

PIN Power Inductor R58



Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 8.1 × 5.3 × 9.0mm Max.
- Product weight: 0.5g(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

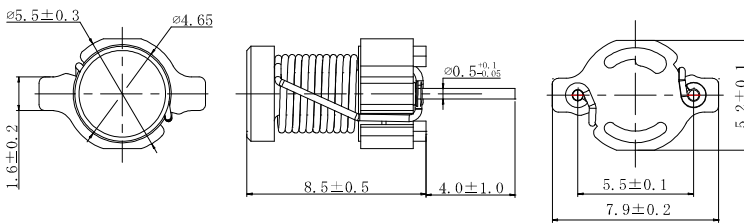
Packaging

- Box packaging.

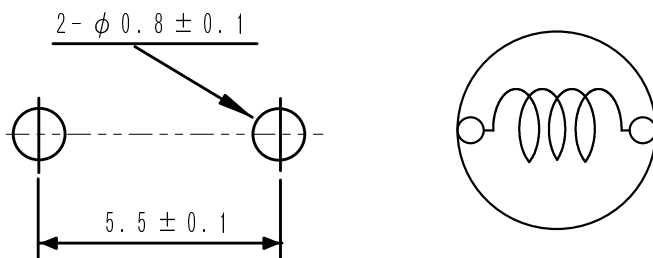
Applications

- Ideally used in Printers, LCD TV, DVD, Copy Machine ,etc as DC-DC Converter inductors.

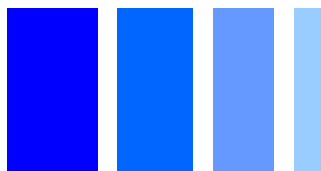
Dimension - [mm]



Land pattern and Schematics - [mm]



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Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R. (m Ω) [Max.] (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise current (A) ※3
				(at 20°C)	(at 105°C)	
R58NP-1R0MB	1R0	1.0 $\pm$ 20%	18.8(15.0)	4.56	3.60	4.20
R58NP-1R5MB	1R5	1.5 $\pm$ 20%	21.5(17.2)	3.48	3.04	4.00
R58NP-2R2MB	2R2	2.2 $\pm$ 20%	25.7(20.5)	3.20	2.52	3.40
R58NP-3R3MB	3R3	3.3 $\pm$ 20%	33.3(26.6)	2.48	1.92	3.00
R58NP-4R7MB	4R7	4.7 $\pm$ 20%	39.0(31.3)	2.20	1.76	2.70
R58NP-5R6MB	5R6	5.6 $\pm$ 20%	41.8(33.4)	2.06	1.66	2.60
R58NP-6R8MB	6R8	6.8 $\pm$ 20%	47.0(37.5)	1.82	1.44	2.50
R58NP-8R2MB	8R2	8.2 $\pm$ 20%	52.4(42.0)	1.76	1.40	2.35
R58NP-100MB	100	10 $\pm$ 20%	61.6(49.3)	1.44	1.12	2.20
R58NP-150MB	150	15 $\pm$ 20%	78.0(62.5)	1.20	0.96	1.95
R58NP-220MB	220	22 $\pm$ 20%	118.0(94.6)	0.98	0.80	1.55
R58NP-330MB	330	33 $\pm$ 20%	170.3(136.3)	0.80	0.66	1.25
R58NP-470MB	470	47 $\pm$ 20%	236.0(188.8)	0.68	0.54	1.02
R58NP-560MB	560	56 $\pm$ 20%	305.8(244.6)	0.62	0.50	0.90
R58NP-680MB	680	68 $\pm$ 20%	398.3(318.6)	0.54	0.44	0.75
R58NP-820MB	820	82 $\pm$ 20%	451.3(361.0)	0.49	0.40	0.70
R58NP-101MB	101	100 $\pm$ 20%	507.3(405.8)	0.46	0.38	0.60

※1. Inductance Measuring Frequency: 1.0 μ H $\sim$ 8.2 μ H at 7.96MHz
10 μ H $\sim$ 100 μ H at 100kHz

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

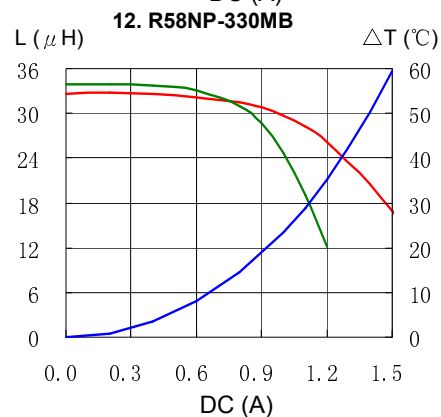
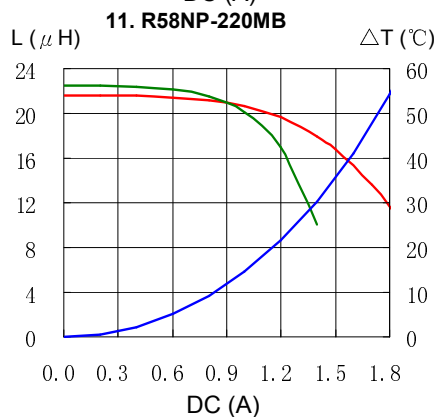
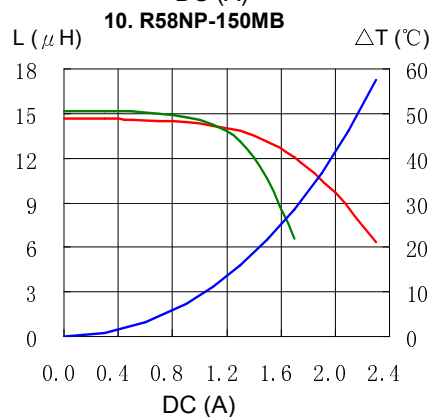
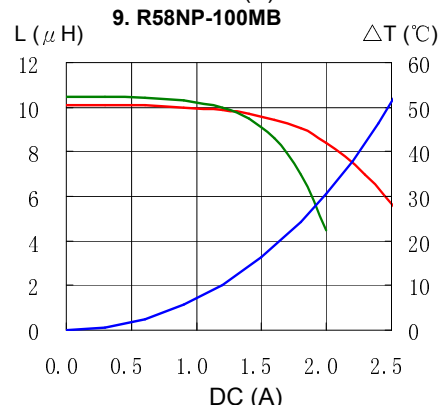
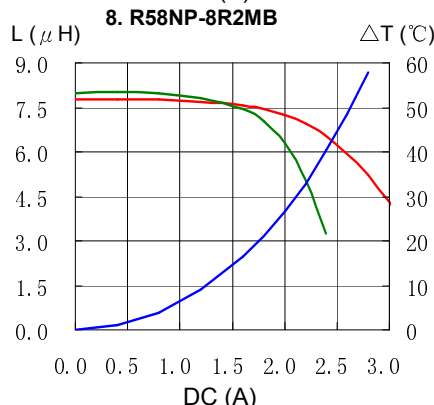
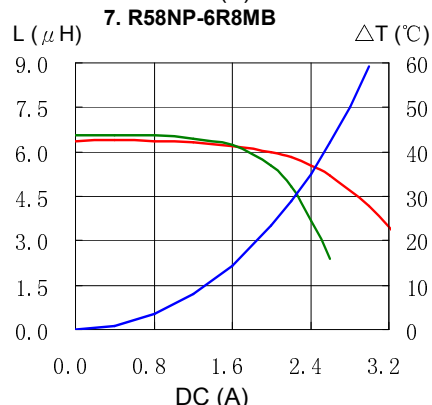
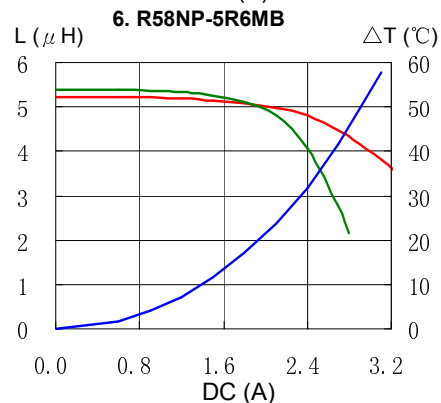
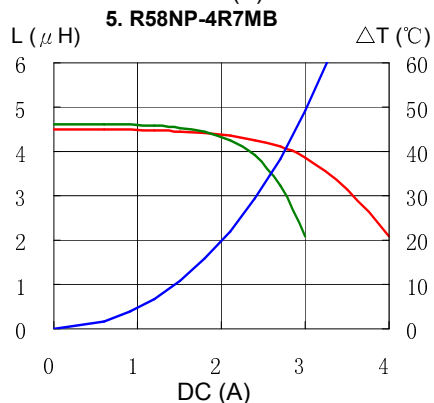
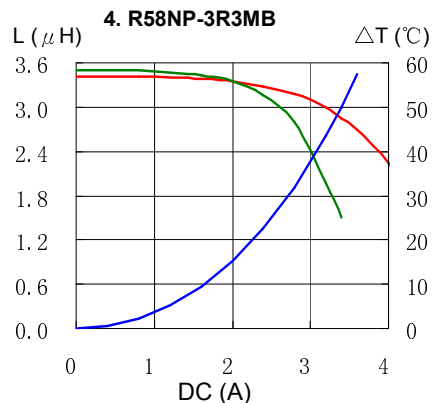
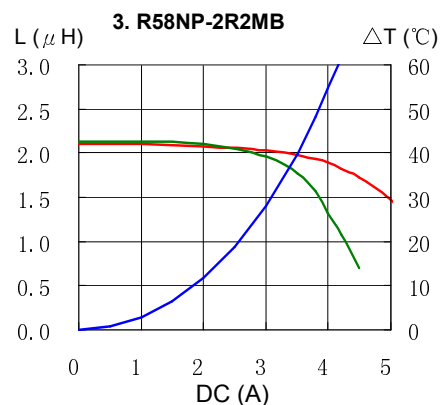
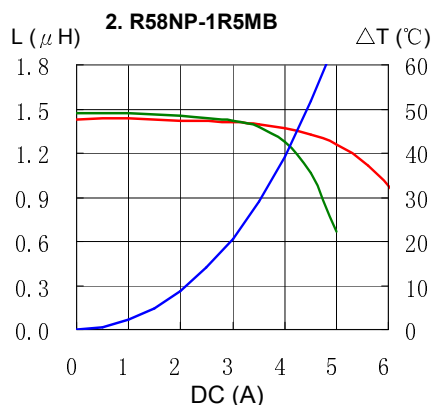
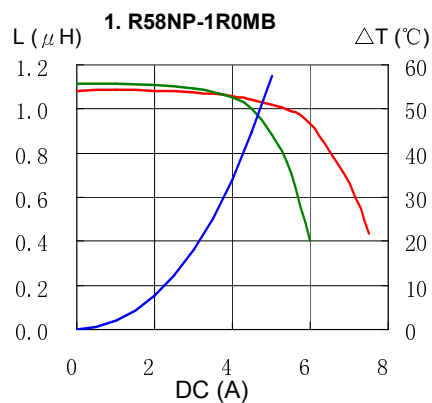
※3. Temperature rise current: The DC current at which the temperature rise is $\Delta t=40^{\circ}\text{C}$. ($T_a=20^{\circ}\text{C}$).

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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

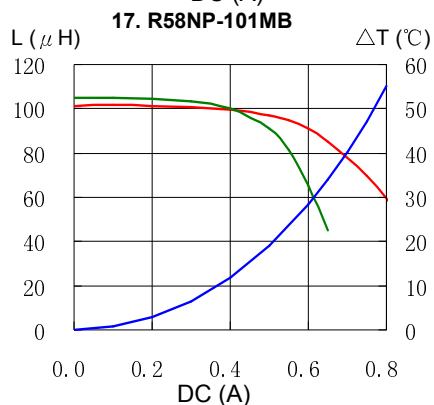
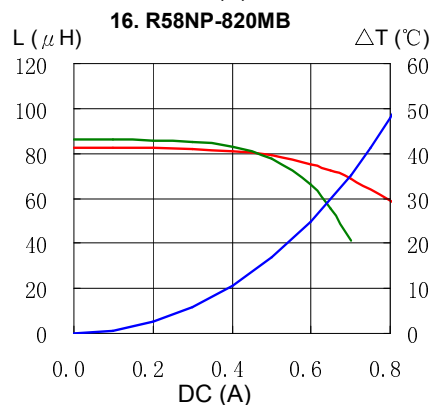
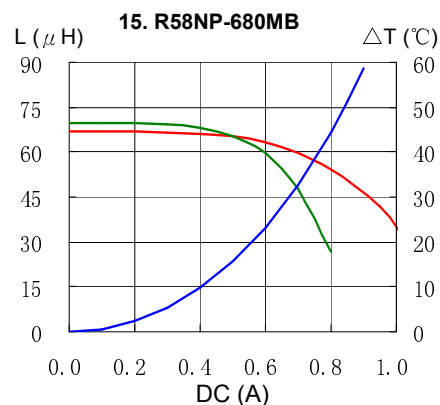
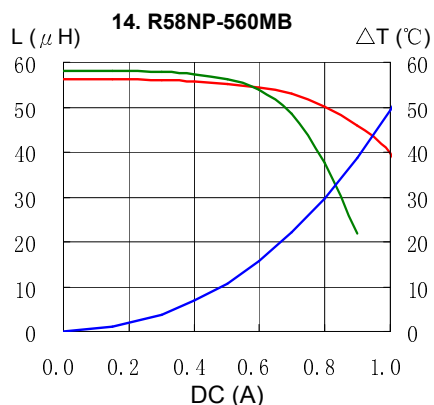
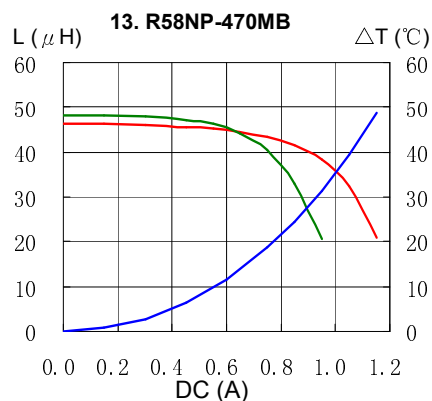


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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT



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