

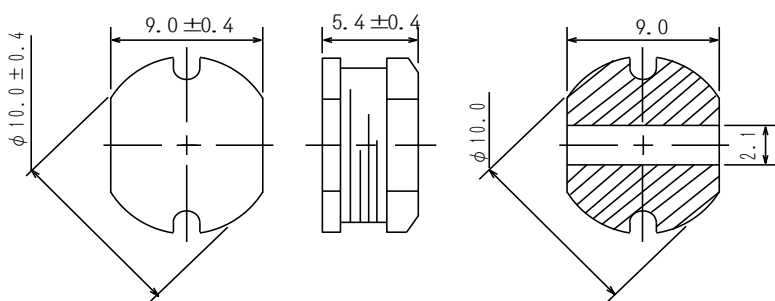
SMD Power Inductor CD105B



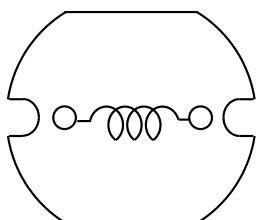
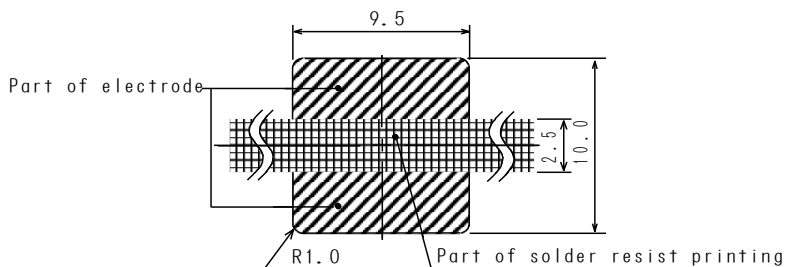
Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 10.4 × 9.4 × 5.8mm Max.
- Product weight: 1.3 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Dimension - [mm]



Land pattern and Schematics - [mm]



Environmental Data

- Operating temperature range: -40°C ~ +105°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +105°C
- Solder reflow temperature: 260 °C peak.

Packaging

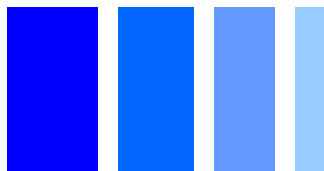
- Carrier tape and reel packaging.
- 12.9" diameter reel
- 500pcs per reel

Applications

- Ideally used in PDA, MP3, DSC/DVC, HDD, Portable DVD, etc as DC-DC converter inductors.

SMD Power Inductor

CD105B



Electrical Characteristics

Part Name	Inductance (μH) [within] ※1	D.C.R. (Ω) [Max.] (at 20°C)	Rated Current (A) ※2	
			(at 20°C)	(at 105°C)
CD105BNP-100MC	$10 \pm 20\%$	0.06	2.60	1.92
CD105BNP-120MC	$12 \pm 20\%$	0.07	2.45	1.44
CD105BNP-150MC	$15 \pm 20\%$	0.08	2.27	1.36
CD105BNP-180MC	$18 \pm 20\%$	0.09	2.15	1.29
CD105BNP-220MC	$22 \pm 20\%$	0.10	1.95	1.24
CD105BNP-270MC	$27 \pm 20\%$	0.11	1.76	1.20
CD105BNP-330MC	$33 \pm 20\%$	0.12	1.50	1.04
CD105BNP-390MC	$39 \pm 20\%$	0.14	1.37	1.00
CD105BNP-470KC	$47 \pm 10\%$	0.17	1.28	0.88
CD105BNP-560KC	$56 \pm 10\%$	0.19	1.17	0.80
CD105BNP-680KC	$68 \pm 10\%$	0.22	1.11	0.71
CD105BNP-820KC	$82 \pm 10\%$	0.25	1.00	0.66
CD105BNP-101KC	$100 \pm 10\%$	0.35	0.97	0.63
CD105BNP-121KC	$120 \pm 10\%$	0.40	0.89	0.53
CD105BNP-151KC	$150 \pm 10\%$	0.47	0.78	0.47
CD105BNP-181KC	$180 \pm 10\%$	0.63	0.72	0.43
CD105BNP-221KC	$220 \pm 10\%$	0.73	0.66	0.40
CD105BNP-271KC	$270 \pm 10\%$	0.97	0.57	0.35
CD105BNP-331KC	$330 \pm 10\%$	1.15	0.52	0.33
CD105BNP-391KC	$390 \pm 10\%$	1.30	0.48	0.32
CD105BNP-471KC	$470 \pm 10\%$	1.48	0.42	0.30
CD105BNP-561KC	$560 \pm 10\%$	1.90	0.33	0.29
CD105BNP-681KC	$680 \pm 10\%$	2.25	0.28	0.24
CD105BNP-821KC	$820 \pm 10\%$	2.55	0.24	0.22

※1: Inductance measuring frequency: 10 μH ~ 82 μH ; at 2.52 MHz.
100 μH ~ 820 μH ; at 1 kHz.

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

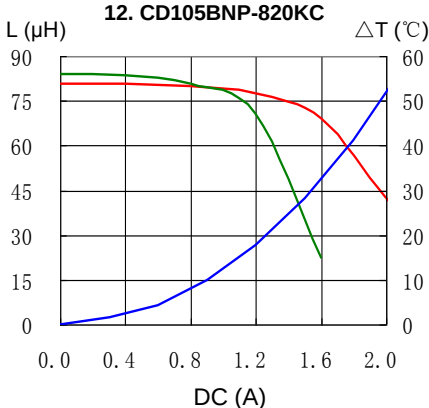
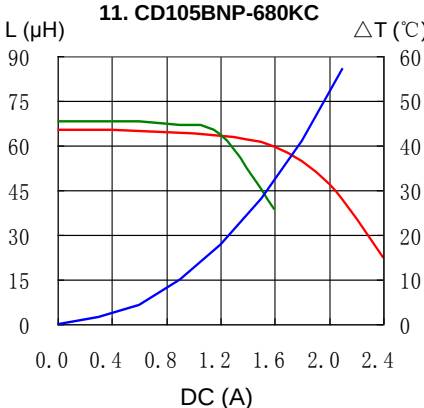
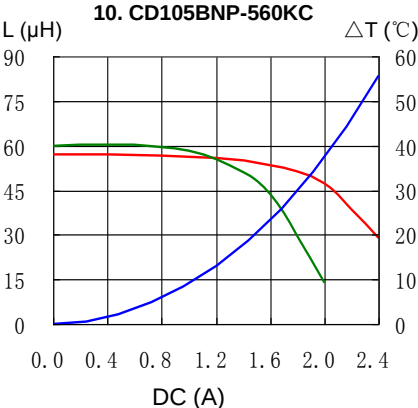
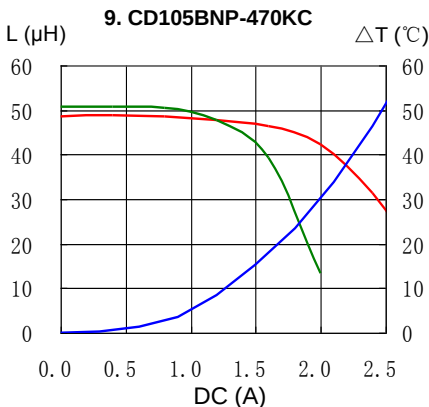
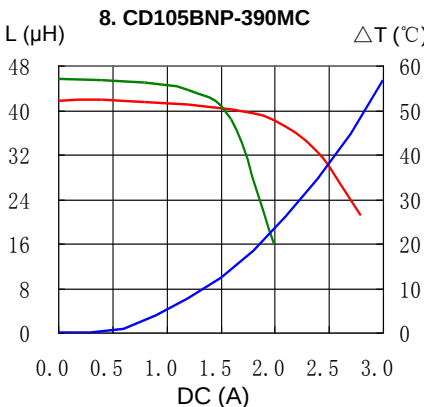
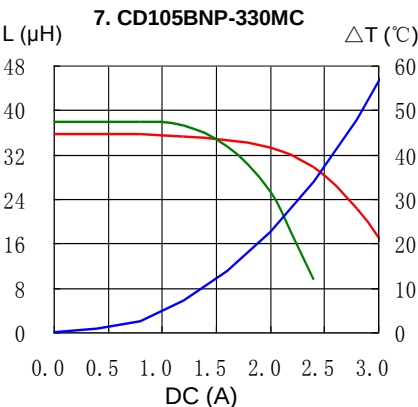
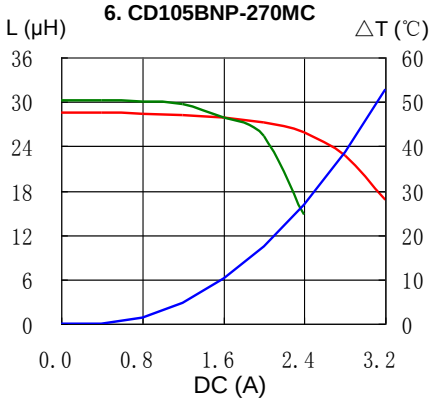
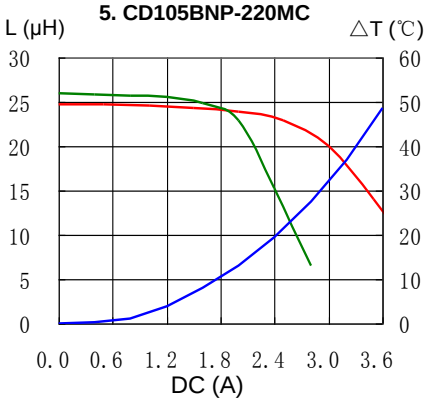
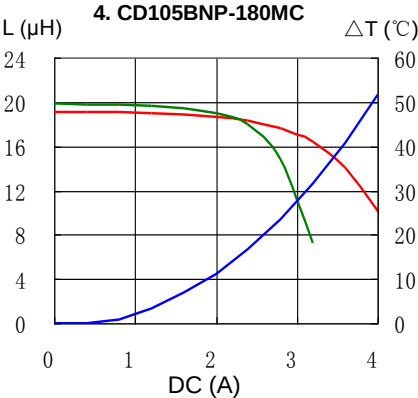
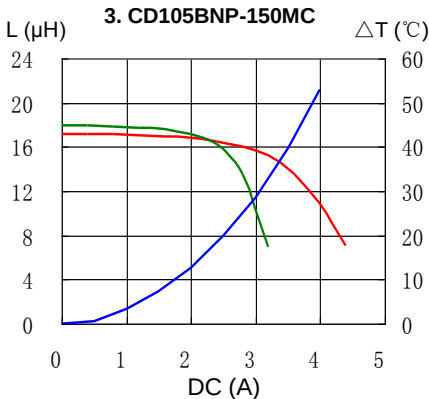
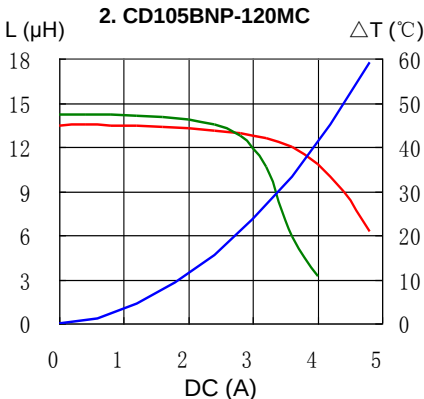
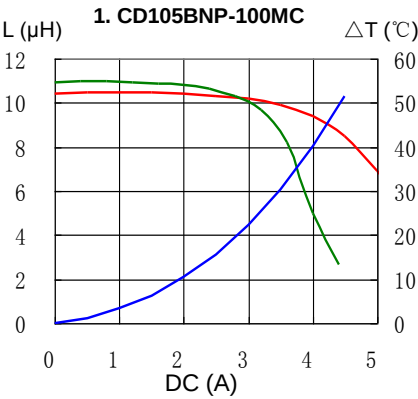
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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT



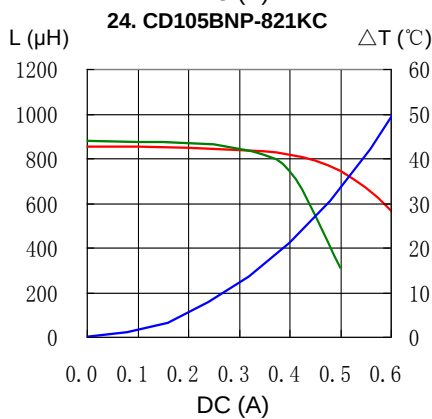
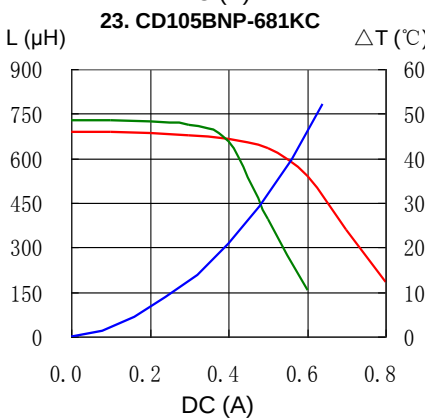
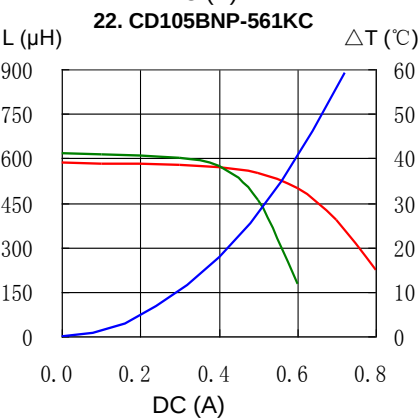
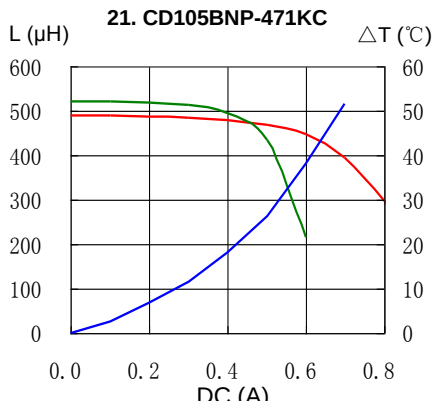
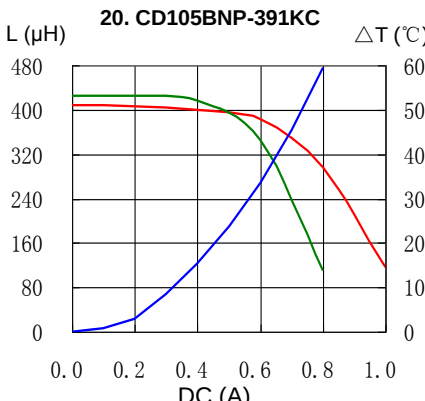
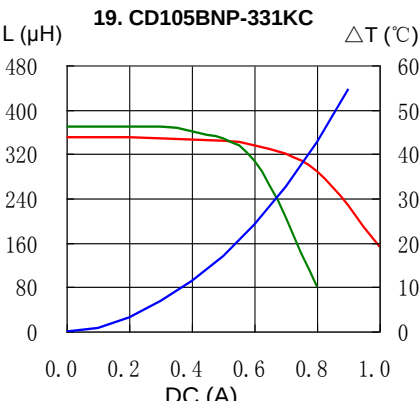
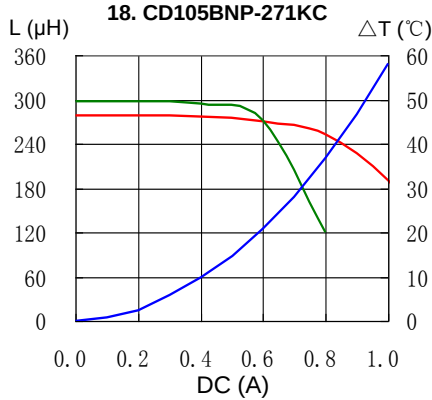
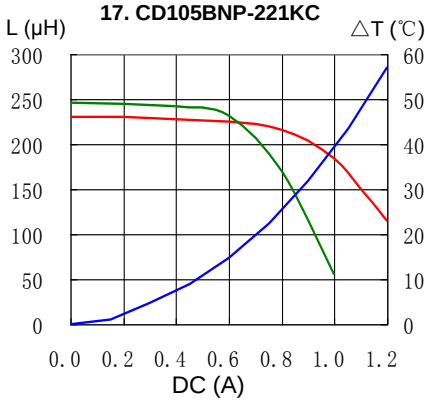
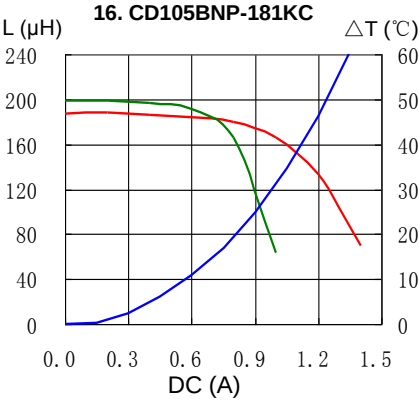
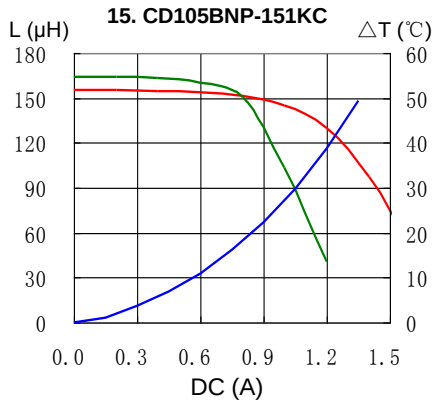
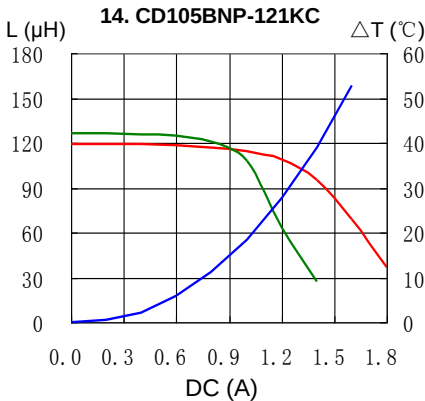
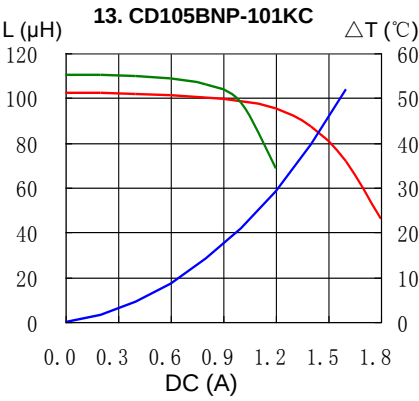
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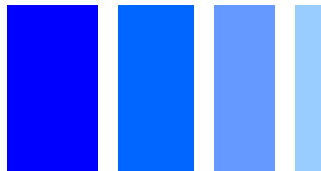


Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

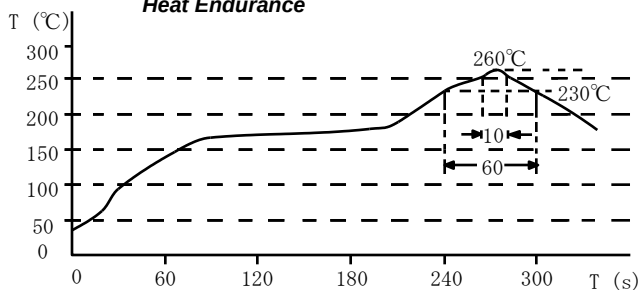


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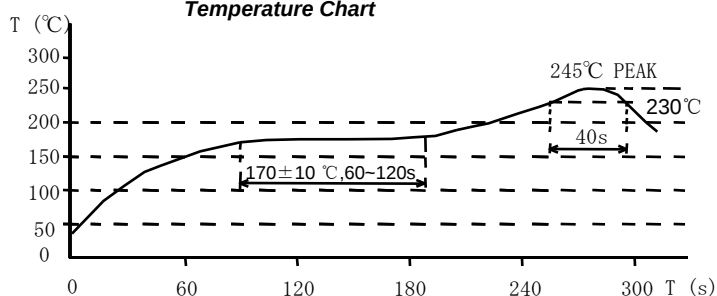


Solder Reflow Condition

Heat Endurance



Temperature Chart



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