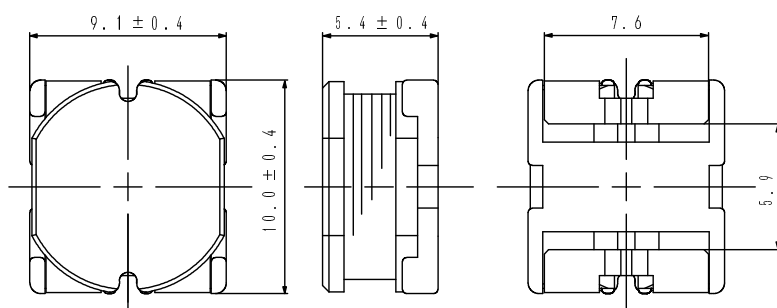


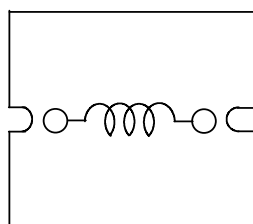
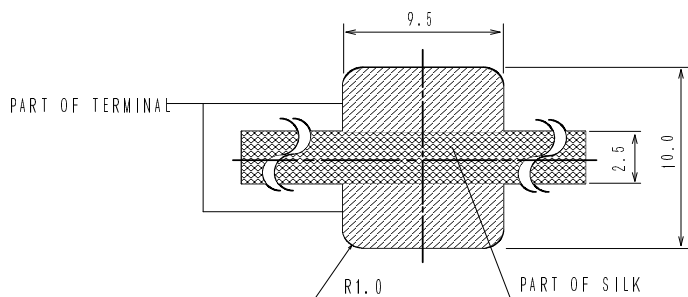
SMD Power Inductor CR105



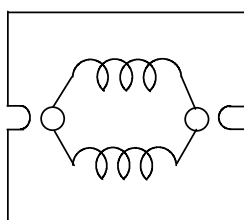
Dimension - [mm]



Land pattern and Schematics - [mm]



$10 \mu H \sim 820 \mu H$



$1.8 \mu H \sim 8.6 \mu H$

Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 10.4 × 9.5 × 5.8 mm Max.
- Product weight: 1.3g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$ (including coil's self temperature rise)
- Storage temperature range: $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- Solder reflow temperature: 260°C peak.

Packaging

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

Applications

- Ideally used in Projector, PDA, DSC/DVC, Game Machine, DVD, STB, Notebook PC etc as DC-DC converter inductors.

SMD Power Inductor CR105



Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within]※ 1	D.C.R. (Ω) [Max.] at 20°C	Rated Current (A) ※ 2
CR105NP-1R8MC	1R8M	$1.8 \pm 20\%$	13.0m	6.0
CR105NP-2R5MC	2R5M	$2.5 \pm 20\%$	15.6m	5.5
CR105NP-3R3MC	3R3M	$3.3 \pm 20\%$	18.2m	5.0
CR105NP-4R2MC	4R2M	$4.2 \pm 20\%$	20.8m	4.5
CR105NP-5R1MC	5R1M	$5.1 \pm 20\%$	23.4m	4.0
CR105NP-6R3MC	6R3M	$6.3 \pm 20\%$	26.0m	3.6
CR105NP-7R5MC	7R5M	$7.5 \pm 20\%$	28.6m	3.3
CR105NP-8R6MC	8R6M	$8.6 \pm 20\%$	32.5m	3.0
CR105NP-100MC	100M	$10 \pm 20\%$	0.06	2.6
CR105NP-120MC	120M	$12 \pm 20\%$	0.07	2.45
CR105NP-150MC	150M	$15 \pm 20\%$	0.08	2.27
CR105NP-180MC	180M	$18 \pm 20\%$	0.09	2.15
CR105NP-220MC	220M	$22 \pm 20\%$	0.10	1.95
CR105NP-270MC	270M	$27 \pm 20\%$	0.11	1.76
CR105NP-330MC	330M	$33 \pm 20\%$	0.12	1.50
CR105NP-390MC	390M	$39 \pm 20\%$	0.14	1.37
CR105NP-470KC	470K	$47 \pm 10\%$	0.17	1.28
CR105NP-560KC	560K	$56 \pm 10\%$	0.19	1.17
CR105NP-680KC	680K	$68 \pm 10\%$	0.22	1.11
CR105NP-820KC	820K	$82 \pm 10\%$	0.25	1.00
CR105NP-101KC	101K	$100 \pm 10\%$	0.35	0.97
CR105NP-121KC	121K	$120 \pm 10\%$	0.40	0.89
CR105NP-151KC	151K	$150 \pm 10\%$	0.47	0.78
CR105NP-181KC	181K	$180 \pm 10\%$	0.63	0.72
CR105NP-221KC	221K	$220 \pm 10\%$	0.73	0.66
CR105NP-271KC	271K	$270 \pm 10\%$	0.97	0.57
CR105NP-331KC	331K	$330 \pm 10\%$	1.15	0.52
CR105NP-391KC	391K	$390 \pm 10\%$	1.30	0.48
CR105NP-471KC	471K	$470 \pm 10\%$	1.48	0.42
CR105NP-561KC	561K	$560 \pm 10\%$	1.90	0.33
CR105NP-681KC	681K	$680 \pm 10\%$	2.25	0.28
CR105NP-821KC	821K	$820 \pm 10\%$	2.55	0.24

※ 1 .Inductance measuring frequency: 1.8μ H $\sim$ 8.6μ H ; at 7.96 MHz
 10μ H $\sim$ 82μ H ; at 2.52 MHz
 100μ H $\sim$ 820μ H ; at 1 kHz

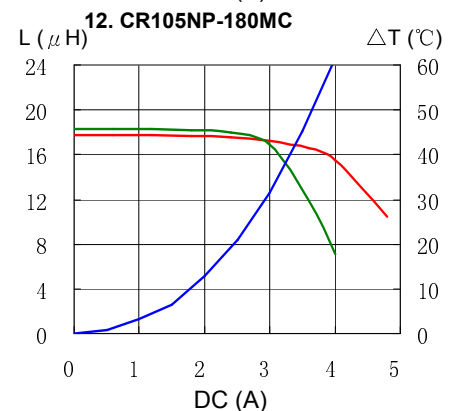
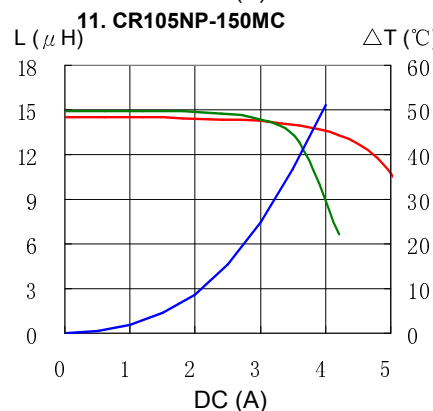
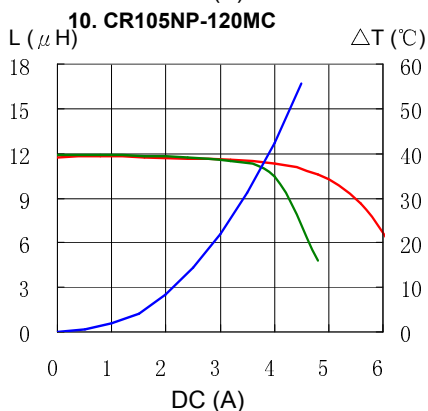
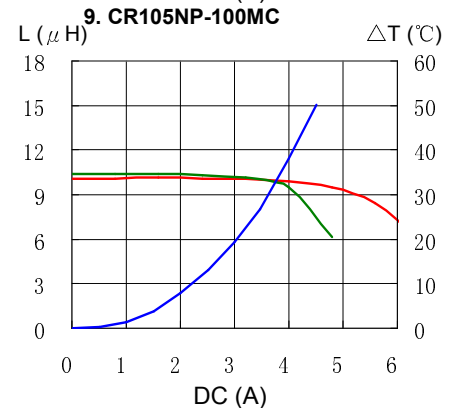
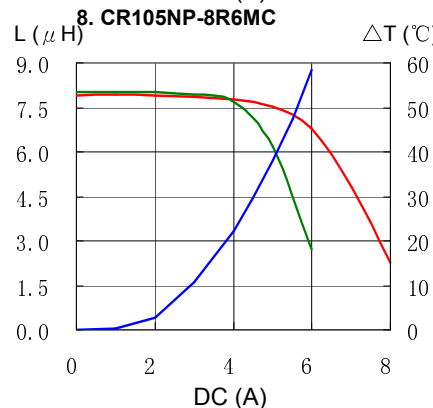
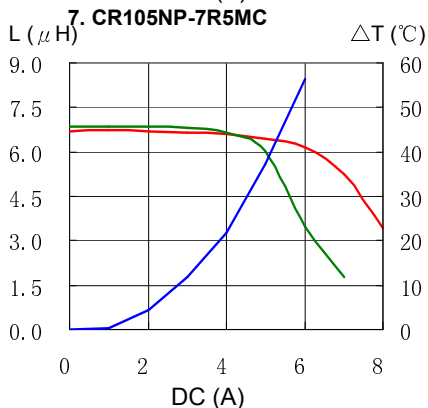
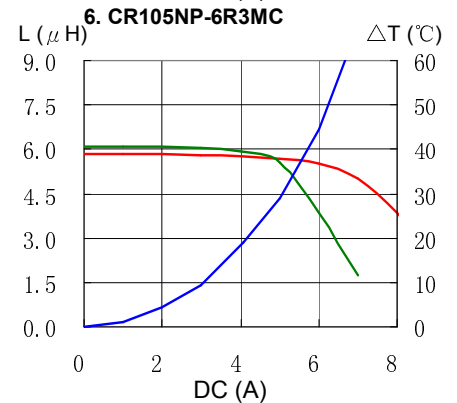
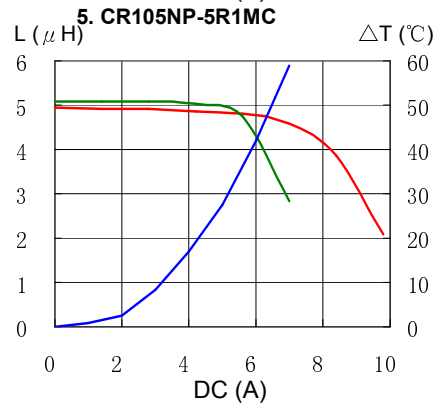
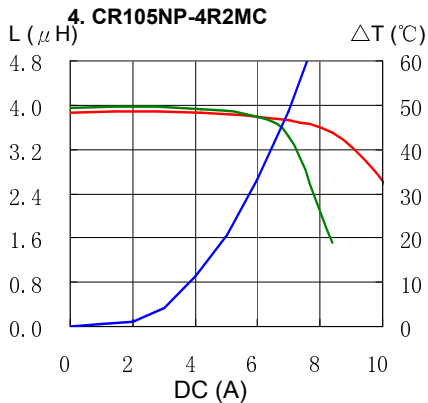
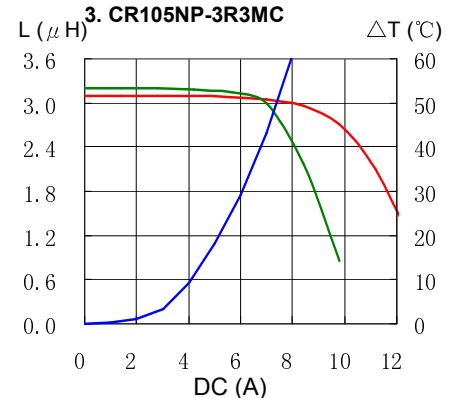
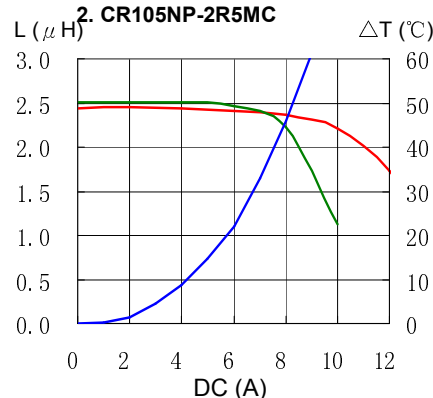
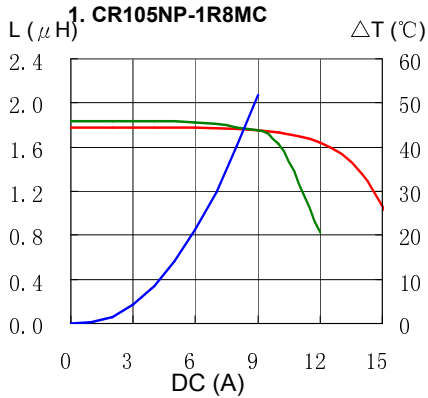
※2. Rated current: The D.C. current at which the inductance decreases to 90% of it's initial value or when $\Delta t=40^\circ\text{C}$, whichever is lower ($T_a=20^\circ\text{C}$).

SMD Power Inductor CR105



Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

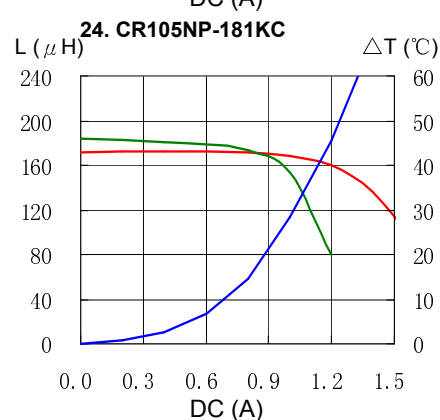
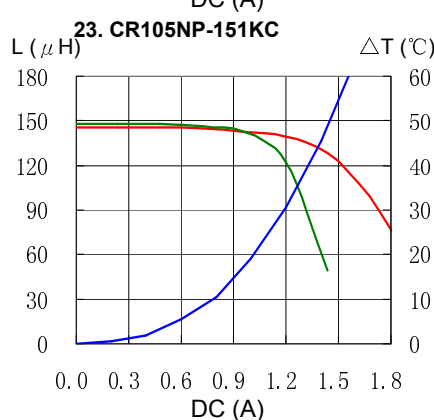
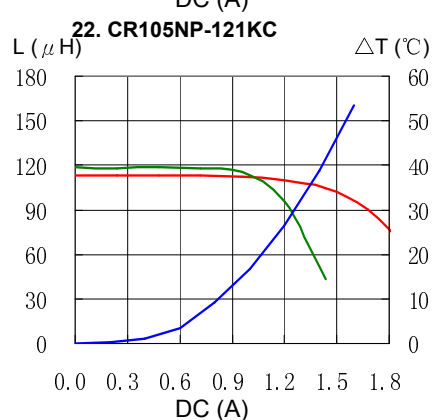
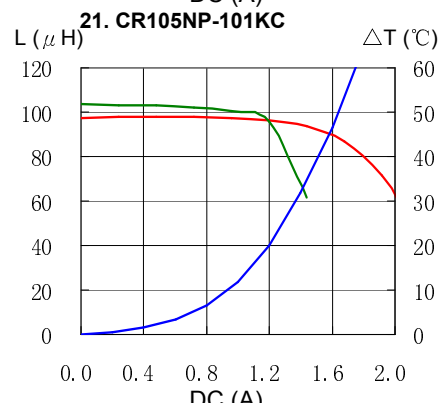
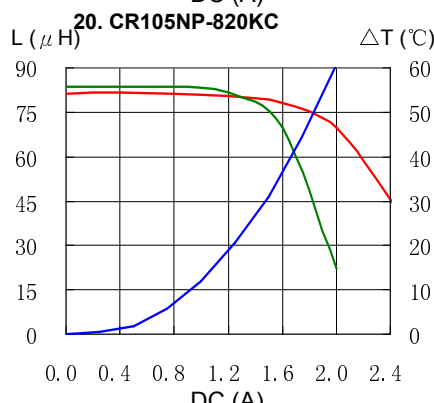
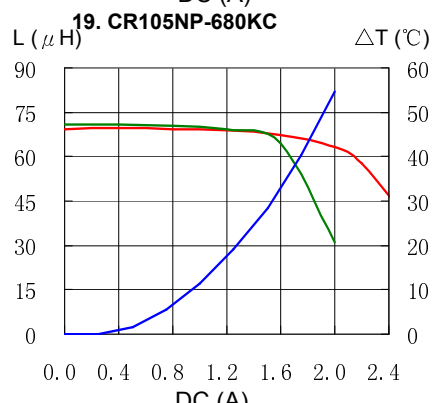
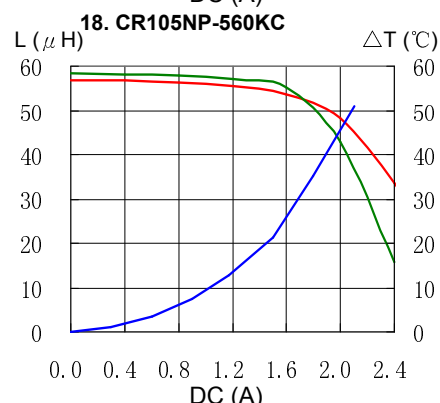
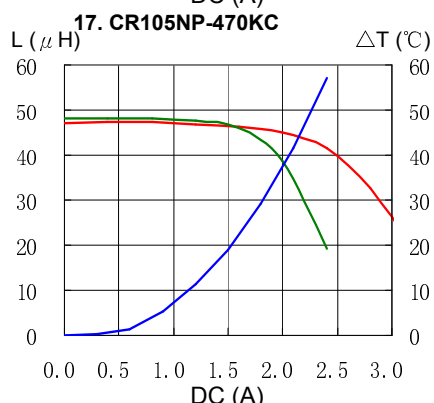
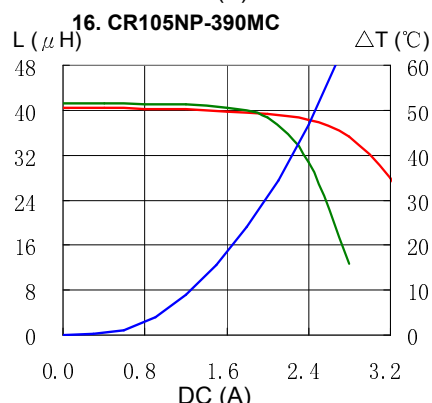
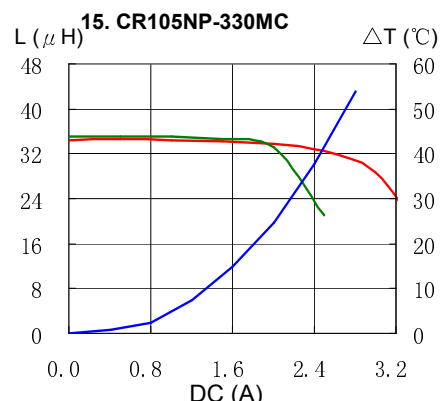
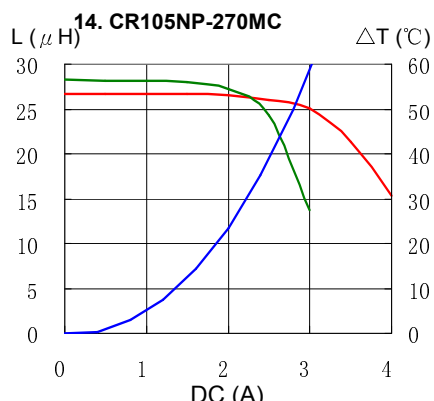
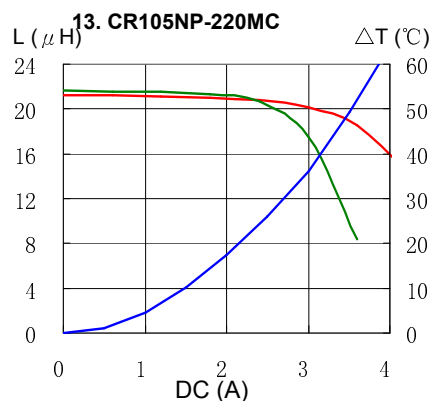


SMD Power Inductor CR105



Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

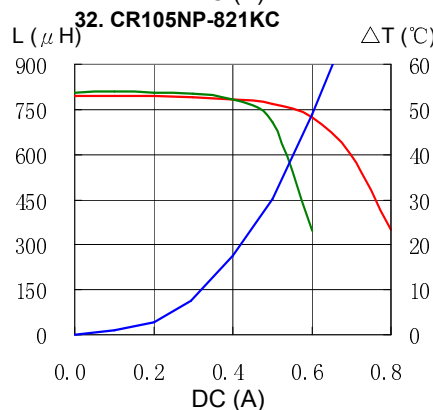
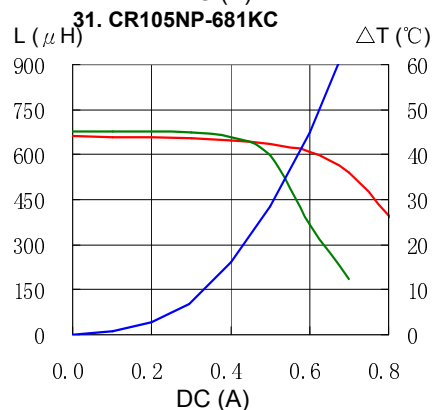
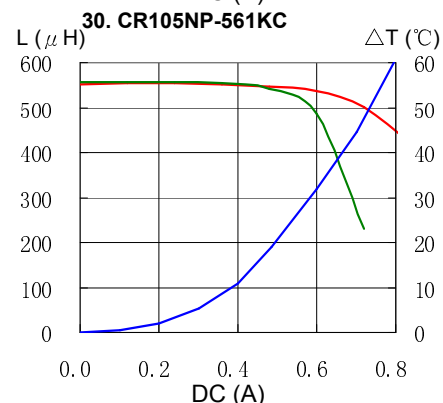
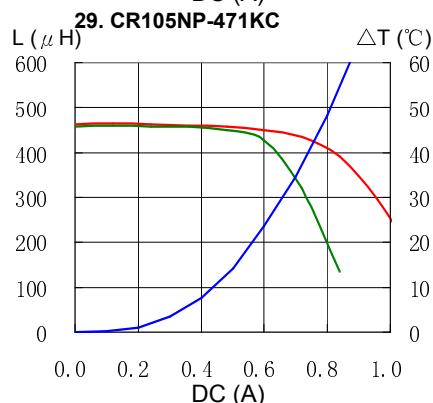
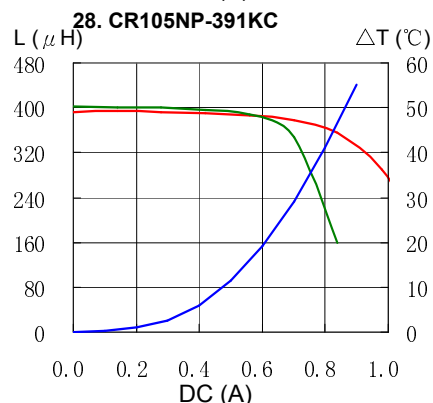
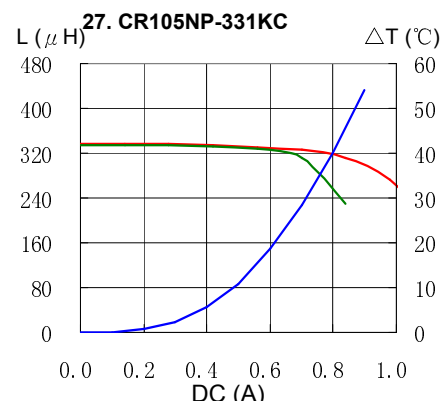
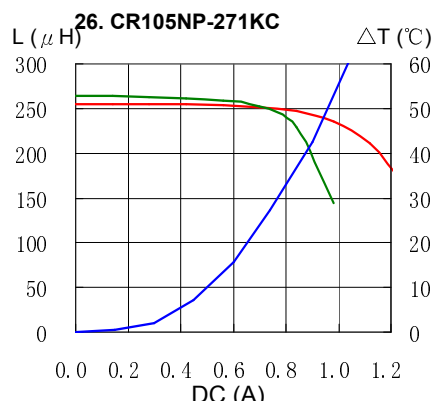
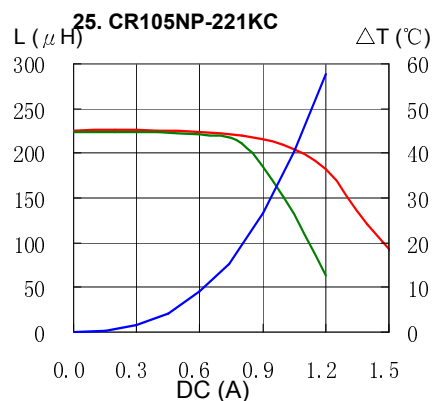


SMD Power Inductor CR105



Saturation Current & Temperature Rise Graph

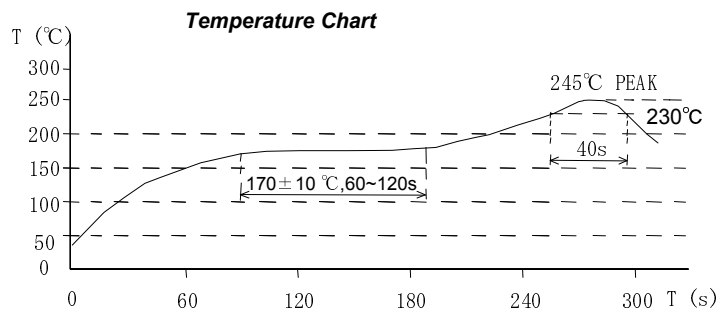
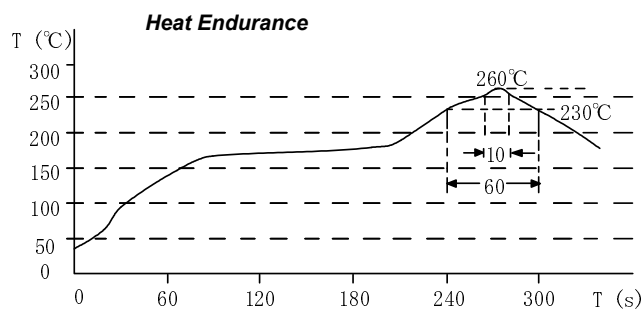
— L (20°C) — L (100°C) — ΔT



SMD Power Inductor CR105



Solder Reflow Condition



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<u>CR105NP-390MC</u>	<u>CR105NP-4R2MC</u>	<u>CR105NP-1R8MC</u>	<u>CR105NP-120MC</u>	<u>CR105NP-561KC</u>	<u>CR105NP-220MC</u>
<u>CR105NP-680KC</u>	<u>CR105NP-150MC</u>	<u>CR105NP-121KC</u>	<u>CR105NP-221KC</u>	<u>CR105NP-7R5MC</u>	<u>CR105NP-470KC</u>
<u>CR105NP-8R6MC</u>	<u>CR105NP-270MC</u>	<u>CR105NP-821KC</u>	<u>CR105NP-100MC</u>	<u>CR105NP-180MC</u>	<u>CR105NP-3R3MC</u>
<u>CR105NP-681KC</u>	<u>CR105NP-391KC</u>	<u>CR105NP-5R1MC</u>	<u>CR105NP-2R5MC</u>	<u>CR105NP-151KC</u>	<u>CR105NP-271KC</u>
<u>CR105NP-820KC</u>	<u>CR105NP-471KC</u>				