

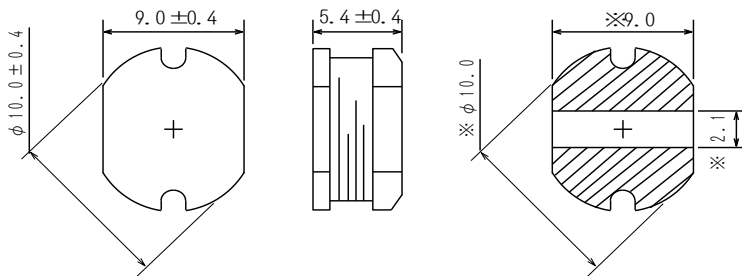
SMD Power Inductor CD105/T125



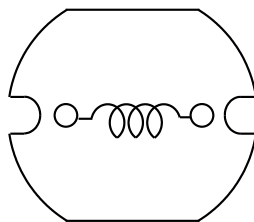
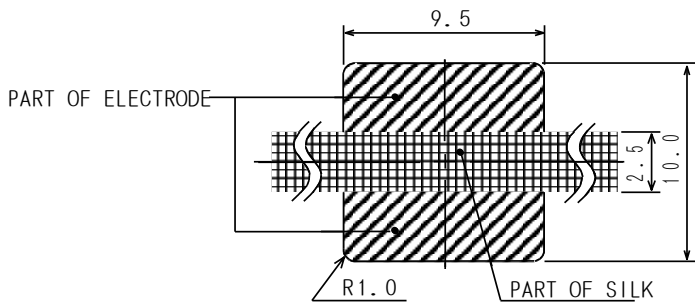
Description

- Ferrite 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.
- Qualification to AEC-Q200.

Dimension - [mm]



Land pattern and Schematics - [mm]



Environmental Data

- Operating temperature range: -40°C ~ +125°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +125°C
- Solder reflow temperature: 260 °C peak.

Packaging

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

Applications

- Automotive and other high temperature, high reliability application.



Electrical Characteristics

Part No.	Stamp	Inductance [Within] (μH) ※1	D.C.R. (Ω) [Max.] (at 20°C)	Saturation current (A) (at 20°C) ※2	Temperature rise current (A) ※3
CD105T125NP-100MC	100M	10 $\mu\text{H} \pm 20\%$	0.06	4.00	4.00
CD105T125NP-120MC	120M	12 $\mu\text{H} \pm 20\%$	0.07	3.54	3.93
CD105T125NP-150MC	150M	15 $\mu\text{H} \pm 20\%$	0.08	3.17	3.57
CD105T125NP-180MC	180M	18 $\mu\text{H} \pm 20\%$	0.09	3.00	3.50
CD105T125NP-220MC	220M	22 $\mu\text{H} \pm 20\%$	0.10	2.66	3.30
CD105T125NP-270MC	270M	27 $\mu\text{H} \pm 20\%$	0.11	2.45	2.84
CD105T125NP-330MC	330M	33 $\mu\text{H} \pm 20\%$	0.12	2.20	2.58
CD105T125NP-390MC	390M	39 $\mu\text{H} \pm 20\%$	0.14	2.02	2.55
CD105T125NP-470KC	470K	47 $\mu\text{H} \pm 10\%$	0.17	1.92	2.25
CD105T125NP-560KC	560K	56 $\mu\text{H} \pm 10\%$	0.19	1.81	2.06
CD105T125NP-680KC	680K	68 $\mu\text{H} \pm 10\%$	0.22	1.65	1.80
CD105T125NP-820KC	820K	82 $\mu\text{H} \pm 10\%$	0.25	1.50	1.76
CD105T125NP-101KC	101K	100 $\mu\text{H} \pm 10\%$	0.35	1.31	1.42
CD105T125NP-121KC	121K	120 $\mu\text{H} \pm 10\%$	0.40	1.22	1.40
CD105T125NP-151KC	151K	150 $\mu\text{H} \pm 10\%$	0.47	1.10	1.20
CD105T125NP-181KC	181K	180 $\mu\text{H} \pm 10\%$	0.63	0.99	1.12
CD105T125NP-221KC	221K	220 $\mu\text{H} \pm 10\%$	0.73	0.89	1.01
CD105T125NP-271KC	271K	270 $\mu\text{H} \pm 10\%$	0.97	0.81	0.83
CD105T125NP-331KC	331K	330 $\mu\text{H} \pm 10\%$	1.15	0.72	0.76
CD105T125NP-391KC	391K	390 $\mu\text{H} \pm 10\%$	1.30	0.63	0.65
CD105T125NP-471KC	471K	470 $\mu\text{H} \pm 10\%$	1.48	0.60	0.61
CD105T125NP-561KC	561K	560 $\mu\text{H} \pm 10\%$	1.90	0.56	0.59
CD105T125NP-681KC	681K	680 $\mu\text{H} \pm 10\%$	2.25	0.52	0.56
CD105T125NP-821KC	821K	820 $\mu\text{H} \pm 10\%$	2.55	0.48	0.54

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

※2 Saturation current: This indicates the actual value of D.C. current when the inductance becomes 10% lower than its initial value.($T_a=20^\circ\text{C}$)

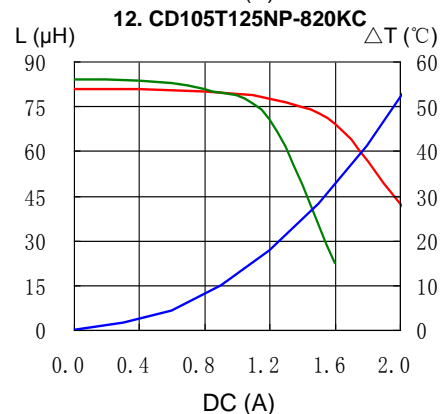
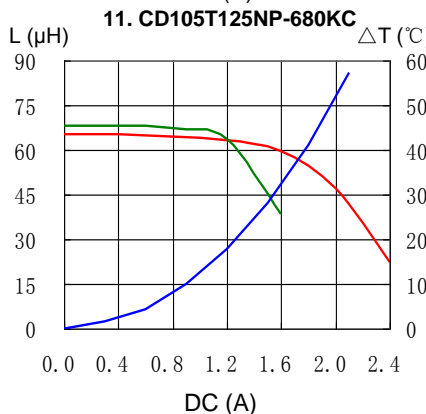
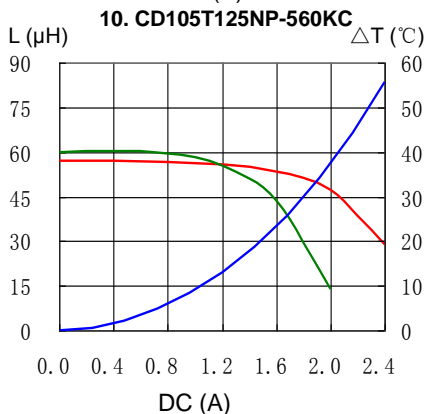
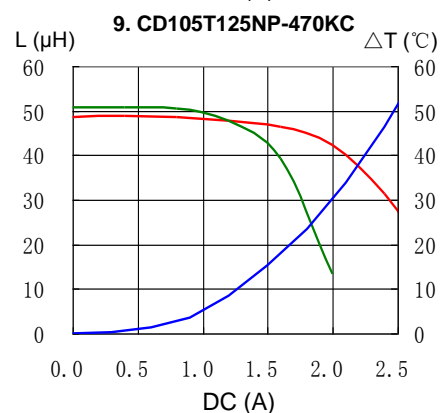
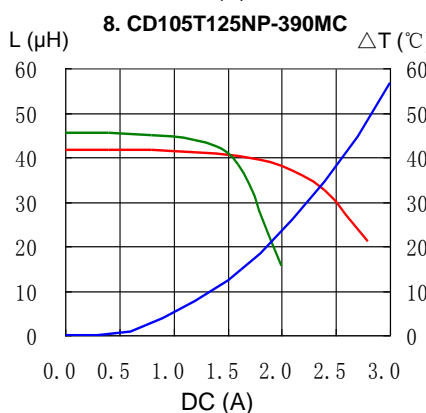
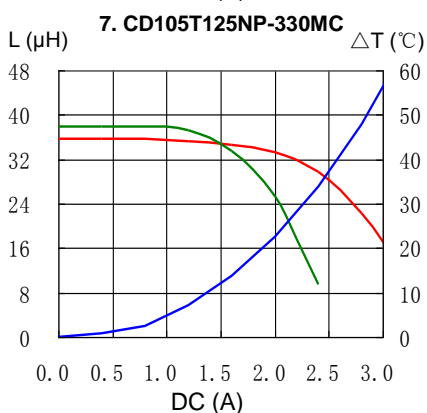
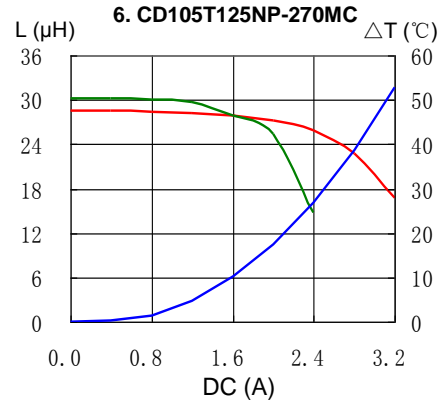
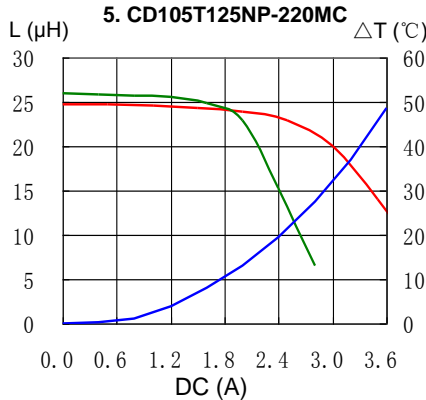
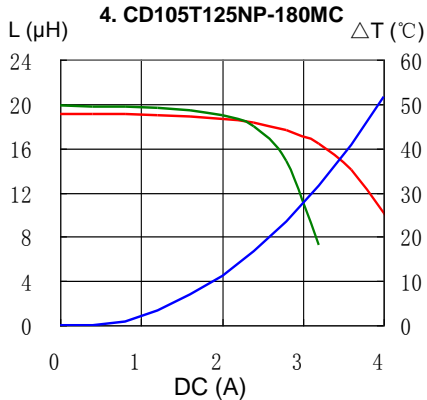
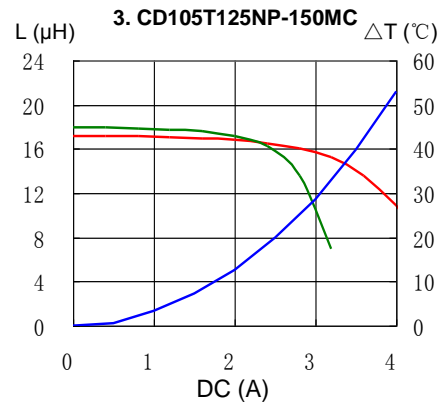
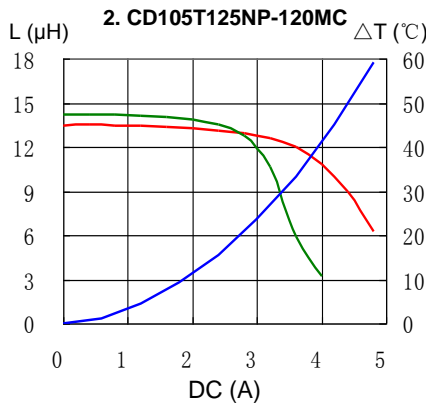
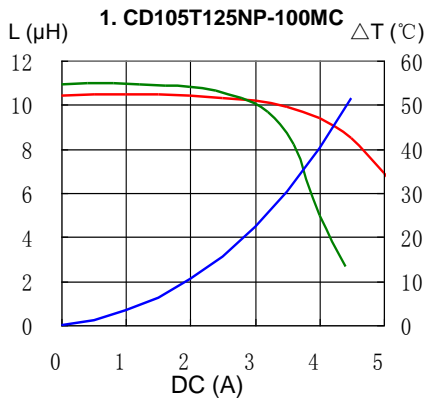
※3 Temperature rise current: The actual value of D.C. current when the temperature of coil becomes $\Delta T=40^\circ\text{C}$ ($T_a=20^\circ\text{C}$).

SMD Power Inductor CD105/T125



Saturation Current & Temperature Rise Graph

— L (25°C) — L (105°C) — ΔT

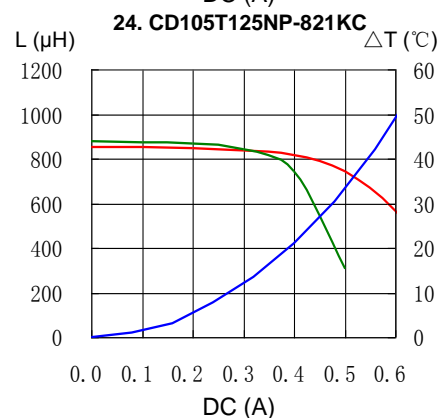
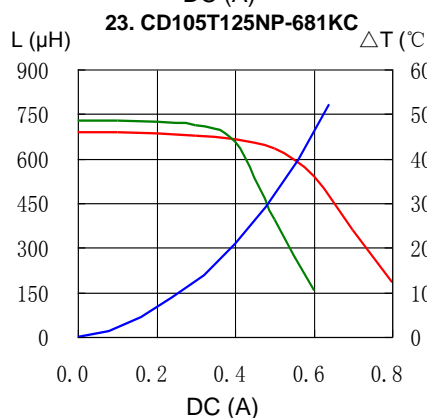
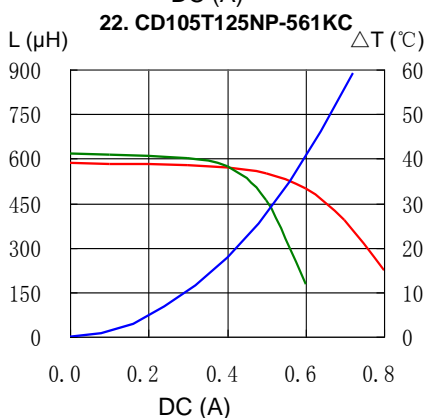
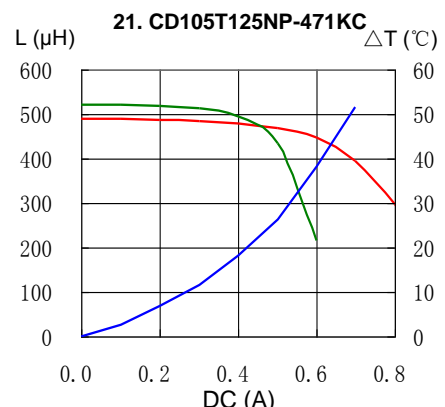
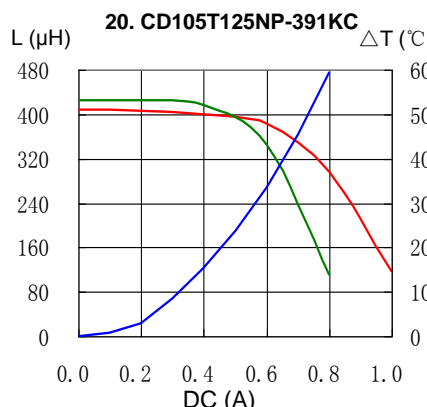
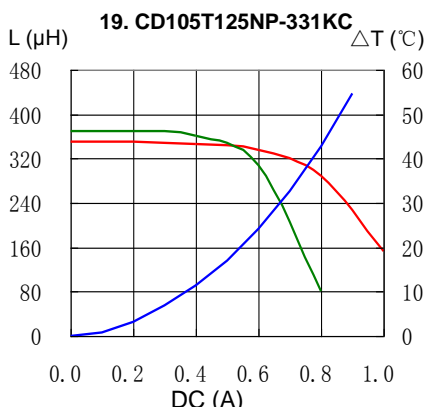
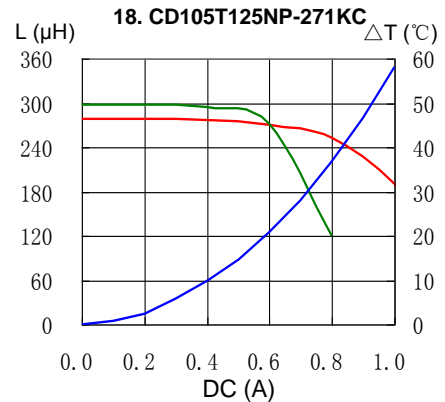
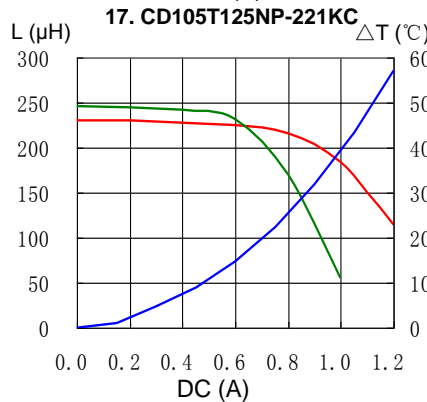
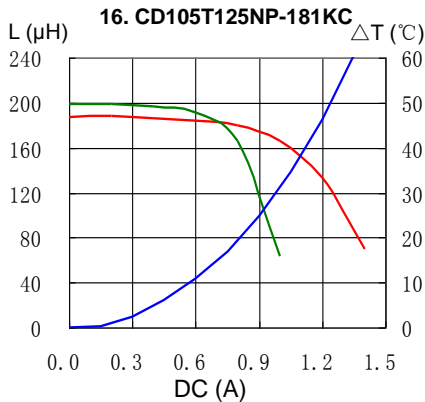
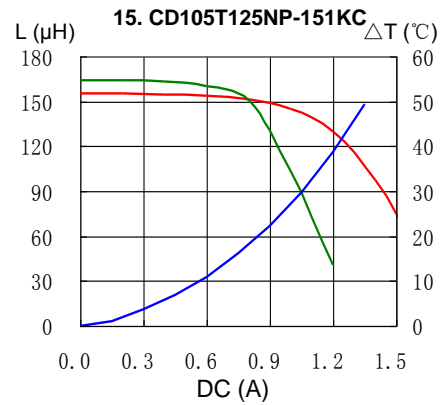
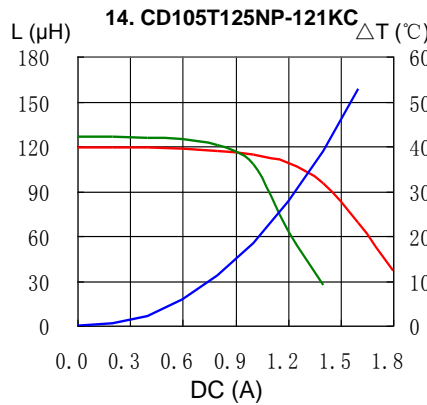
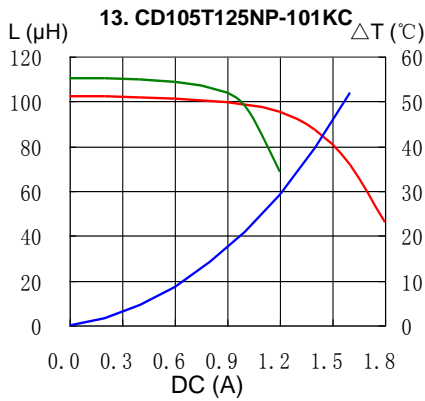


SMD Power Inductor CD105/T125



Saturation Current & Temperature Rise Graph

— L (25°C) — L (105°C) — ΔT

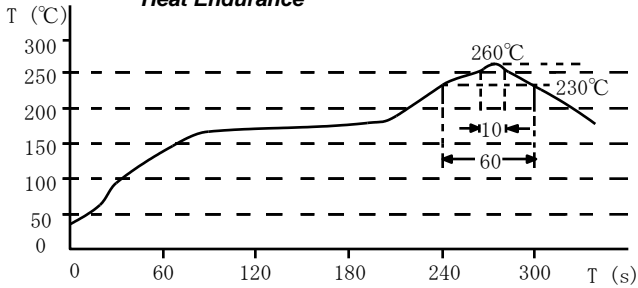


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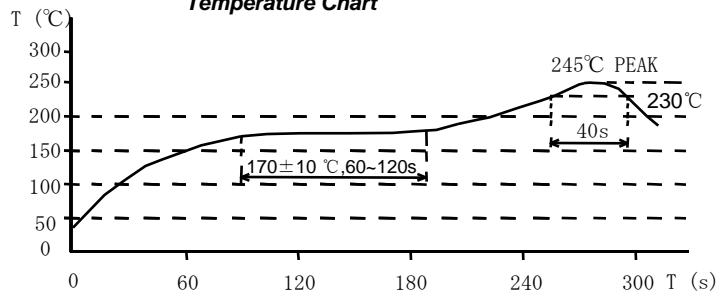


Solder Reflow Condition

Heat Endurance



Temperature Chart



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