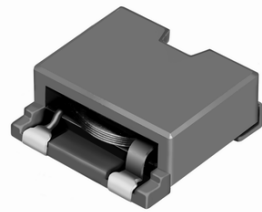


SMD Power Inductor CDEP145



Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 14.9 × 14.9 × 6.0 mm Max.
- Product weight: 3.8g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Qualification to AEC-Q200.

Environmental Data

- Operating temperature range: -40°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C
- Solder reflow temperature: 260 °C peak.

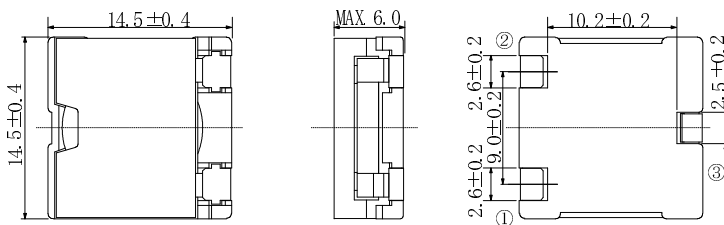
Packaging

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

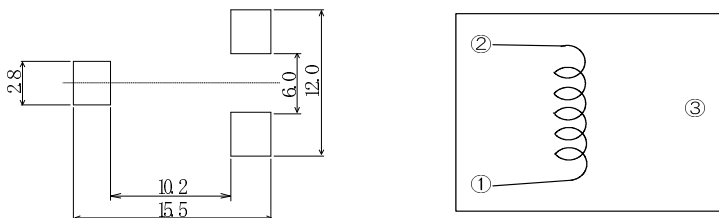
Applications

- Ideally used in personal computer CPU power supply.

Dimension - [mm]



Land pattern and Schematics - [mm]



SMD Power Inductor CDEP145



Electrical Characteristics

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)	
CDEP145NP-0R6MC-170	0R6M	0.68 μH ±20%	1.7(1.4)	30.0	25.6	23.0
CDEP145NP-1R5MC-170	1R5M	1.5 μH ±20%	3.0(2.5)	19.8	17.0	19.5
CDEP145NP-2R7MC-170	2R7M	2.7 μH ±20%	4.6(3.8)	15.2	13.0	15.0
CDEP145NP-4R2MC-170	4R2M	4.2 μH ±20%	7.4(6.2)	12.3	10.6	12.0
CDEP145NP-6R1MC-170	6R1M	6.1 μH ±20%	10.8(9.0)	10.4	8.8	9.5

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)	
CDEP145NP-0R5MC-140	0R5M	0.56 μH ±20%	1.7(1.4)	36.0	31.2	23.0
CDEP145NP-1R2MC-140	1R2M	1.2 μH ±20%	3.0(2.5)	25.0	20.8	19.5
CDEP145NP-2R2MC-140	2R2M	2.2 μH ±20%	4.6(3.8)	19.2	16.0	15.0
CDEP145NP-3R5MC-140	3R5M	3.5 μH ±20%	7.4(6.2)	15.4	13.0	12.0
CDEP145NP-5R0MC-140	5R0M	5.0 μH ±20%	10.8(9.0)	13.1	10.8	9.5

※1. Measuring condition: at 100kHz.

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

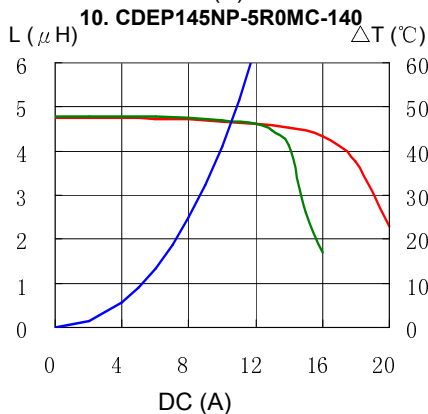
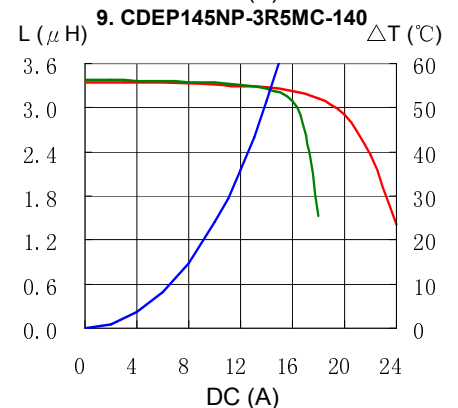
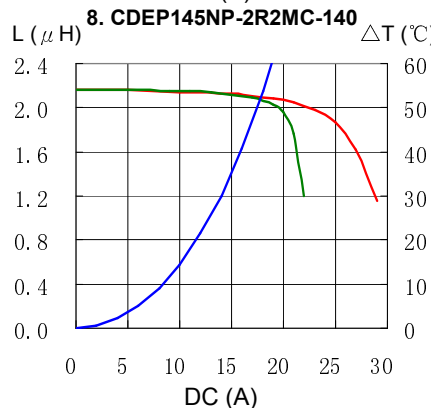
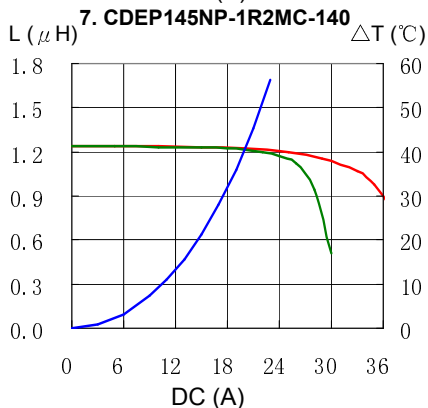
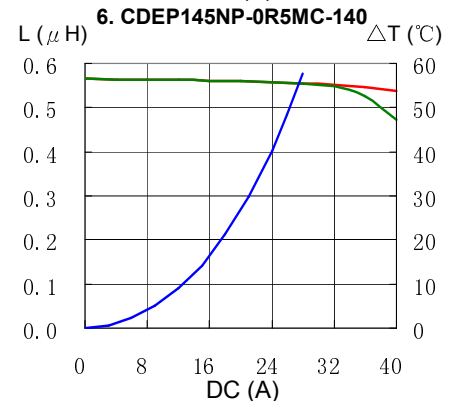
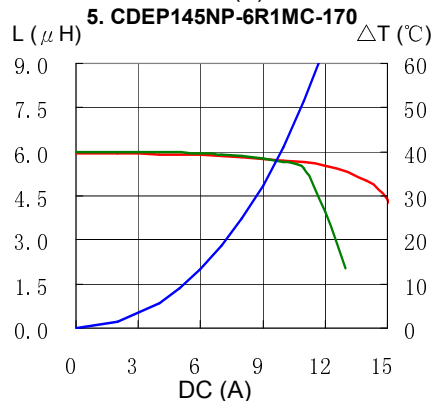
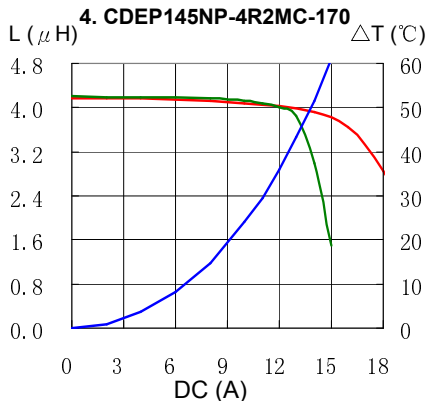
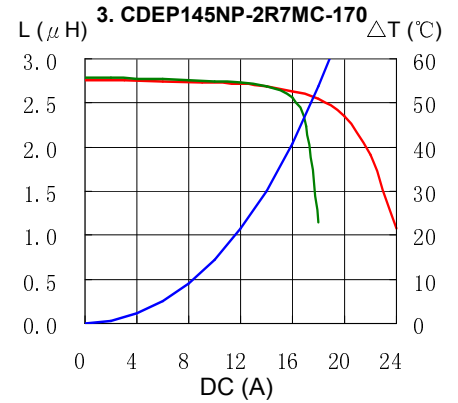
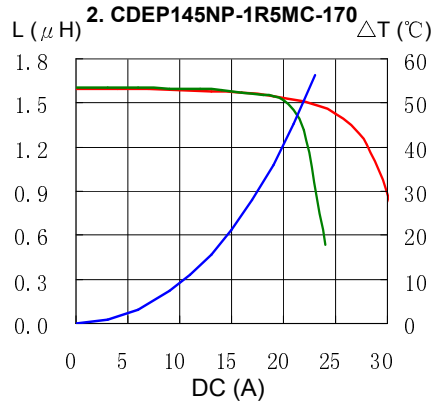
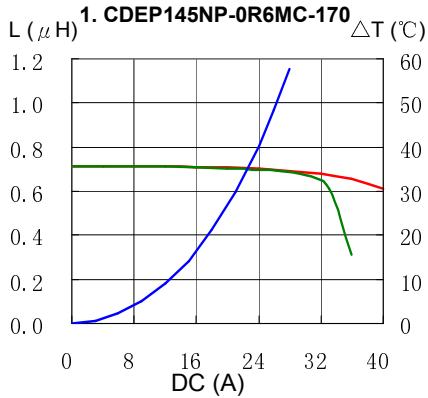
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

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Saturation Current & Temperature Rise Graph

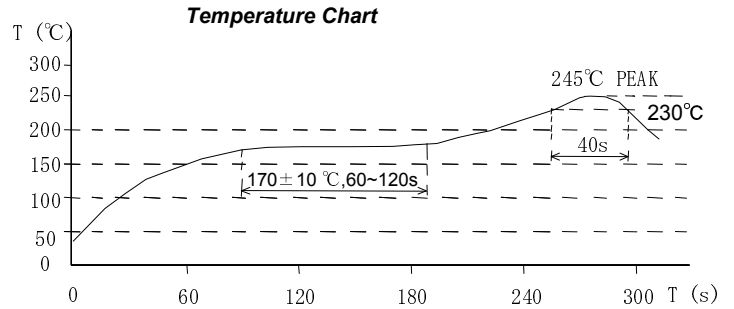
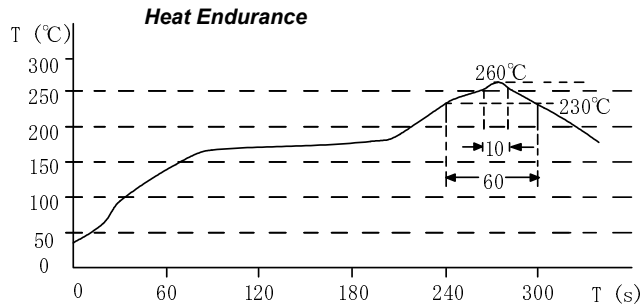
— L (20°C) — L (105°C) — ΔT



SMD Power Inductor CDEP145



Solder Reflow Condition



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