

# SMD Power Inductor CDRH50D18R/LD



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 5.2 × 5.2 × 2.0mm Max.
- Product weight: 0.16g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## 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.

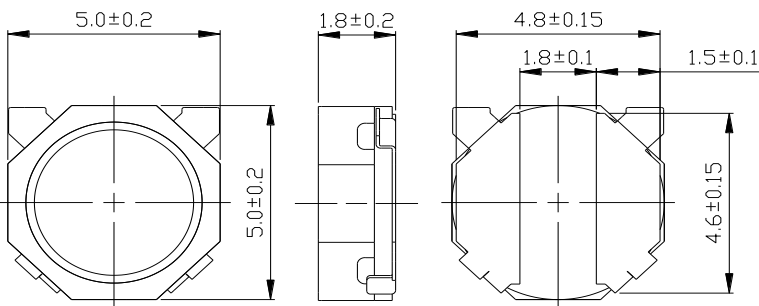
## Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 3000pcs per reel

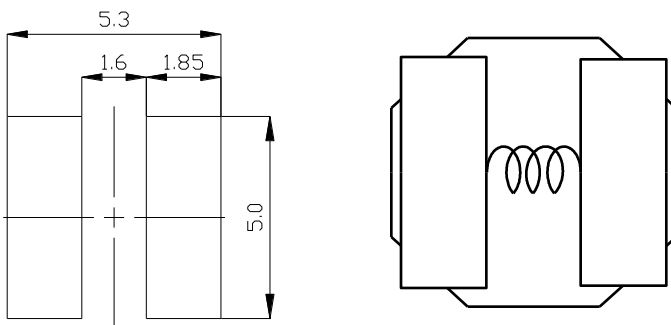
## Applications

- Ideally used in digital single-lens reflex camera etc.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor

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### Electrical Characteristics

Part No.	Stamp	Inductance ( $\mu\text{H}$ ) [Within] ※1	D.C.R. ( $\text{m}\Omega$ ) [Within] (at 20°C)	Saturation current (A) ※2		Temperature rise current (A) ※3
				(at 20°C)	(at 105°C)	
CDRH50D18RLDNP-1R1NC	A	$1.1 \pm 30\%$	$17 \pm 25\%$	2.10	1.72	4.40
CDRH50D18RLDNP-1R6NC	B	$1.6 \pm 30\%$	$20 \pm 25\%$	1.75	1.46	3.95
CDRH50D18RLDNP-2R2NC	C	$2.2 \pm 30\%$	$24 \pm 25\%$	1.50	1.24	3.45
CDRH50D18RLDNP-3R6NC	D	$3.6 \pm 30\%$	$31 \pm 25\%$	1.17	0.98	3.15
CDRH50D18RLDNP-4R7MC	E	$4.7 \pm 20\%$	$34 \pm 25\%$	1.00	0.83	2.98
CDRH50D18RLDNP-6R8MC	F	$6.8 \pm 20\%$	$52 \pm 25\%$	0.85	0.70	2.22
CDRH50D18RLDNP-100MC	G	$10 \pm 20\%$	$79 \pm 25\%$	0.72	0.58	1.80
CDRH50D18RLDNP-150MC	H	$15 \pm 20\%$	$120 \pm 20\%$	0.58	0.47	1.40
CDRH50D18RLDNP-220MC	J	$22 \pm 20\%$	$178 \pm 20\%$	0.48	0.40	1.17
CDRH50D18RLDNP-330MC	K	$33 \pm 20\%$	$255 \pm 20\%$	0.38	0.30	0.97
CDRH50D18RLDNP-470MC	L	$47 \pm 20\%$	$355 \pm 20\%$	0.32	0.26	0.77
CDRH50D18RLDNP-680MC	M	$68 \pm 20\%$	$600 \pm 20\%$	0.28	0.23	0.54
CDRH50D18RLDNP-101MC	N	$100 \pm 20\%$	$760 \pm 20\%$	0.22	0.20	0.50
CDRH50D18RLDNP-151MC	P	$150 \pm 20\%$	$1420 \pm 20\%$	0.18	0.15	0.34

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of it's nominal value.

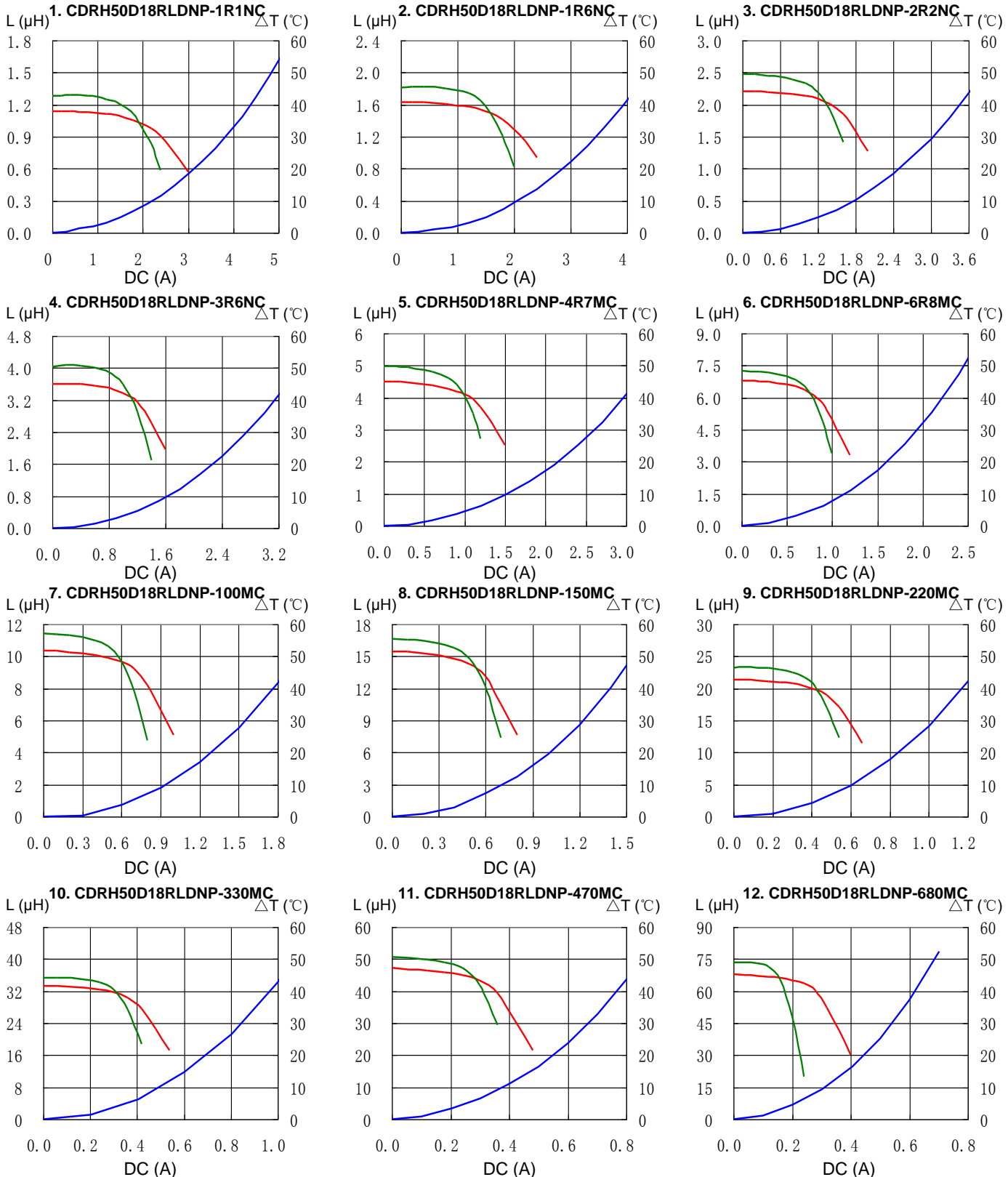
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

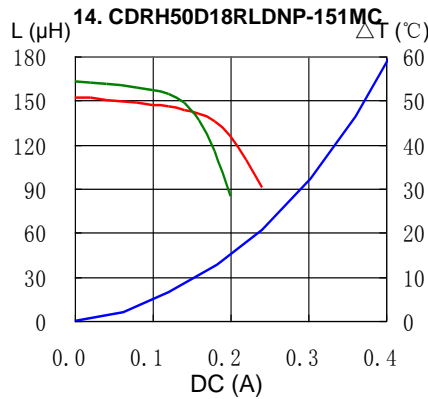
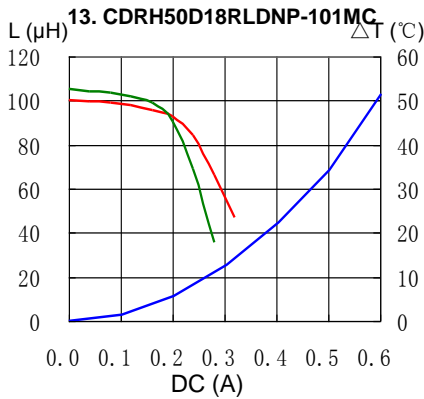


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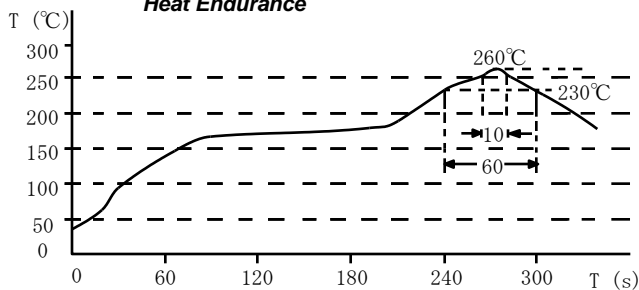
## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

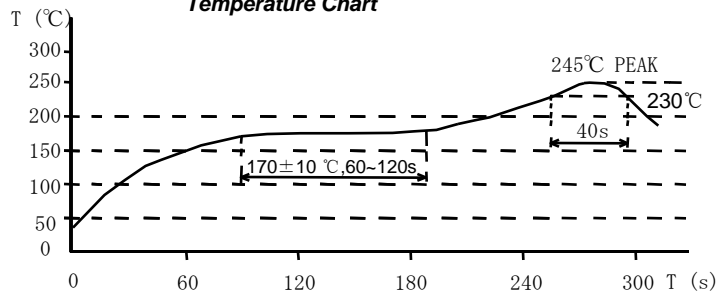


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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