

SMD Power Inductor CD105



RoHS

Halogen
Free



Description

- Ferrite durm 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.
- Halogen Free available.

Environmental Data

- Operating temperature range: -40°C~+100°C
(including coil's self temperature rise)
- Storage temperature range: -40°C~+100°C
- Solder reflow temperature: 260 °C peak.

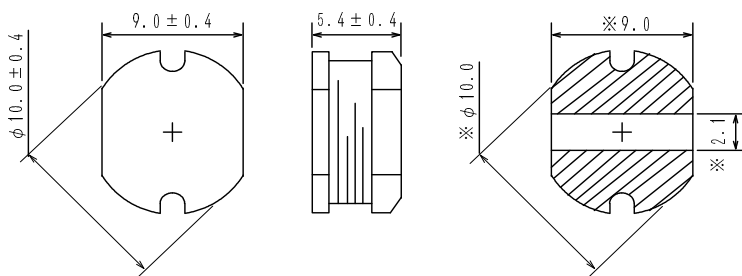
Packaging

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

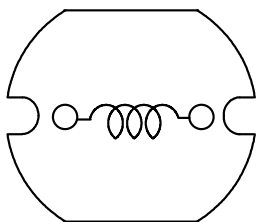
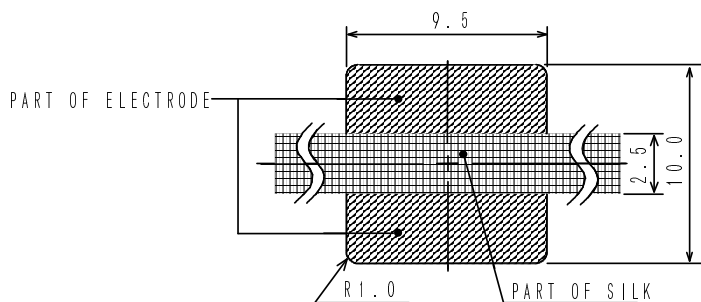
Applications

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

Dimension - [mm]



Land pattern and Schematics - [mm]



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Electrical Characteristics

Part Name	Inductance (μH) [Within] ※1	D.C.R. (Ω) [MAX.] (at 20°C)	Rated Current (A) ※2
CD105NP-100MC	$10 \pm 20\%$	0.06	2.60
CD105NP-120MC	$12 \pm 20\%$	0.07	2.45
CD105NP-150MC	$15 \pm 20\%$	0.08	2.27
CD105NP-180MC	$18 \pm 20\%$	0.09	2.15
CD105NP-220MC	$22 \pm 20\%$	0.10	1.95
CD105NP-270MC	$27 \pm 20\%$	0.11	1.76
CD105NP-330MC	$33 \pm 20\%$	0.12	1.50
CD105NP-390MC	$39 \pm 20\%$	0.14	1.37
CD105NP-470KC	$47 \pm 10\%$	0.17	1.28
CD105NP-560KC	$56 \pm 10\%$	0.19	1.17
CD105NP-680KC	$68 \pm 10\%$	0.22	1.11
CD105NP-820KC	$82 \pm 10\%$	0.25	1.00
CD105NP-101KC	$100 \pm 10\%$	0.35	0.97
CD105NP-121KC	$120 \pm 10\%$	0.40	0.89
CD105NP-151KC	$150 \pm 10\%$	0.47	0.78
CD105NP-181KC	$180 \pm 10\%$	0.63	0.72
CD105NP-221KC	$220 \pm 10\%$	0.73	0.66
CD105NP-271KC	$270 \pm 10\%$	0.97	0.57
CD105NP-331KC	$330 \pm 10\%$	1.15	0.52
CD105NP-391KC	$390 \pm 10\%$	1.30	0.48
CD105NP-471KC	$470 \pm 10\%$	1.48	0.42
CD105NP-561KC	$560 \pm 10\%$	1.90	0.33
CD105NP-681KC	$680 \pm 10\%$	2.25	0.28
CD105NP-821KC	$820 \pm 10\%$	2.55	0.24

※1: Inductance measuring frequency: $10 \mu\text{H} \sim 82 \mu\text{H}$; at 2.52MHz.
 $100 \mu\text{H} \sim 820 \mu\text{H}$; at 1kHz.

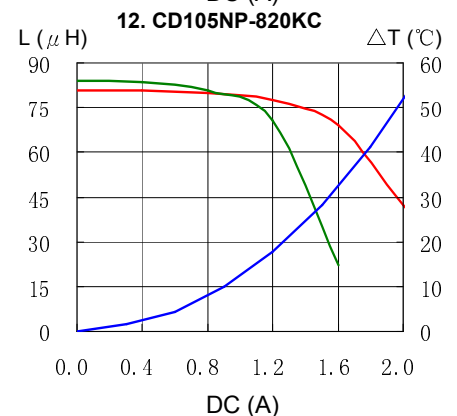
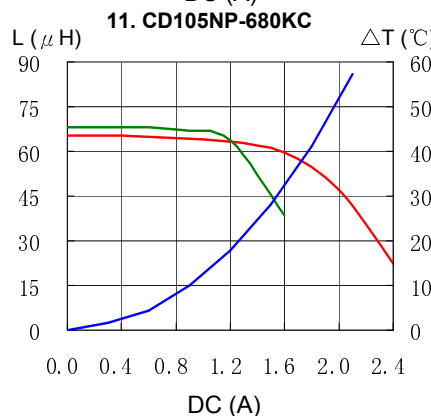
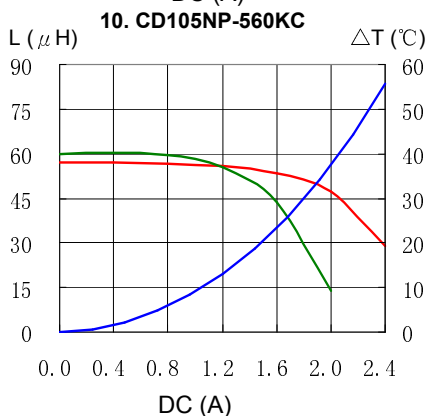
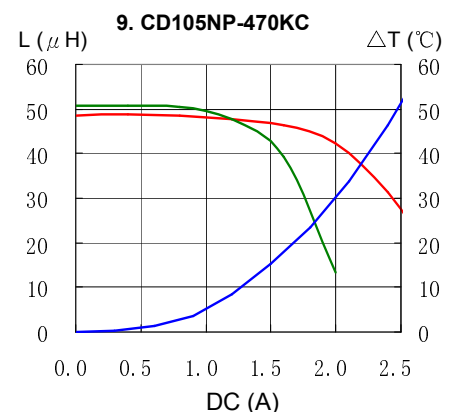
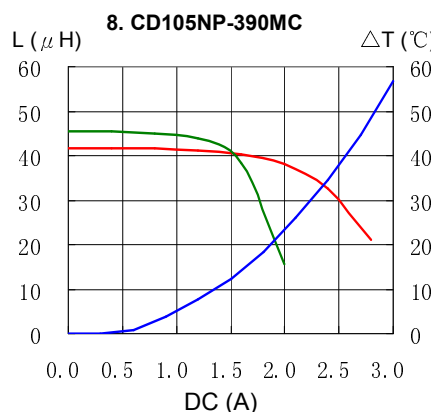
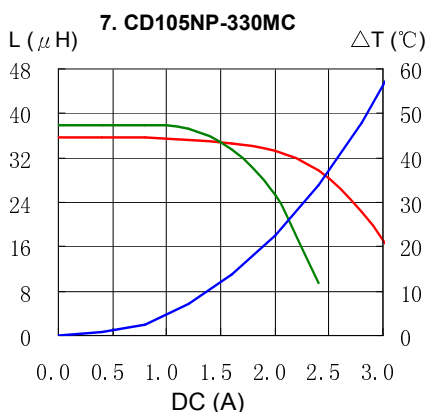
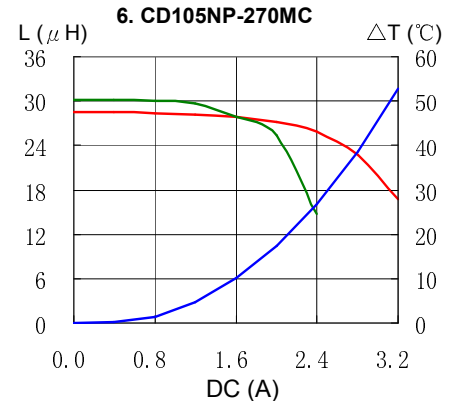
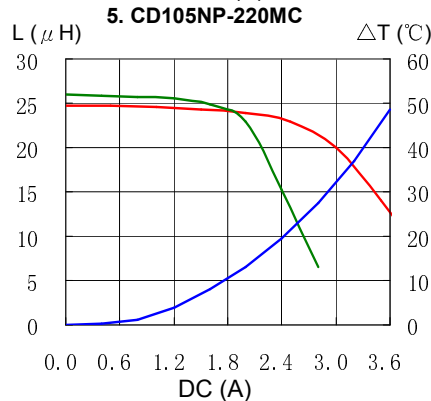
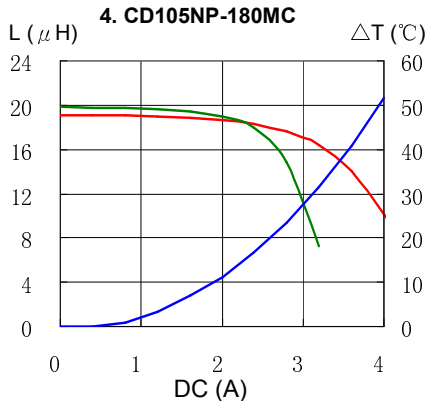
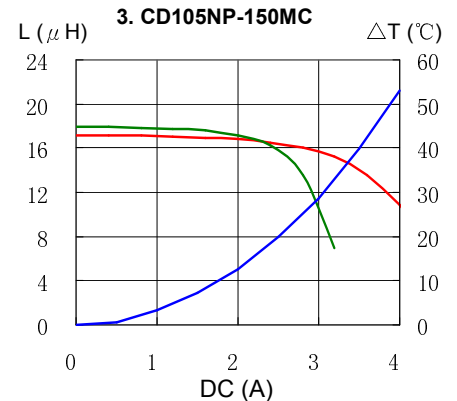
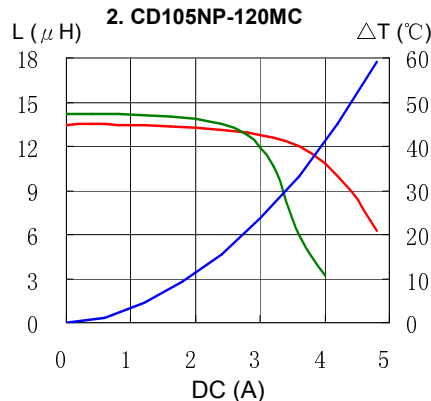
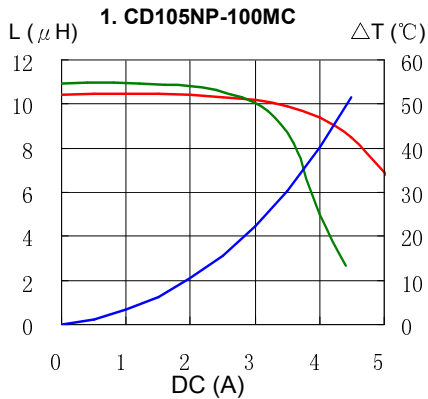
※2: Rated current: The DC current at which the inductance decreases to 90 % of it's initial value or when $\Delta t = 40^\circ\text{C}$, whichever is lower ($T_a = 20^\circ\text{C}$).

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Saturation Current & Temperature Rise Graph

— L (25°C) — L (105°C) — ΔT

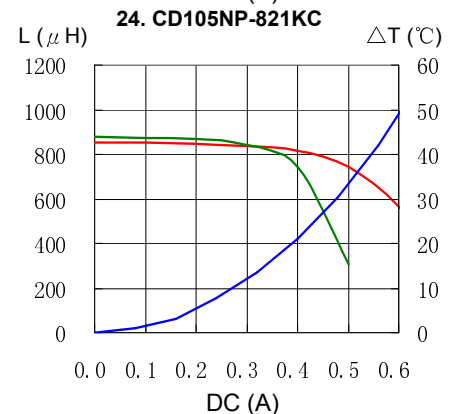
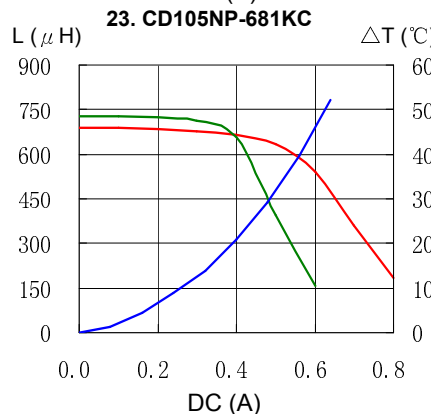
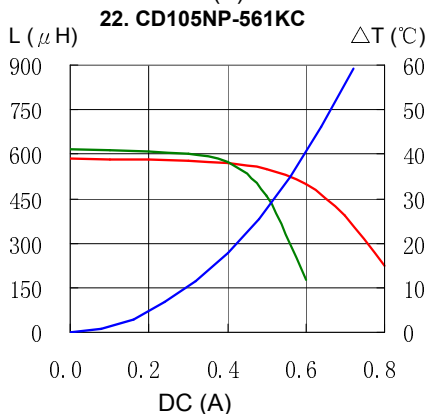
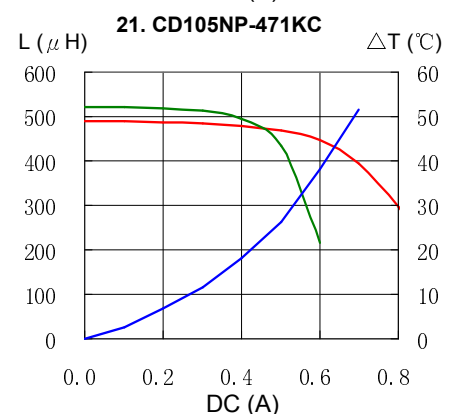
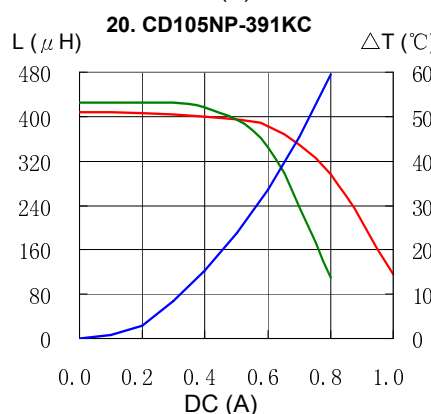
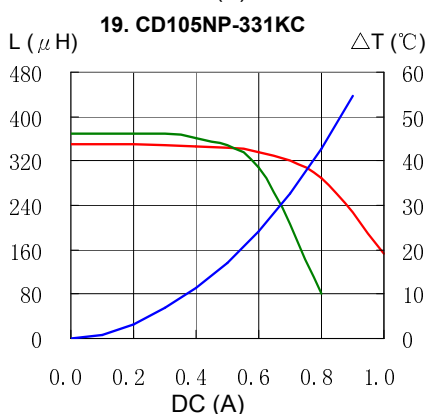
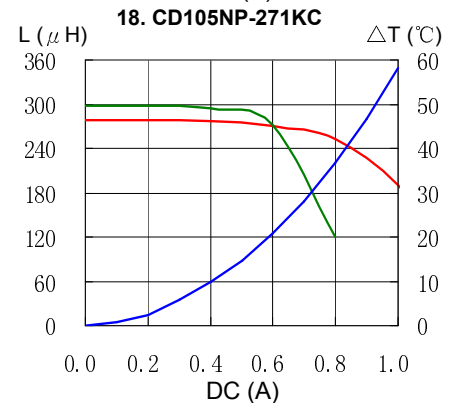
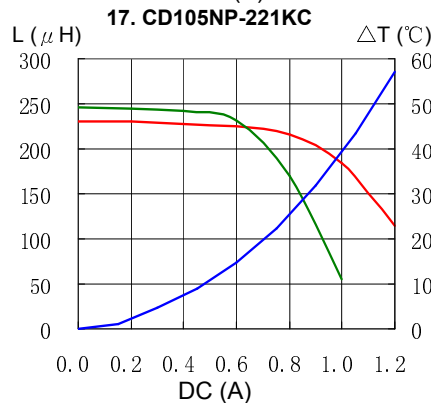
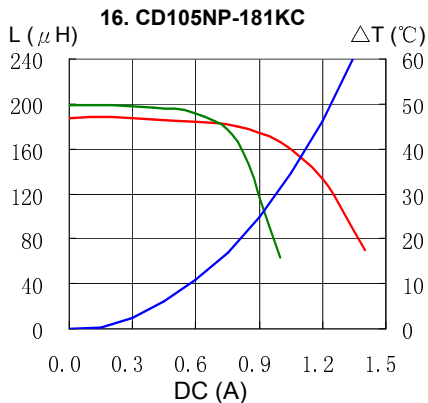
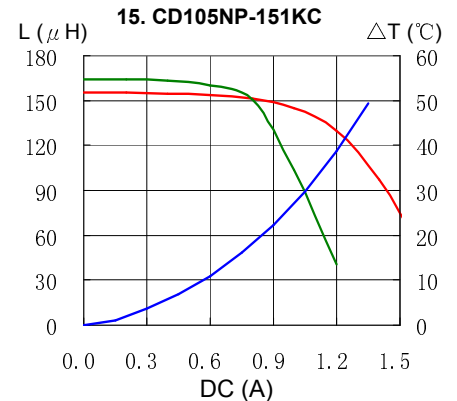
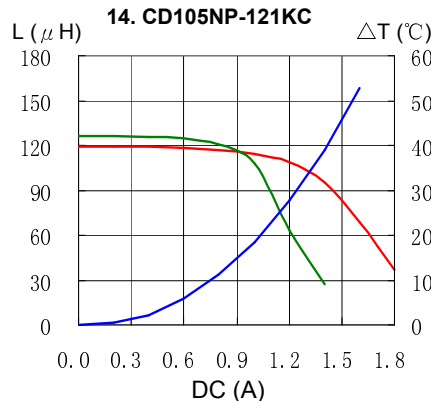
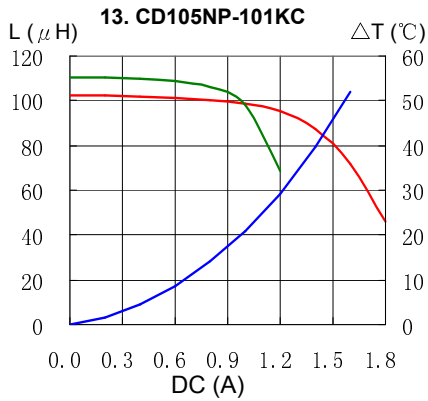


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Saturation Current & Temperature Rise Graph

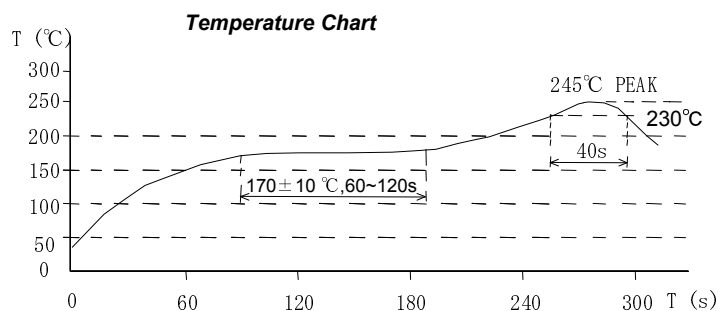
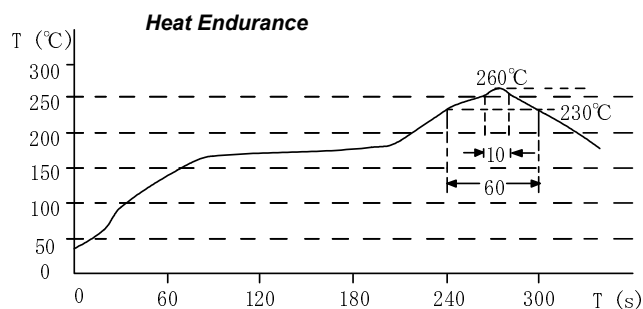
— L (25°C) — L (105°C) — ΔT



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Solder Reflow Condition



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

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