

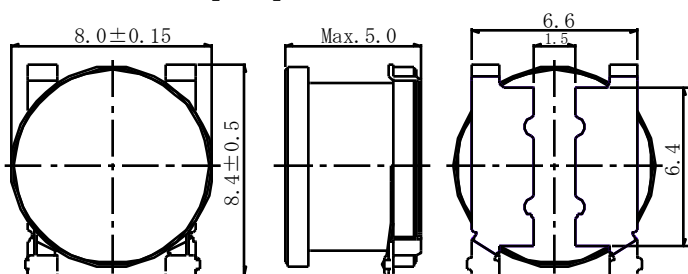
# SMD Power Inductor CDH80D48



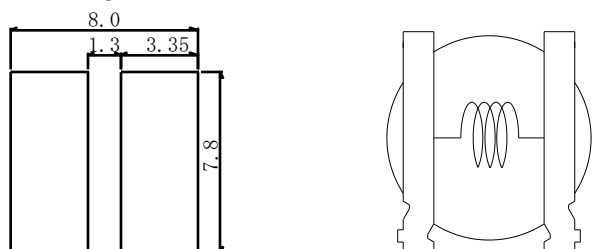
## Description

- Ferrite drum core construction
- Magnetically unshielded
- L × W × H: 8.90 × 8.15 × 5.0 mm Max.
- Product weight: 1.0g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## 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:  $260^{\circ}\text{C}$  peak.

## Packaging

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

## Applications

- Ideally used in input filter of LED lighting.

## Electrical Characteristics

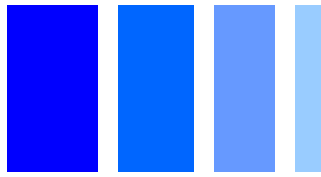
Part No.	Stamp	Inductance ( $\mu\text{H}$ ) [Within] ※1	D.C.R. ( $\Omega$ ) [Max.] (Typ.) (at $20^{\circ}\text{C}$ )	Saturation current (mA) ※2		Temperature rise current (mA) ※3
				at $20^{\circ}\text{C}$	at $105^{\circ}\text{C}$	
CDH80D48NP-101K	101	$100 \pm 10\%$	0.33(0.26)	1020	840	1030
CDH80D48NP-151K	151	$150 \pm 10\%$	0.48(0.38)	830	690	830
CDH80D48NP-221K	221	$220 \pm 10\%$	0.75(0.60)	680	560	650
CDH80D48NP-331K	331	$330 \pm 10\%$	1.00(0.80)	580	480	570
CDH80D48NP-471K	471	$470 \pm 10\%$	1.42(1.18)	470	390	450
CDH80D48NP-681K	681	$680 \pm 10\%$	2.06(1.72)	390	330	370
CDH80D48NP-102K	102	$1000 \pm 10\%$	2.94(2.45)	320	270	310
CDH80D48NP-152K	152	$1500 \pm 10\%$	4.69(3.91)	260	220	250
CDH80D48NP-222K	222	$2200 \pm 10\%$	6.54(5.45)	220	180	210
CDH80D48NP-332K	332	$3300 \pm 10\%$	11.2(9.32)	180	145	160
CDH80D48NP-472K	472	$4700 \pm 10\%$	17.2(14.3)	155	120	125

※1. Measuring condition :at 100kHz

※2. Saturation current: The value of D.C. current when the inductance decreases to 90% of it's nominal value.

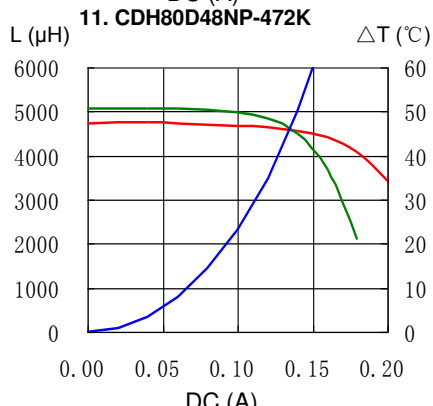
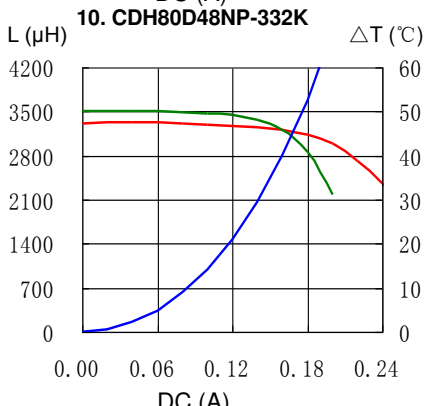
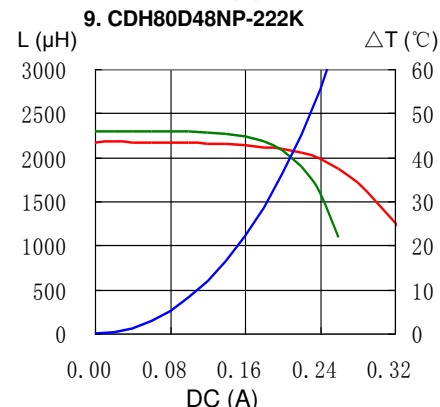
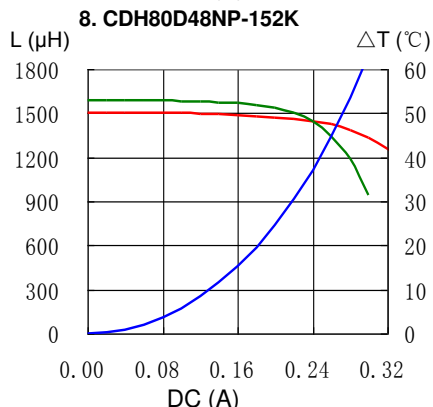
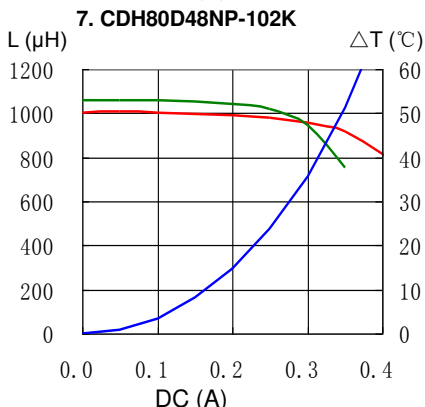
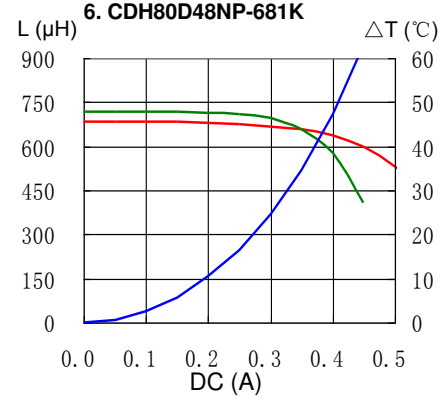
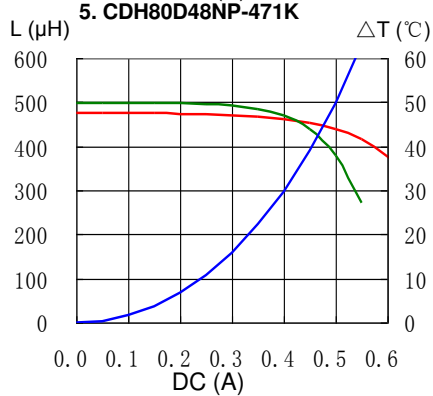
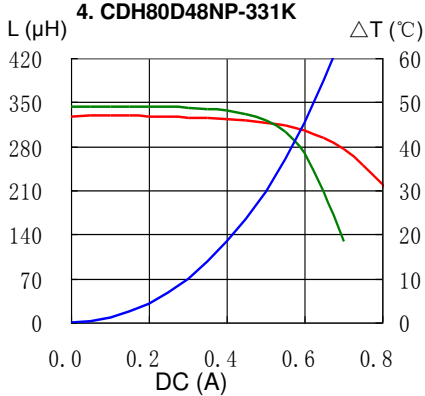
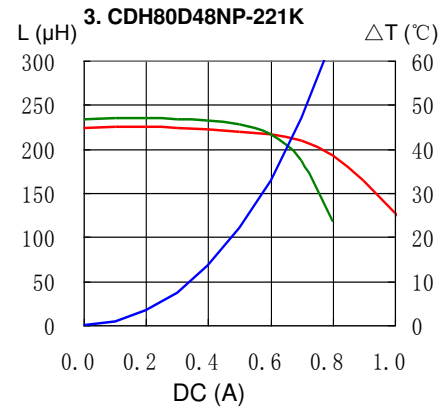
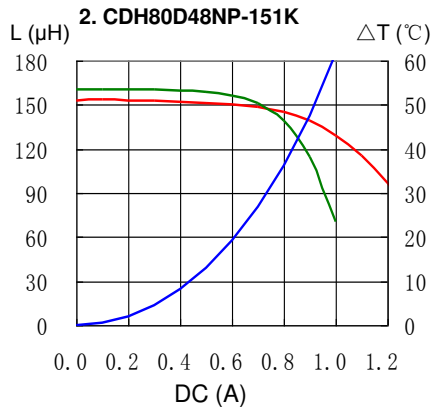
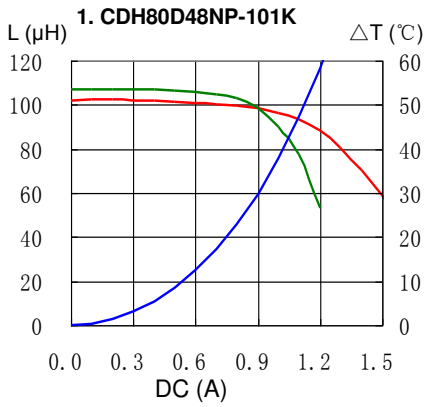
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^{\circ}\text{C}$  ( $T_a = 20^{\circ}\text{C}$ ).

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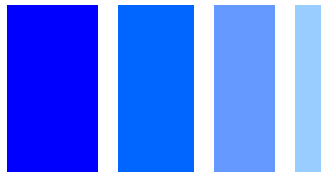


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

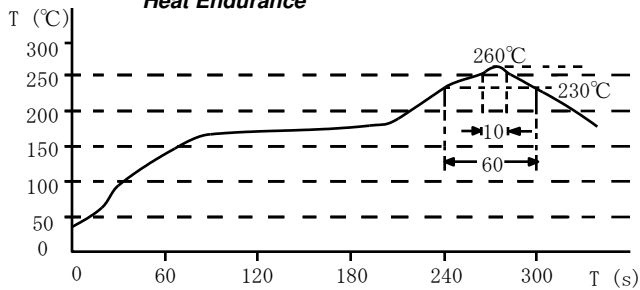


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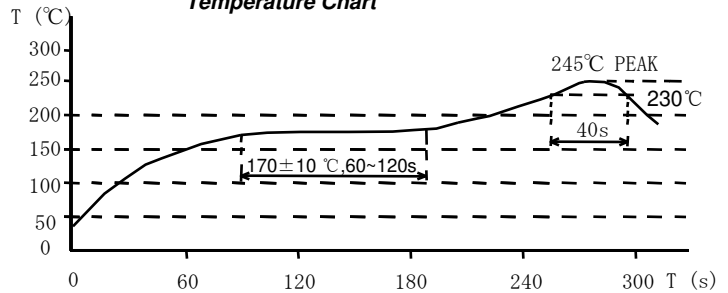


## Solder Reflow Condition

**Heat Endurance**



**Temperature Chart**



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