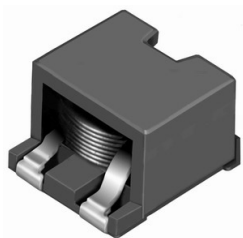


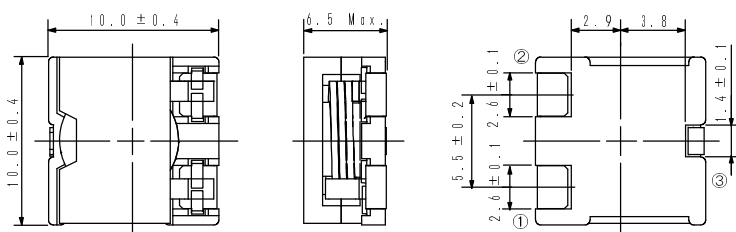
SMD Power Inductor CDEP106



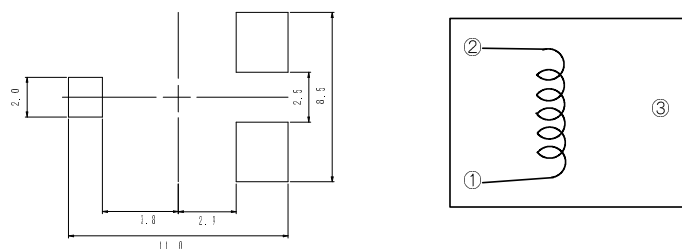
Halogen
Free



Dimension - [mm]



Land pattern and Schematics - [mm]



Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: $10.4 \times 10.4 \times 6.5 \text{ mm Max.}$
- Product weight: 1.9g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$ (including coil's self temperature rise)
- Storage temperature range: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$
- Solder reflow temperature: 260°C peak.

Packaging

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

Applications

- Ideally used in computer CPU power supply.

SMD Power Inductor CDEP106



Electrical characteristics - Standard Type

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.] (Typ.) (at 20°C)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20°C)	(at 105°C)	
CDEP106NP-R36MC-88	R36MS	0.36±20%	1.14(0.95)	24.0(30.0)	19.6(24.5)	23.0
CDEP106NP-R80MC-88	R80MS	0.80±20%	1.68(1.40)	16.0(20.0)	13.2(16.5)	20.0
CDEP106NP-1R4MC-88	1R4MS	1.4±20%	2.30(1.90)	12.0(15.0)	9.9(12.4)	17.5
CDEP106NP-2R2MC-88	2R2MS	2.2±20%	3.44(2.87)	9.6(12.0)	8.0(10.0)	13.5
CDEP106NP-3R2MC-88	3R2MS	3.2±20%	5.04(4.20)	7.8(9.8)	6.7(8.4)	11.5
CDEP106NP-4R3MC-88	4R3MS	4.3±20%	6.40(5.32)	6.6(8.3)	5.8(7.2)	10.0
CDEP106NP-5R6MC-88	5R6MS	5.6±20%	9.81(8.18)	5.8(7.3)	5.0(6.3)	8.5
CDEP106NP-7R2MC-88	7R2MS	7.2±20%	11.2(9.34)	5.0(6.3)	4.4(5.5)	7.8
CDEP106NP-8R8MC-88	8R8MS	8.8±20%	12.6(10.5)	4.6(5.8)	4.0(5.0)	7.5
CDEP106NP-100MC-88	100MS	10±20%	15.9(13.2)	4.3(5.4)	3.6(4.5)	6.5

Electrical Characteristics - High Power Type

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.] (Typ.) (at 20°C)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20°C)	(at 105°C)	
CDEP106NP-R20MC-50	R20MH	0.20±20%	1.14(0.95)	48.0(60.0)	38.0(47.0)	23.0
CDEP106NP-R45MC-50	R45MH	0.45±20%	1.68(1.40)	31.6(39.5)	25.2(31.5)	20.0
CDEP106NP-R80MC-50	R80MH	0.80±20%	2.30(1.90)	23.2(29.0)	18.8(23.5)	17.5
CDEP106NP-1R2MC-50	1R2MH	1.2±20%	3.44(2.87)	19.2(24.0)	15.6(19.5)	13.5
CDEP106NP-1R8MC-50	1R8MH	1.8±20%	5.04(4.20)	16.0(20.0)	13.2(16.5)	11.5
CDEP106NP-2R4MC-50	2R4MH	2.4±20%	6.40(5.32)	13.6(17.0)	10.8(13.5)	10.0
CDEP106NP-3R2MC-50	3R2MH	3.2±20%	9.81(8.18)	12.2(15.2)	9.8(12.2)	8.5
CDEP106NP-4R0MC-50	4R0MH	4.0±20%	11.2(9.34)	10.8(13.5)	8.4(10.5)	7.8
CDEP106NP-5R0MC-50	5R0MH	5.0±20%	12.6(10.5)	9.6(12.0)	7.6(9.5)	7.5
CDEP106NP-6R0MC-50	6R0MH	6.0±20%	15.9(13.2)	8.8(11.0)	6.8(8.5)	6.5

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 75% of it's nominal value.

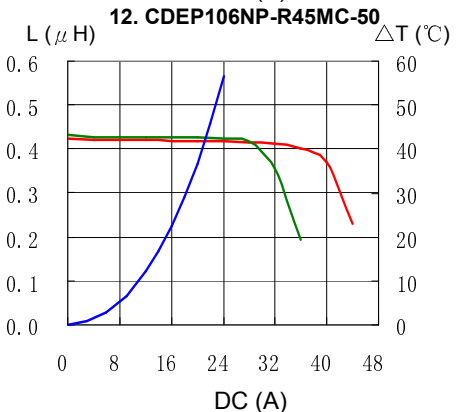
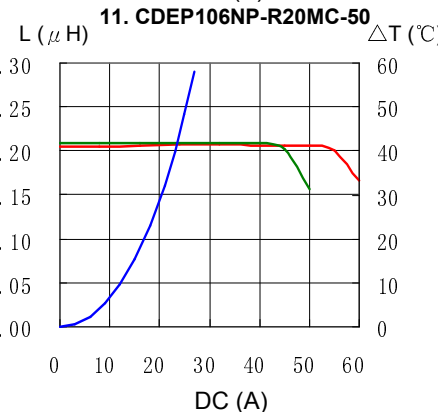
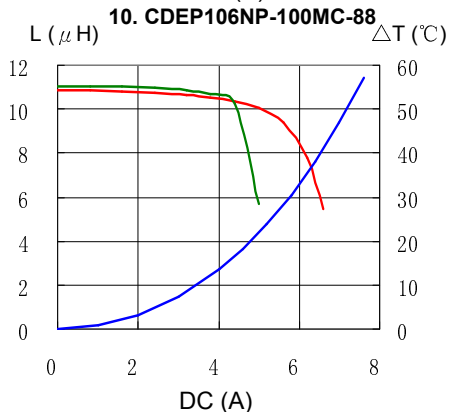
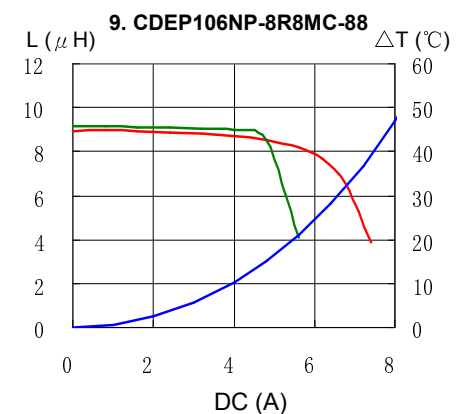
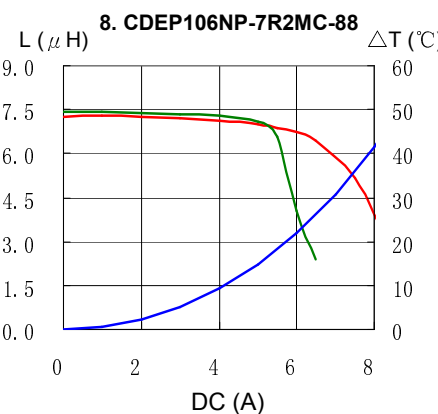
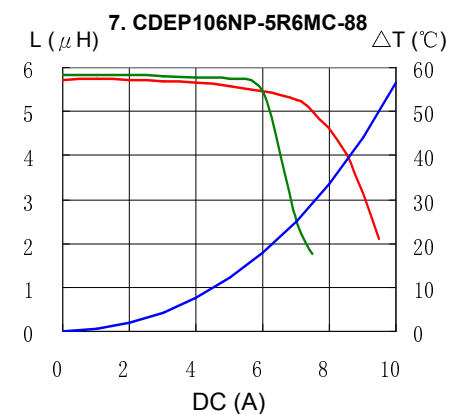
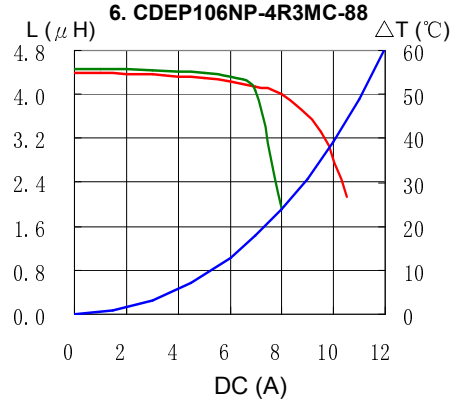
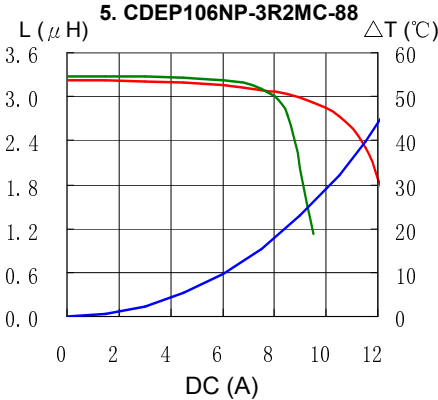
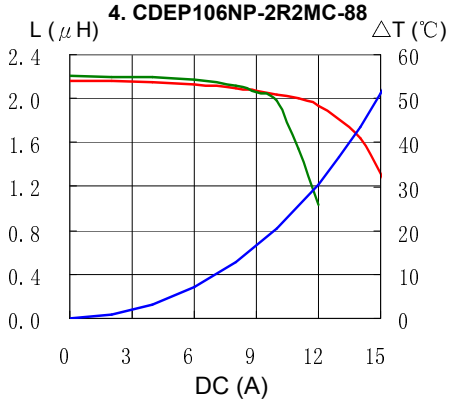
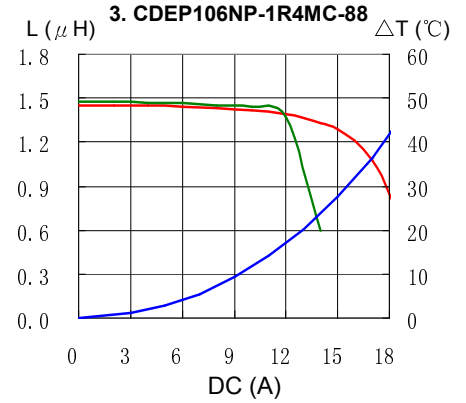
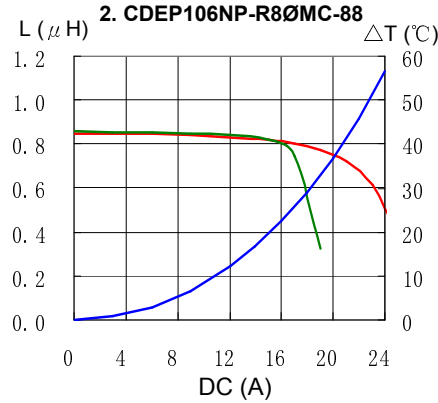
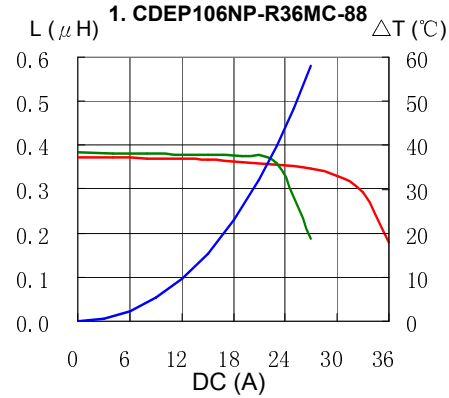
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

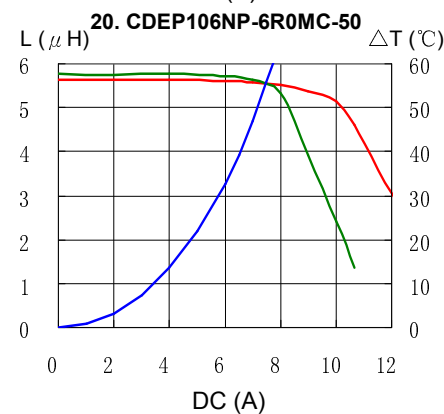
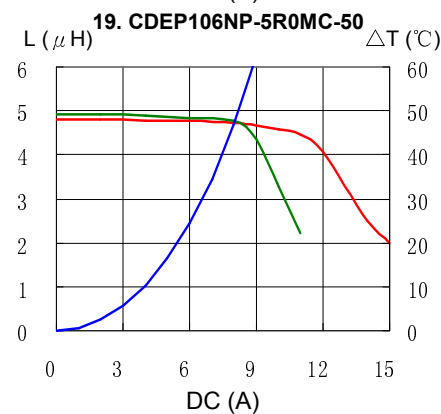
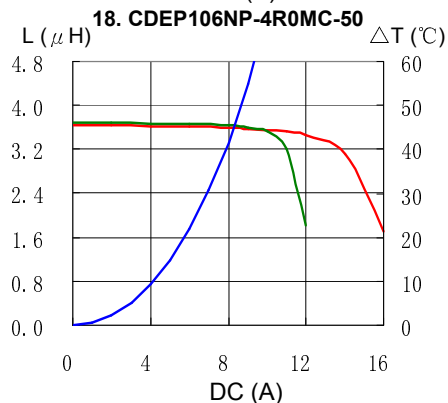
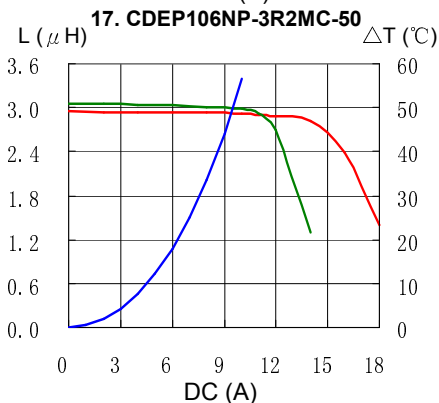
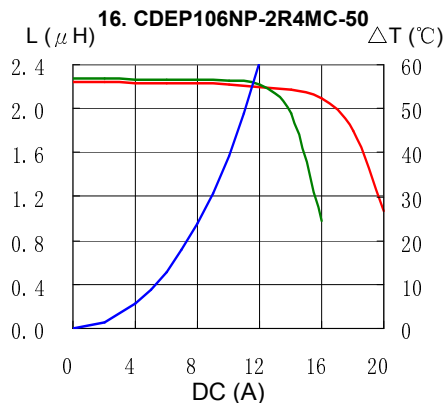
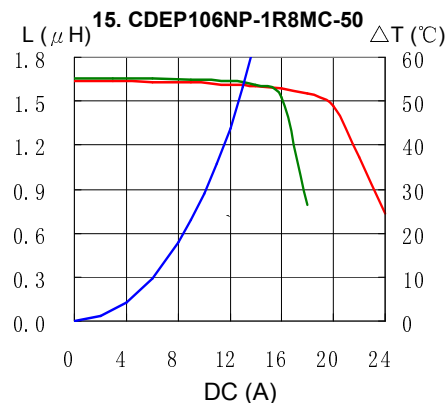
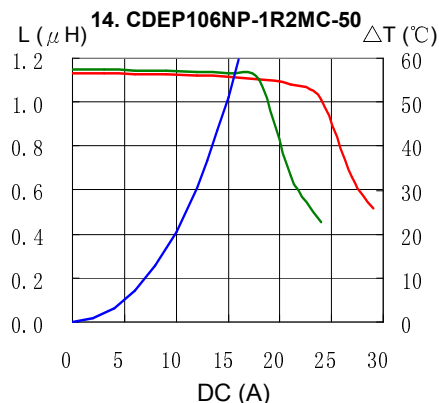
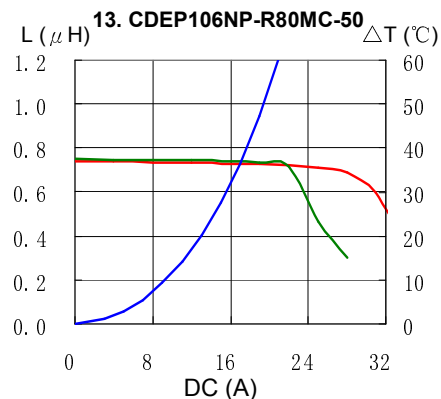


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Saturation Current & Temperature Rise Graph

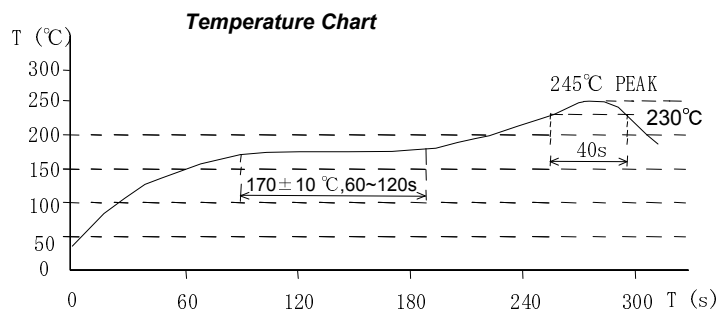
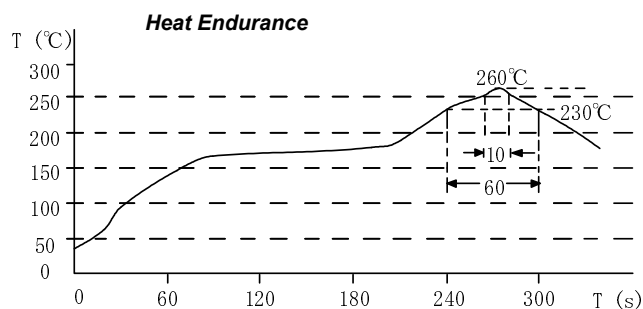
— L (20°C) — L (105°C) — ΔT



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Solder Reflow Condition



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