

PIN Power Inductor RCR-875D



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 8.3 × 8.3 × 7.5mm Max.
- Product weight: 1.3g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: -40°C~+85°C
(including coil's self temperature rise)
- Storage temperature range: -40°C~+85°C

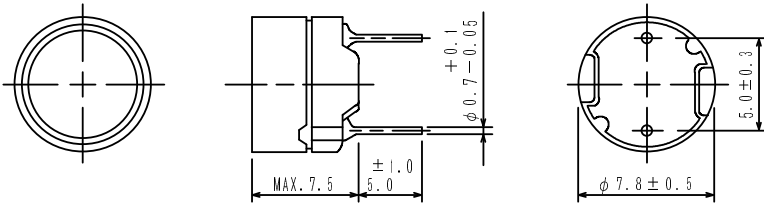
Packaging

- Box packaging.

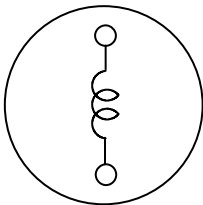
Applications

- 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

RCR-875D



Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [Within] ※1	D.C.R. (Ω) [Max.] at 20°C	Rated Current (mA) ※2
RCR875DNP-1R2L	1R2L	1.2 μ H $\pm$ 15%	18 m	4140
RCR875DNP-1R7L	1R7L	1.7 μ H $\pm$ 15%	22 m	3750
RCR875DNP-2R3L	2R3L	2.3 μ H $\pm$ 15%	25 m	3450
RCR875DNP-3R0L	3R0L	3.0 μ H $\pm$ 15%	28m	3250
RCR875DNP-3R9L	3R9L	3.9 μ H $\pm$ 15%	31m	3080
RCR875DNP-4R7L	4R7L	4.7 μ H $\pm$ 15%	35m	2940
RCR875DNP-5R6L	5R6L	5.6 μ H $\pm$ 15%	39m	2820
RCR875DNP-7R0L	7R0L	7.0 μ H $\pm$ 15%	43m	2680
RCR875DNP-8R2L	8R2L	8.2 μ H $\pm$ 15%	47m	2550
RCR875DNP-100L	100L	10 μ H $\pm$ 15%	50m	2400
RCR875DNP-120L	120L	12 μ H $\pm$ 15%	54m	2250
RCR875DNP-150L	150L	15 μ H $\pm$ 15%	62m	1950
RCR875DNP-180L	180L	18 μ H $\pm$ 15%	71m	1780
RCR875DNP-220L	220L	22 μ H $\pm$ 15%	0.08	1600
RCR875DNP-270L	270L	27 μ H $\pm$ 15%	0.10	1400
RCR875DNP-330L	330L	33 μ H $\pm$ 15%	0.14	1300
RCR875DNP-390L	390L	39 μ H $\pm$ 15%	0.15	1200
RCR875DNP-470L	470L	47 μ H $\pm$ 15%	0.17	1100
RCR875DNP-560K	560K	56 μ H $\pm$ 10%	0.19	990
RCR875DNP-680K	680K	68 μ H $\pm$ 10%	0.21	890
RCR875DNP-820K	820K	82 μ H $\pm$ 10%	0.27	810
RCR875DNP-101K	101K	100 μ H $\pm$ 10%	0.32	740
RCR875DNP-121K	121K	120 μ H $\pm$ 10%	0.36	670
RCR875DNP-151K	151K	150 μ H $\pm$ 10%	0.51	600
RCR875DNP-181K	181K	180 μ H $\pm$ 10%	0.57	550
RCR875DNP-221K	221K	220 μ H $\pm$ 10%	0.76	500
RCR875DNP-271K	271K	270 μ H $\pm$ 10%	0.86	450
RCR875DNP-331K	331K	330 μ H $\pm$ 10%	0.97	410
RCR875DNP-391K	391K	390 μ H $\pm$ 10%	1.28	370
RCR875DNP-471K	471K	470 μ H $\pm$ 10%	1.44	340
RCR875DNP-561K	561K	560 μ H $\pm$ 10%	1.61	310
RCR875DNP-681K	681K	680 μ H $\pm$ 10%	2.07	280
RCR875DNP-821K	821K	820 μ H $\pm$ 10%	2.33	260
RCR875DNP-102K	102K	1.0 mH $\pm$ 10%	2.72	230
RCR875DNP-122K	122K	1.2 mH $\pm$ 10%	3.98	210
RCR875DNP-152K	152K	1.5 mH $\pm$ 10%	4.50	190
RCR875DNP-182K	182K	1.8 mH $\pm$ 10%	6.81	170
RCR875DNP-222K	222K	2.2 mH $\pm$ 10%	7.56	160
RCR875DNP-272K	272K	2.7 mH $\pm$ 10%	8.54	140
RCR875DNP-332K	332K	3.3 mH $\pm$ 10%	9.74	130
RCR875DNP-392K	392K	3.9 mH $\pm$ 10%	12.9	120
RCR875DNP-472K	472K	4.7 mH $\pm$ 10%	14.7	110
RCR875DNP-562K	562K	5.6 mH $\pm$ 10%	20.4	99
RCR875DNP-682K	682K	6.8 mH $\pm$ 10%	23.0	89
RCR875DNP-822K	822K	8.2 mH $\pm$ 10%	30.6	81
RCR875DNP-103K	103K	10 mH $\pm$ 10%	35.0	74

※1: Inductance Measuring frequency: 100 μ H $\sim$ 10 mH(1kHz); 1.2 μ H $\sim$ 82 μ H(2.52 MHz)

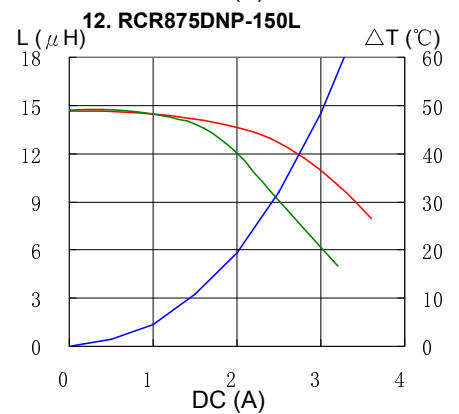
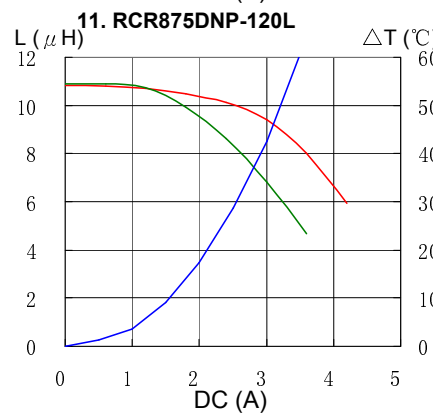
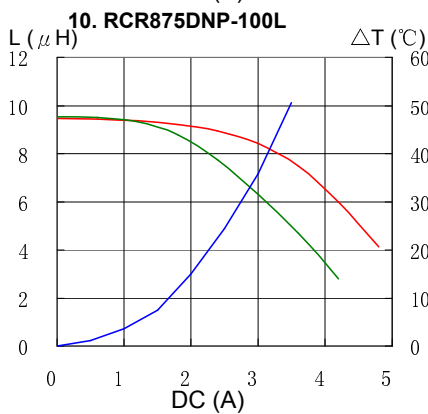
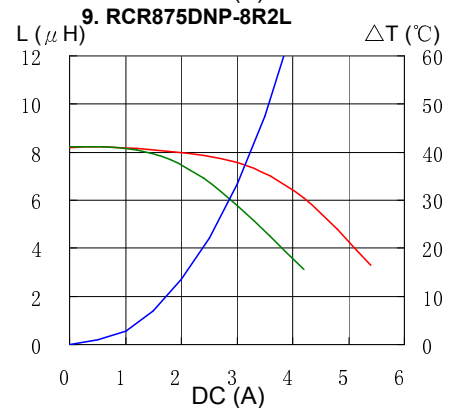
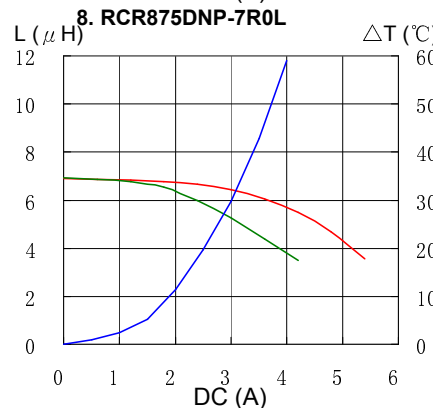
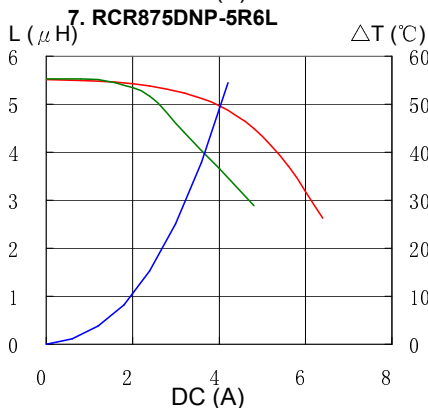
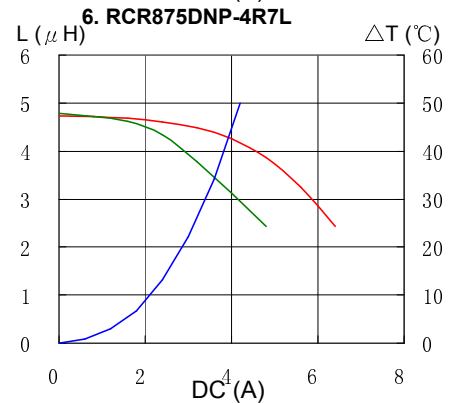
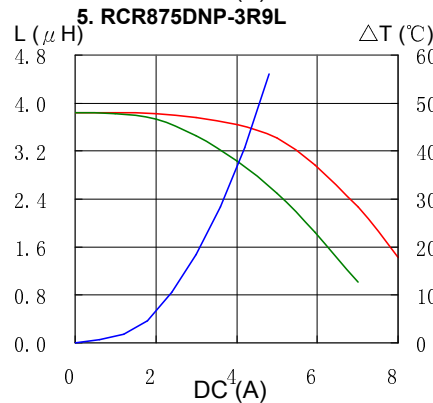
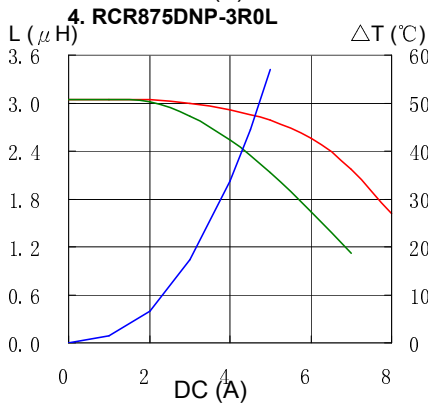
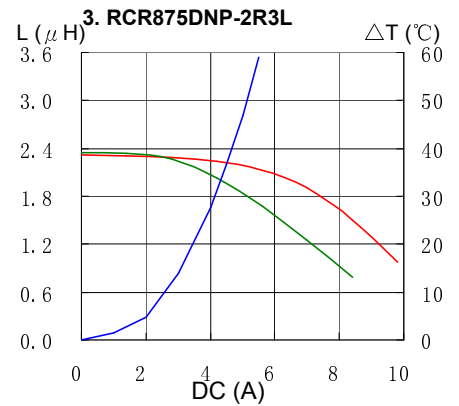
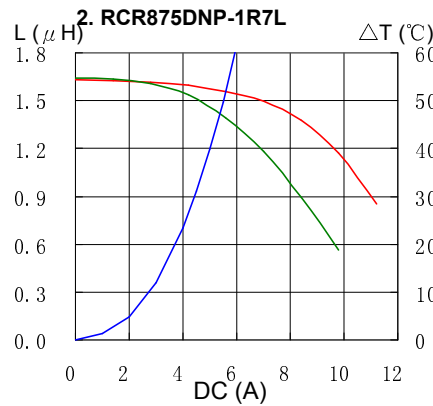
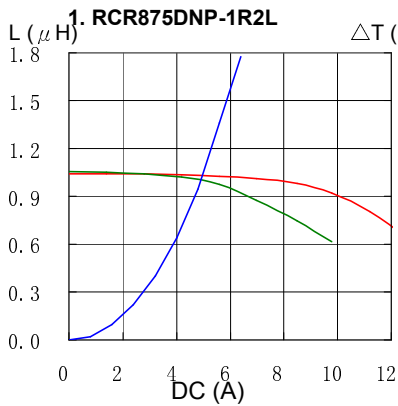
※2:Rated current: The DC current at which the inductance decreases 90% of it's initial value or when $\Delta t=40^{\circ}\text{C}$, whichever is lower ($T_a=20^{\circ}\text{C}$).

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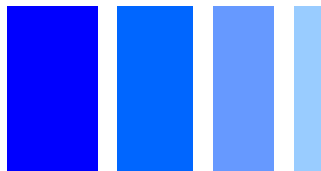


Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

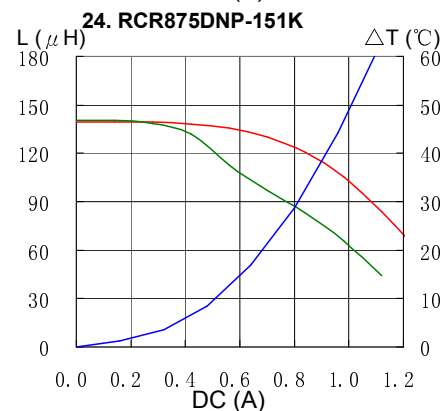
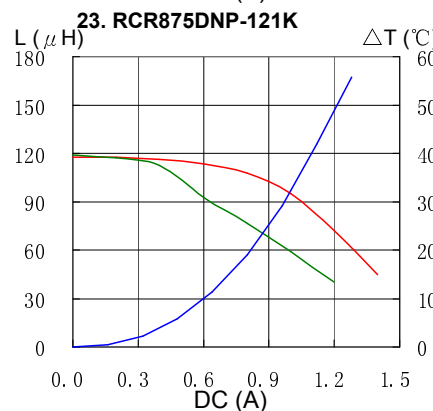
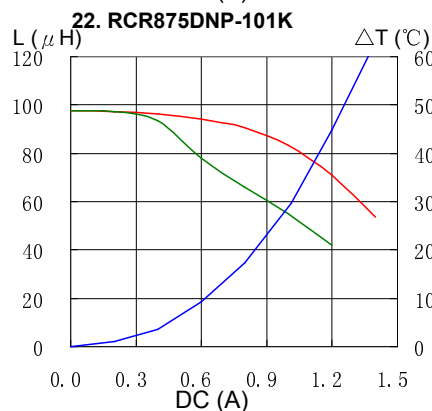
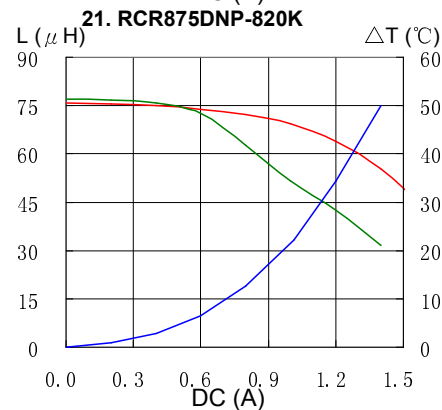
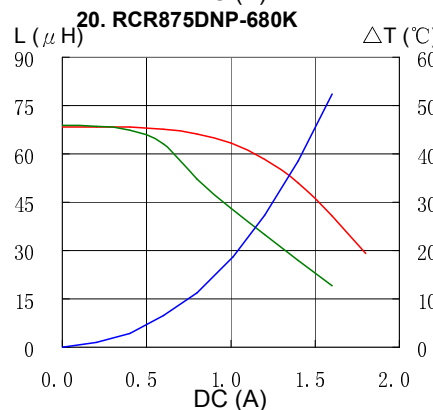
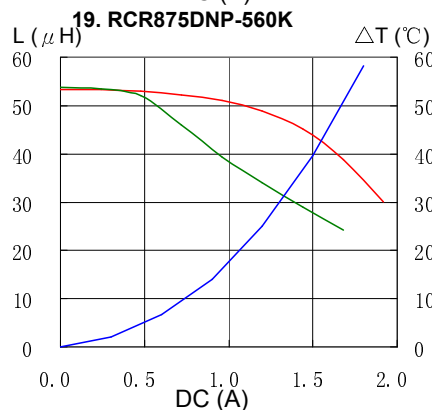
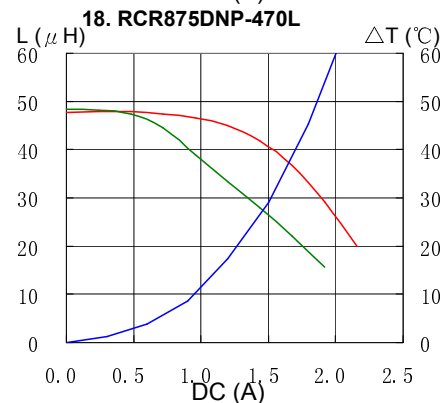
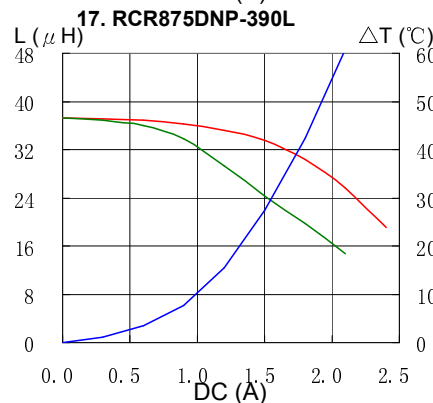
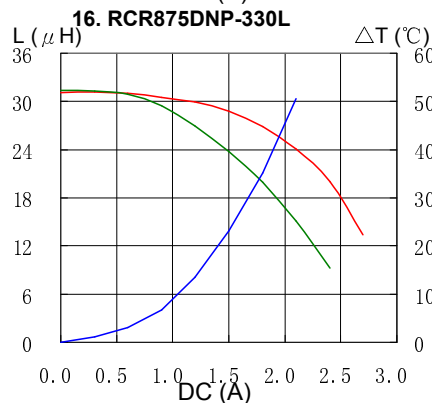
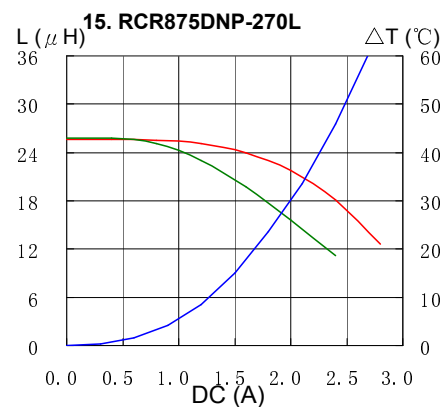
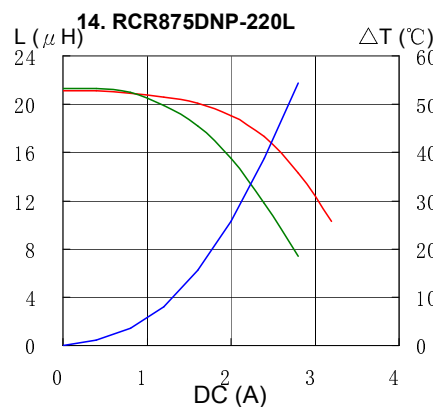
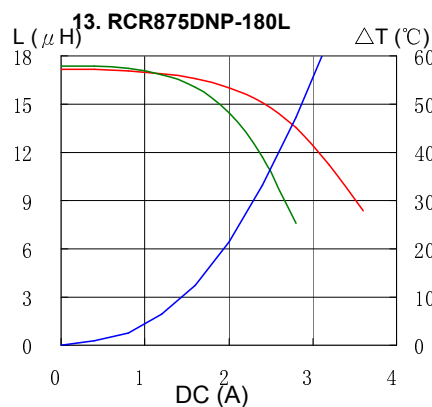


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Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

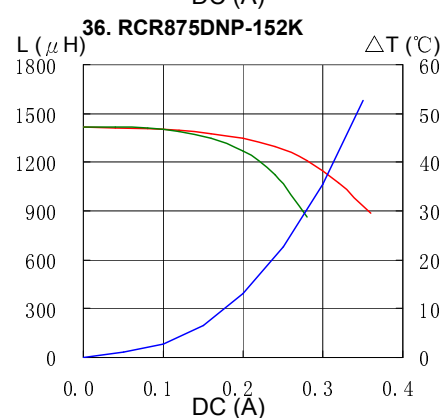
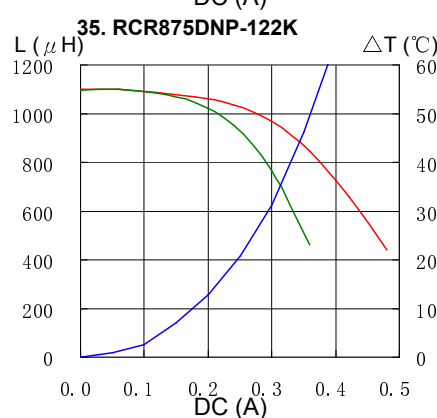
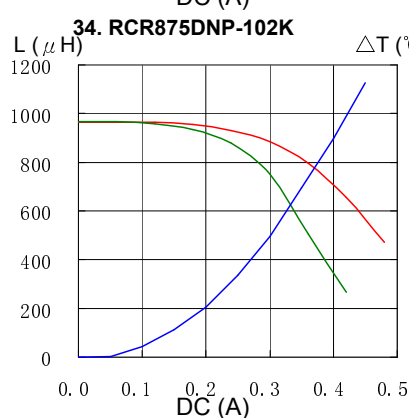
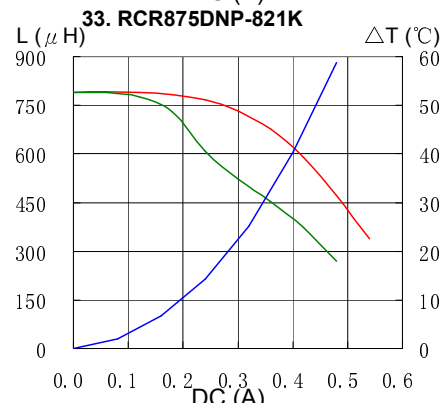
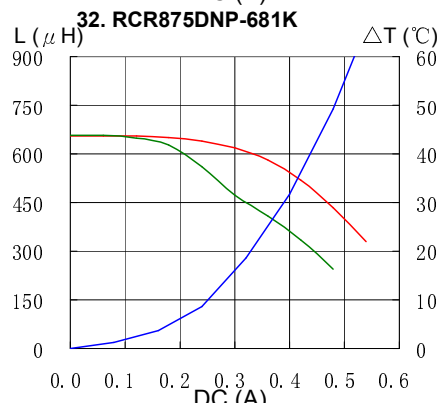
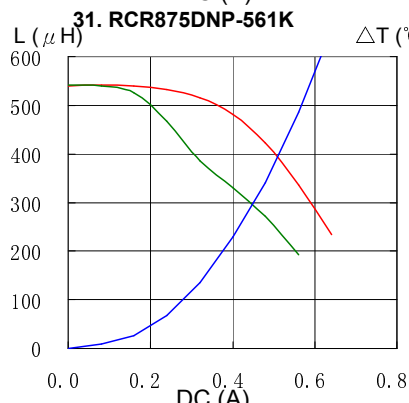
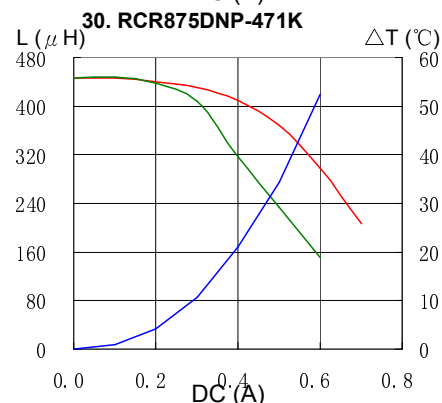
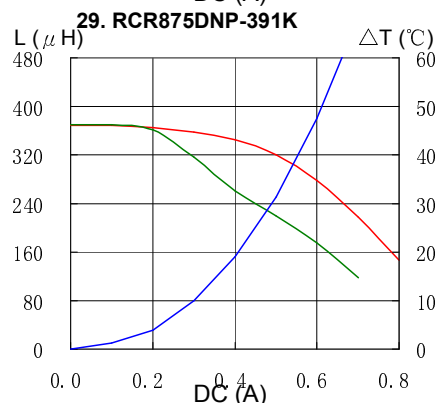
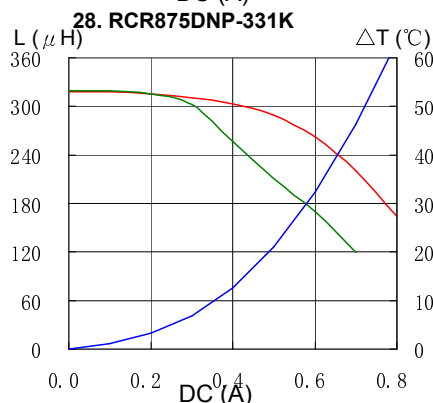
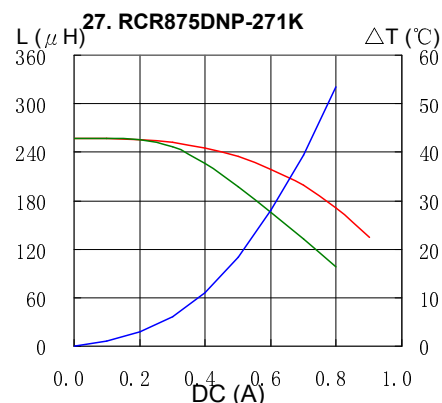
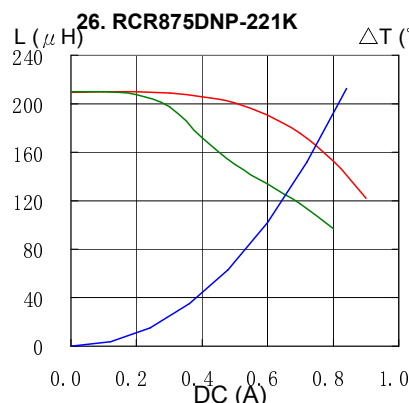




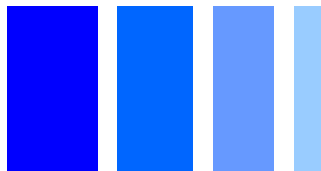
25. RCR875DNP-181K

Graph showing Load Inductance L (μH) versus DC Current I (A) for the RCR875DNP-181K component. The graph includes three curves: L_{max} (red), L_{min} (green), and ΔT (blue). The x-axis ranges from 0.0 to 1.2 A, and the y-axis ranges from 0 to 180 μH .

DC Current I (A)	L_{max} (μH)	L_{min} (μH)	ΔT ($^{\circ}\text{C}$)
0.0	170	170	0
0.2	168	168	5
0.4	165	155	15
0.6	155	120	35
0.8	140	100	75
1.0	115	60	135
1.1	80	-	170

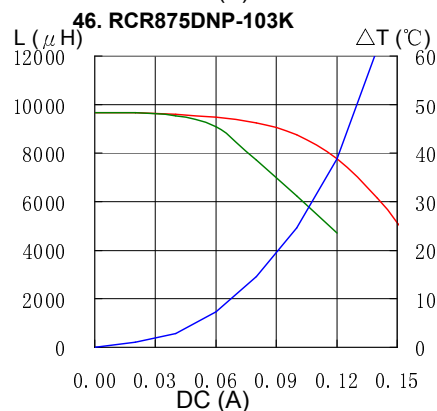
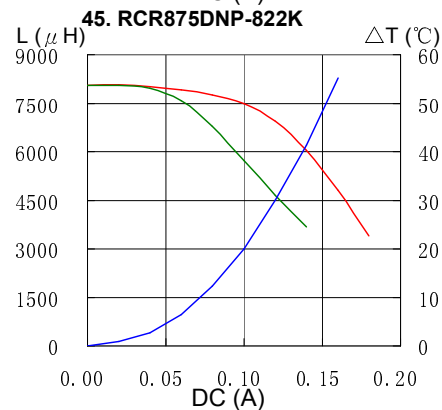
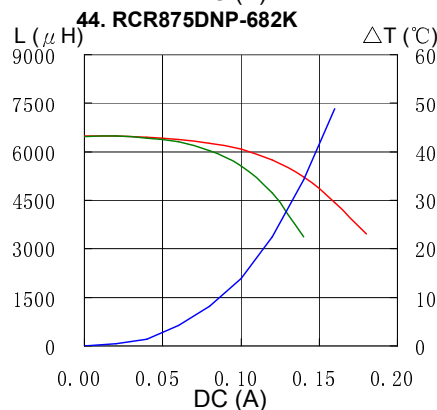
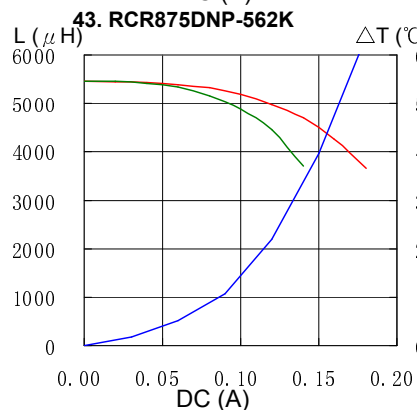
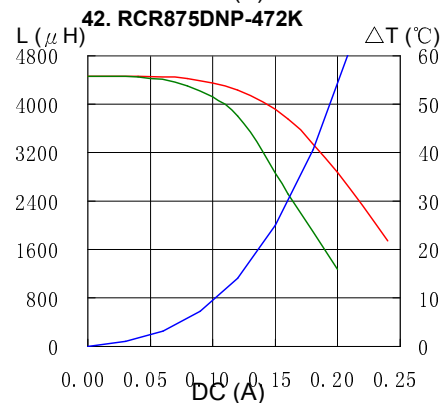
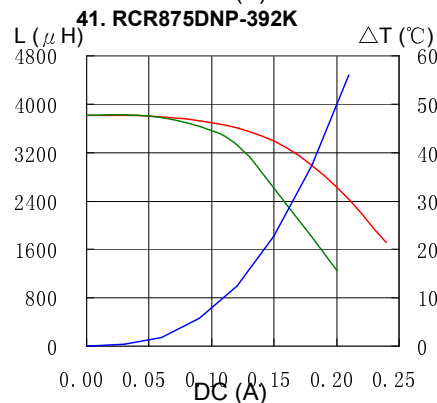
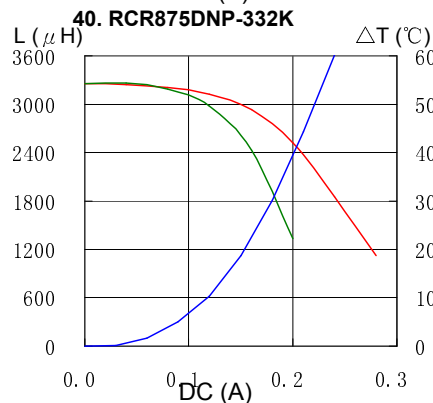
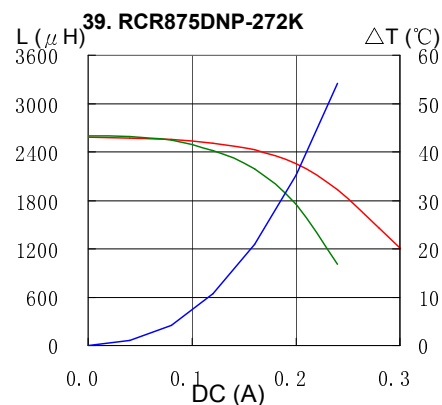
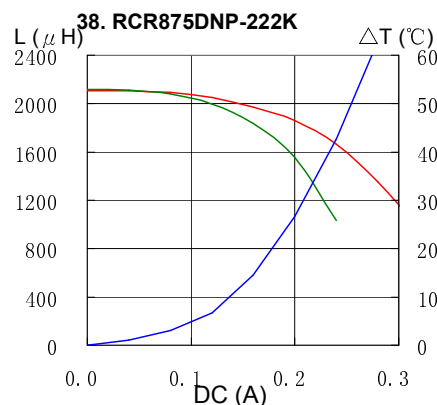
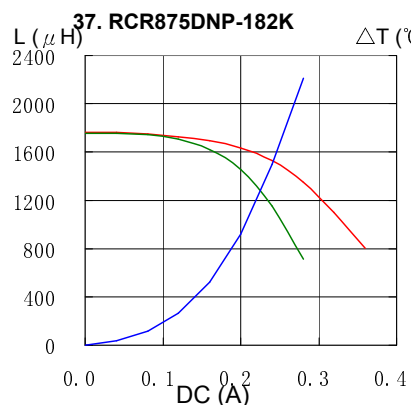


PIN Power Inductor RCR-875D



Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT



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Please refer to the sales offices on our website - <http://www.sumida.com>

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