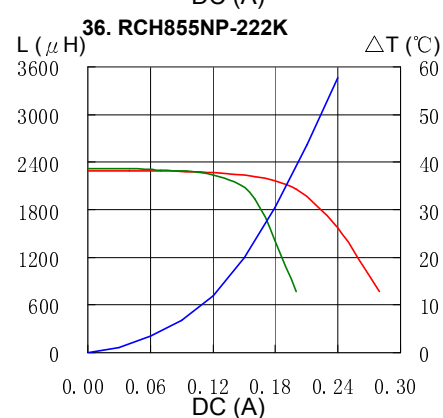
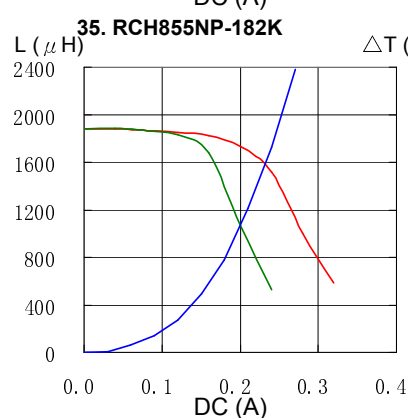
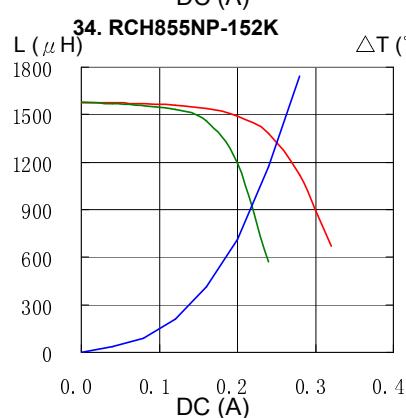
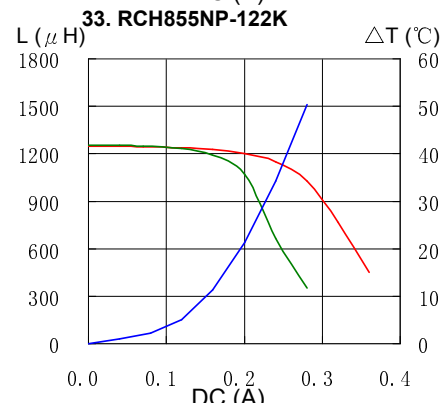
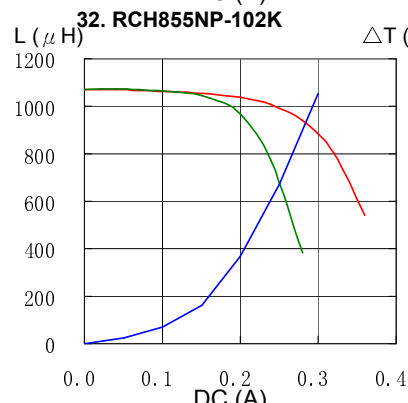
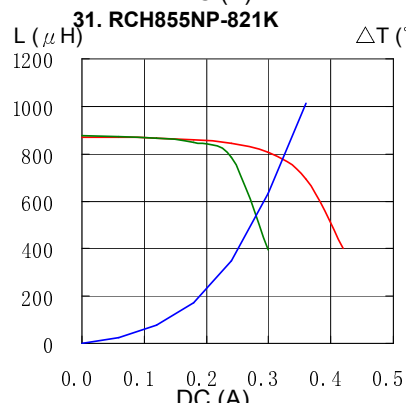
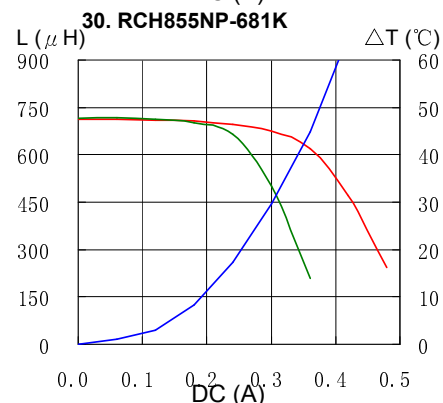
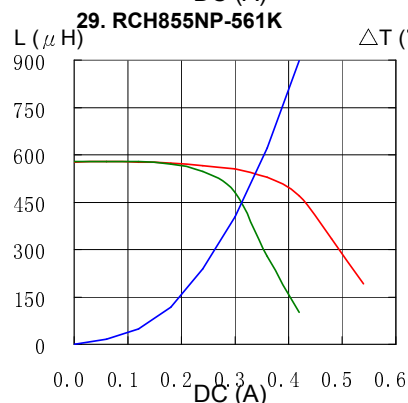
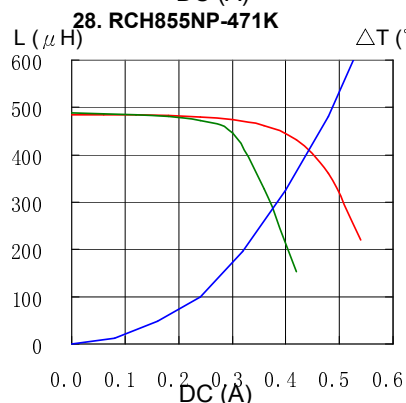
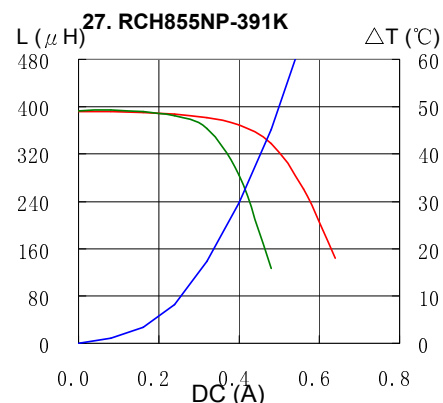
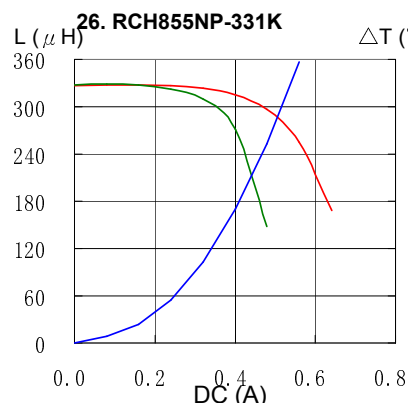




25. RCH855NP-271K

Graph showing Inductance L (μH) versus DC current (A) for the RCH855NP-271K component. The y-axis represents L (μH) from 0 to 360. The x-axis represents DC (A) from 0.0 to 0.8. The graph shows three curves: a green curve (inductance decreasing), a red curve (inductance decreasing), and a blue curve (inductance increasing).

DC (A)	L (μH) (Green)	L (μH) (Red)	L (μH) (Blue)
0.0	280	270	0
0.2	275	265	10
0.4	250	250	120
0.6	90	220	330
0.8	-	90	-

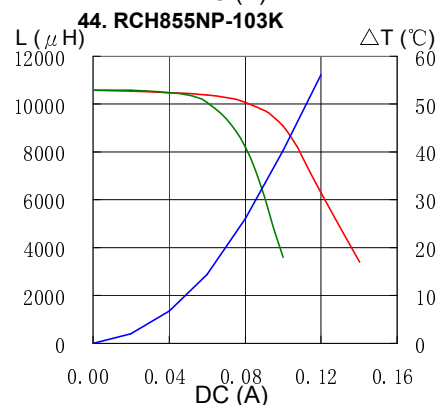
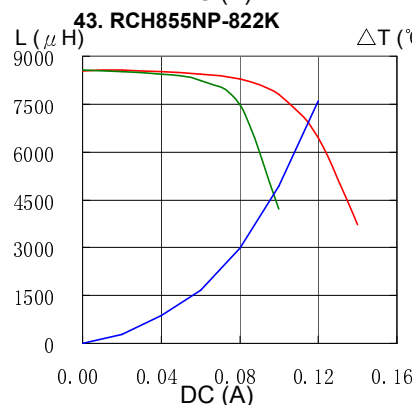
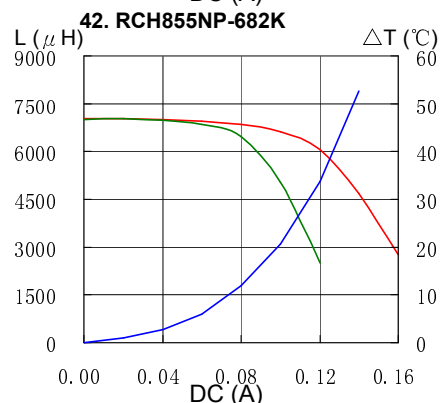
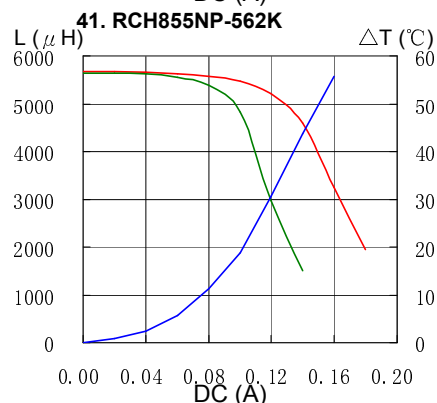
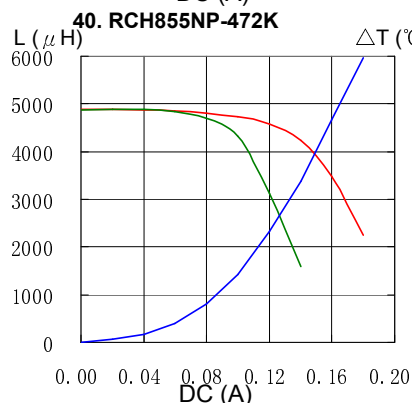
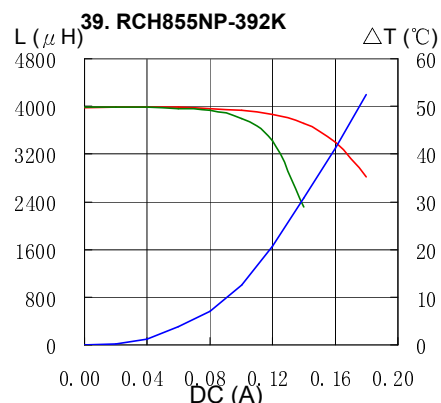
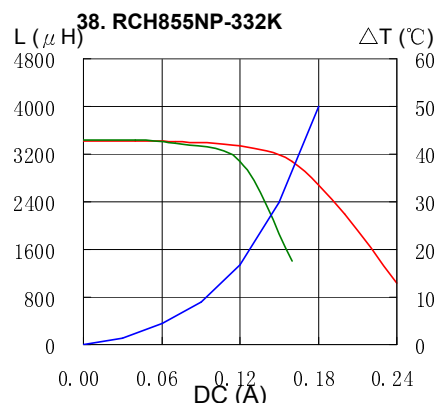
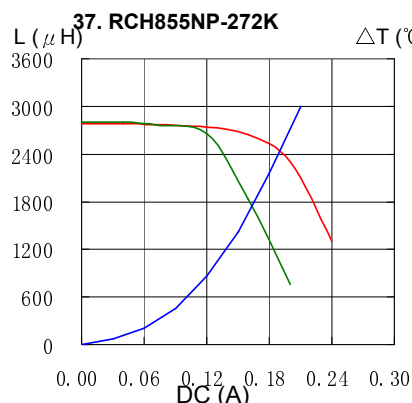


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Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT



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