

PIN Power Inductor RCR-110D



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.5 × 10.5mm Max.
- Product weight: 2.7 g(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

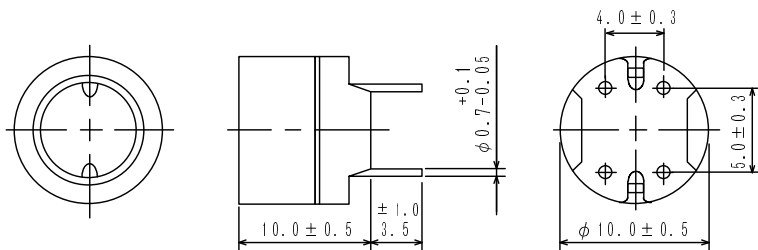
Packaging

- Box packaging.

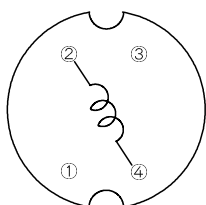
Applications

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

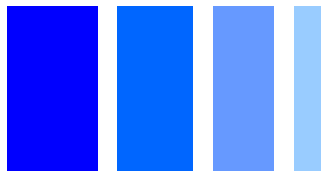
Dimension - [mm]



Schematics - [mm]



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Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R. (Ω) [Max.] (at 20°C)	Rated Current (A)※2
RCR110DNP-100M	100M	10 μ H $\pm$ 20%	0.023	3.51
RCR110DNP-120M	120M	12 μ H $\pm$ 20%	0.024	3.24
RCR110DNP-150M	150M	15 μ H $\pm$ 20%	0.036	2.88
RCR110DNP-180M	180M	18 μ H $\pm$ 20%	0.039	2.61
RCR110DNP-220M	220M	22 μ H $\pm$ 20%	0.042	2.34
RCR110DNP-270M	270M	27 μ H $\pm$ 20%	0.045	2.16
RCR110DNP-330L	330L	33 μ H $\pm$ 15%	0.057	1.89
RCR110DNP-390L	390L	39 μ H $\pm$ 15%	0.076	1.80
RCR110DNP-470L	470L	47 μ H $\pm$ 15%	0.10	1.62
RCR110DNP-560L	560L	56 μ H $\pm$ 15%	0.11	1.44
RCR110DNP-680L	680L	68 μ H $\pm$ 15%	0.15	1.35
RCR110DNP-820L	820L	82 μ H $\pm$ 15%	0.16	1.26
RCR110DNP-101L	101L	100 μ H $\pm$ 15%	0.19	1.08
RCR110DNP-121L	121L	120 μ H $\pm$ 15%	0.21	0.99
RCR110DNP-151L	151L	150 μ H $\pm$ 15%	0.23	0.90
RCR110DNP-181L	181L	180 μ H $\pm$ 15%	0.26	0.82
RCR110DNP-221L	221L	220 μ H $\pm$ 15%	0.29	0.74
RCR110DNP-271L	271L	270 μ H $\pm$ 15%	0.36	0.67
RCR110DNP-331L	331L	330 μ H $\pm$ 15%	0.51	0.61
RCR110DNP-391L	391L	390 μ H $\pm$ 15%	0.69	0.55
RCR110DNP-471L	471L	470 μ H $\pm$ 15%	0.98	0.51
RCR110DNP-561L	561L	560 μ H $\pm$ 15%	1.1	0.46
RCR110DNP-681L	681L	680 μ H $\pm$ 15%	1.2	0.42
RCR110DNP-821L	821L	820 μ H $\pm$ 15%	1.3	0.38
RCR110DNP-102L	102L	1.0 mH $\pm$ 15%	1.5	0.35

※1 Inductance Measuring condition at 1kHz .

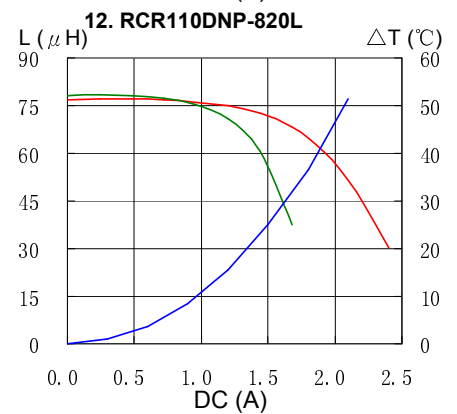
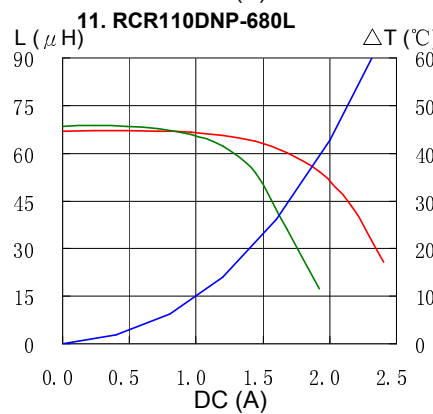
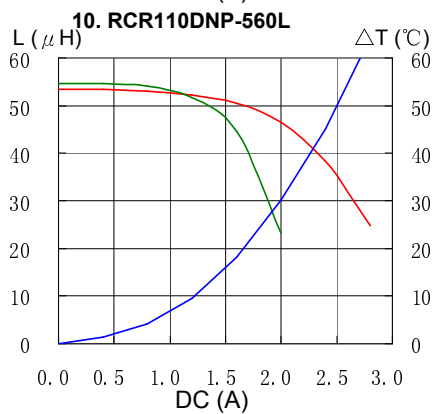
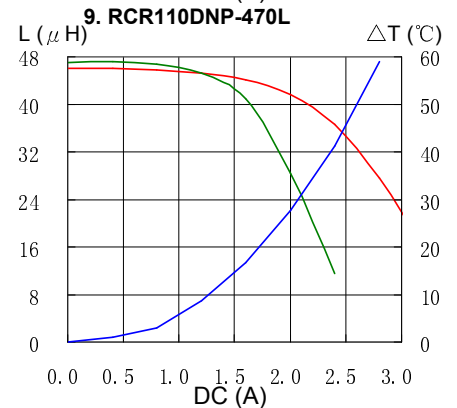
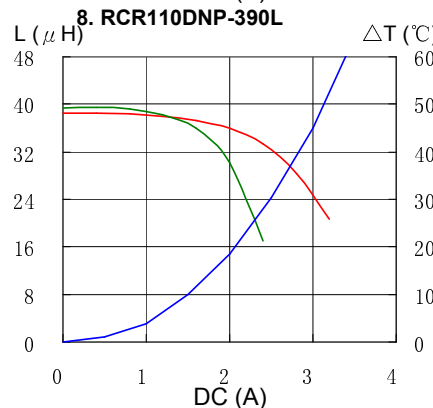
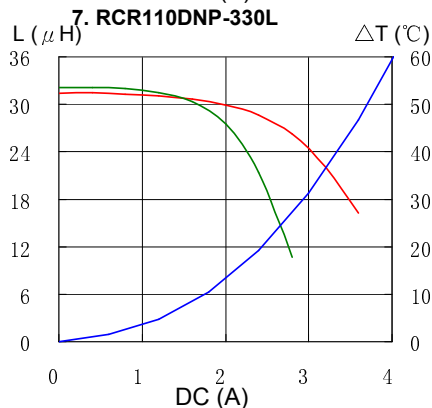
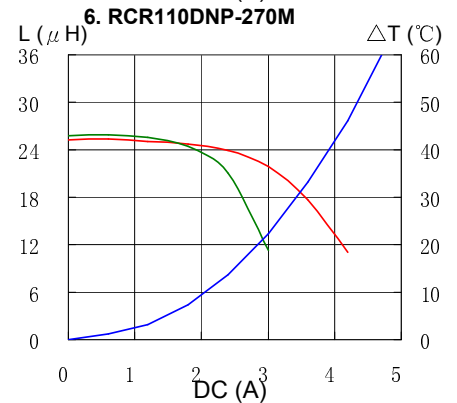
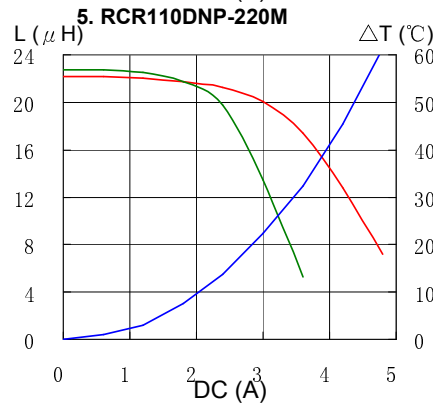
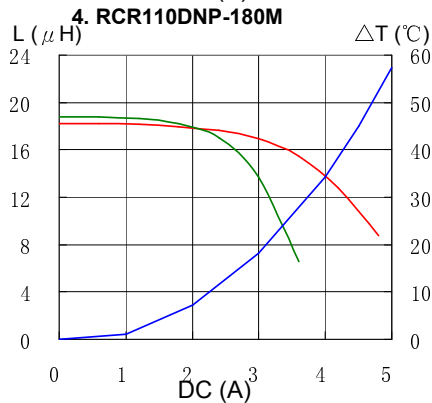
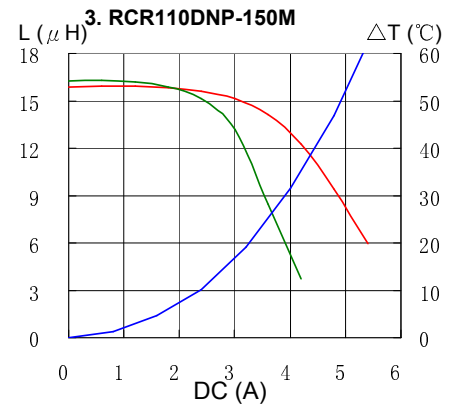
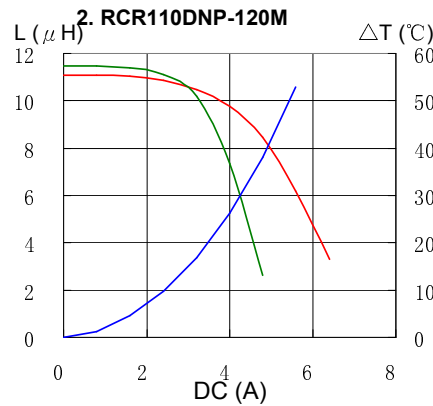
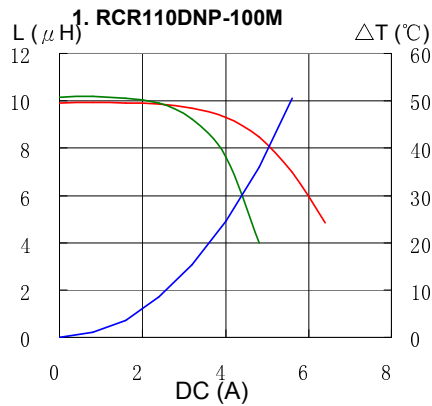
※2 Rated current: The DC current at which the inductance decreases 90% of it's initial value or when $\Delta t=40^{\circ}\text{C}$ whichever is lower ($T_a=20^{\circ}\text{C}$).

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Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT



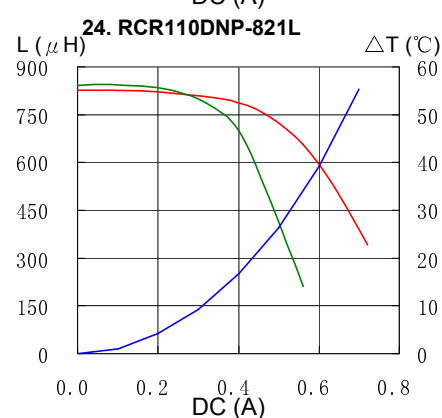
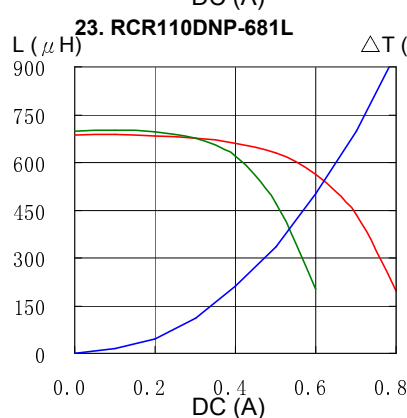
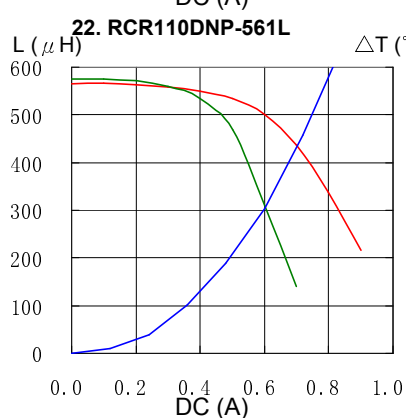
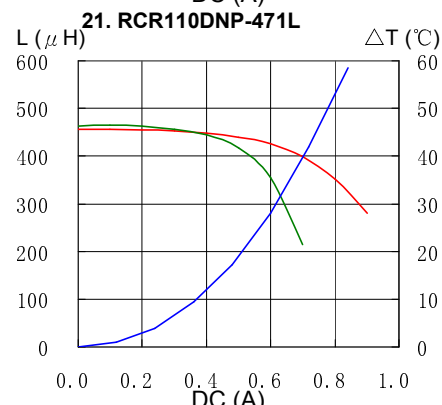
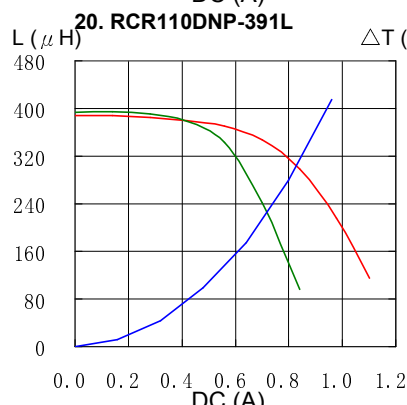
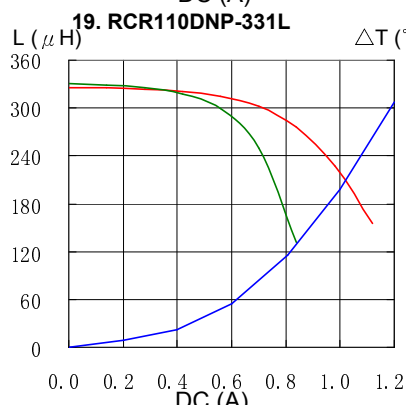
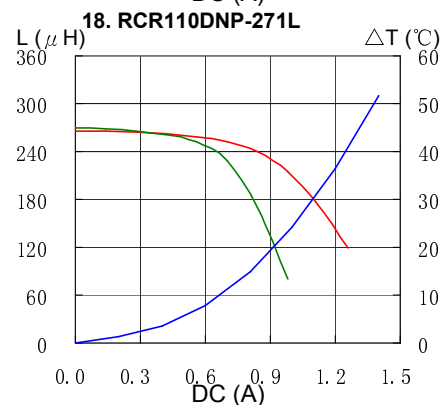
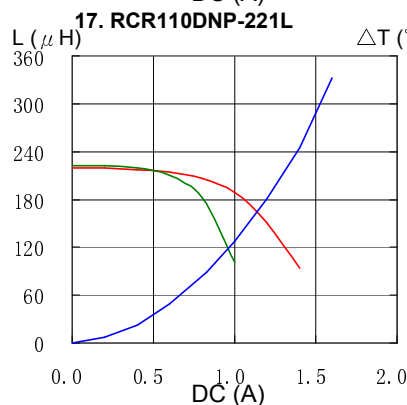
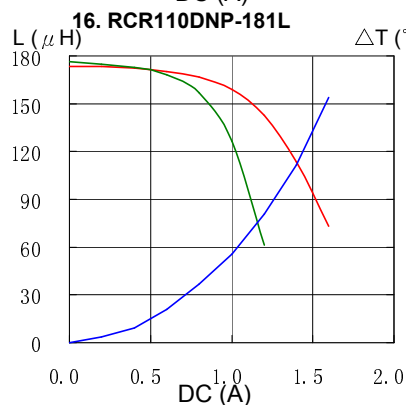
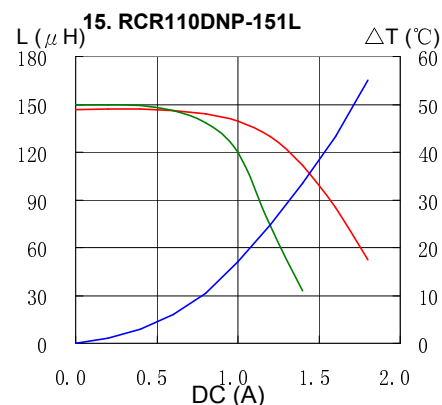
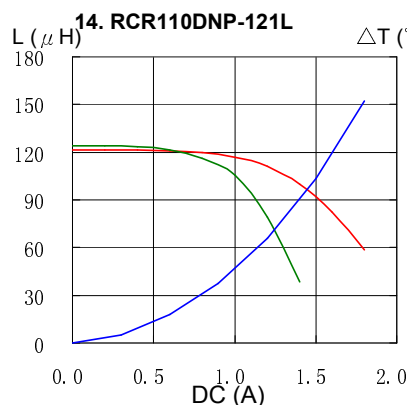


13. RCR110DNP-101L

Y-axis: $L (\mu H)$ and $\Delta T (^{\circ}C)$

X-axis: DC (A)

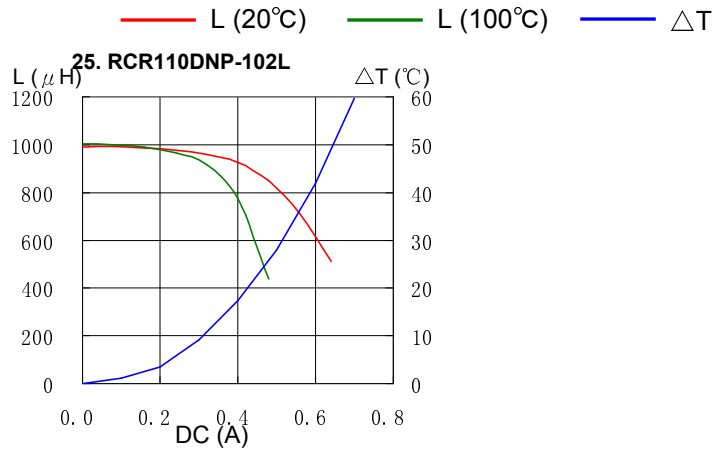
DC (A)	$L (\mu H)$ (Blue)	$\Delta T (^{\circ}C)$ (Green)	$\Delta T (^{\circ}C)$ (Red)
0.0	0	110	105
0.5	10	108	105
1.0	25	100	102
1.5	55	42	90
2.0	95	-	55
2.1	115	-	50



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Saturation Current & Temperature Rise Graph



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