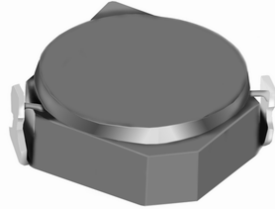


# SMD Power Inductor CDRH6D18/HP



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 7.0 × 7.0 × 2.0 mm Max.
- Product weight: 0.38g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

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

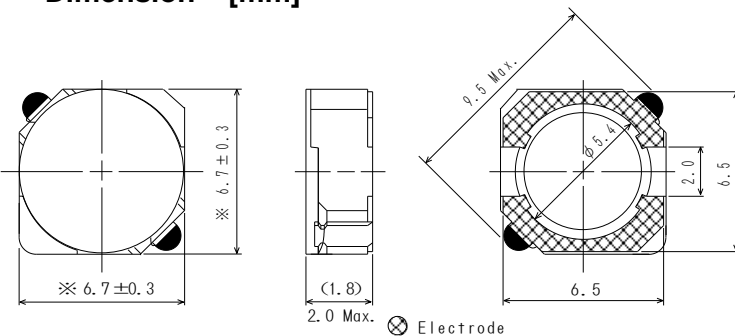
## Packaging

- Carrier tape and reel packaging
- 13" diameter reel
- 2000pcs per reel

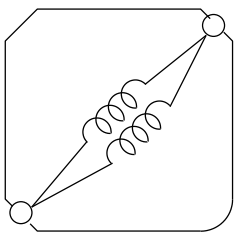
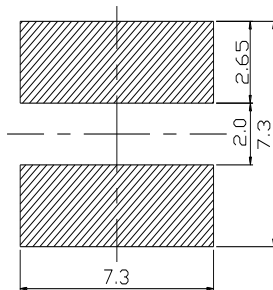
## Applications

- Ideally used in PDA ,HDD,DSC/DVC, etc as DC-DC converter inductors.

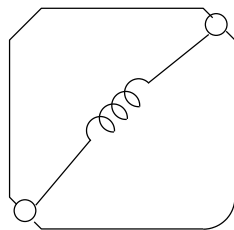
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(1.0µH~8.2µH)



(10µH~120µH)

# SMD Power Inductor

## CDRH6D18/HP



### Electrical Characteristics

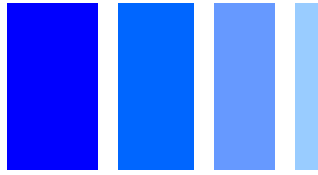
Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [within] ※1	D.C.R. (m $\Omega$ ) [within] (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 105°C	
CDRH6D18HPNP-1R0PC	1R0	1.0 $\pm$ 25%	18.5 $\pm$ 25%	5.50	4.60	4.00
CDRH6D18HPNP-1R8PC	1R8	1.8 $\pm$ 25%	24.0 $\pm$ 25%	4.50	3.50	3.50
CDRH6D18HPNP-2R7PC	2R7	2.7 $\pm$ 25%	35.5 $\pm$ 25%	3.60	3.00	2.75
CDRH6D18HPNP-3R9PC	3R9	3.9 $\pm$ 25%	45.5 $\pm$ 25%	3.00	2.50	2.35
CDRH6D18HPNP-4R7PC	4R7	4.7 $\pm$ 25%	53.0 $\pm$ 25%	2.80	2.35	2.20
CDRH6D18HPNP-6R8PC	6R8	6.8 $\pm$ 25%	82.0 $\pm$ 25%	2.35	1.95	1.70
CDRH6D18HPNP-8R2PC	8R2	8.2 $\pm$ 25%	98.0 $\pm$ 25%	2.10	1.80	1.50
CDRH6D18HPNP-100PC	100	10 $\pm$ 25%	125 $\pm$ 25%	1.95	1.60	1.30
CDRH6D18HPNP-150PC	150	15 $\pm$ 25%	190 $\pm$ 25%	1.60	1.30	1.10
CDRH6D18HPNP-220PC	220	22 $\pm$ 25%	220 $\pm$ 25%	1.35	1.10	1.00
CDRH6D18HPNP-330PC	330	33 $\pm$ 25%	374 $\pm$ 25%	1.10	0.90	0.70
CDRH6D18HPNP-470PC	470	47 $\pm$ 25%	535 $\pm$ 25%	0.90	0.70	0.60
CDRH6D18HPNP-560PC	560	56 $\pm$ 25%	605 $\pm$ 25%	0.85	0.65	0.55
CDRH6D18HPNP-680PC	680	68 $\pm$ 25%	758 $\pm$ 25%	0.70	0.60	0.50
CDRH6D18HPNP-820PC	820	82 $\pm$ 25%	859 $\pm$ 25%	0.65	0.58	0.45
CDRH6D18HPNP-101PC	101	100 $\pm$ 25%	970 $\pm$ 25%	0.60	0.55	0.40
CDRH6D18HPNP-121PC	121	120 $\pm$ 25%	1290 $\pm$ 25%	0.58	0.50	0.35

※1. Inductance measuring condition: at 100kHz.

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

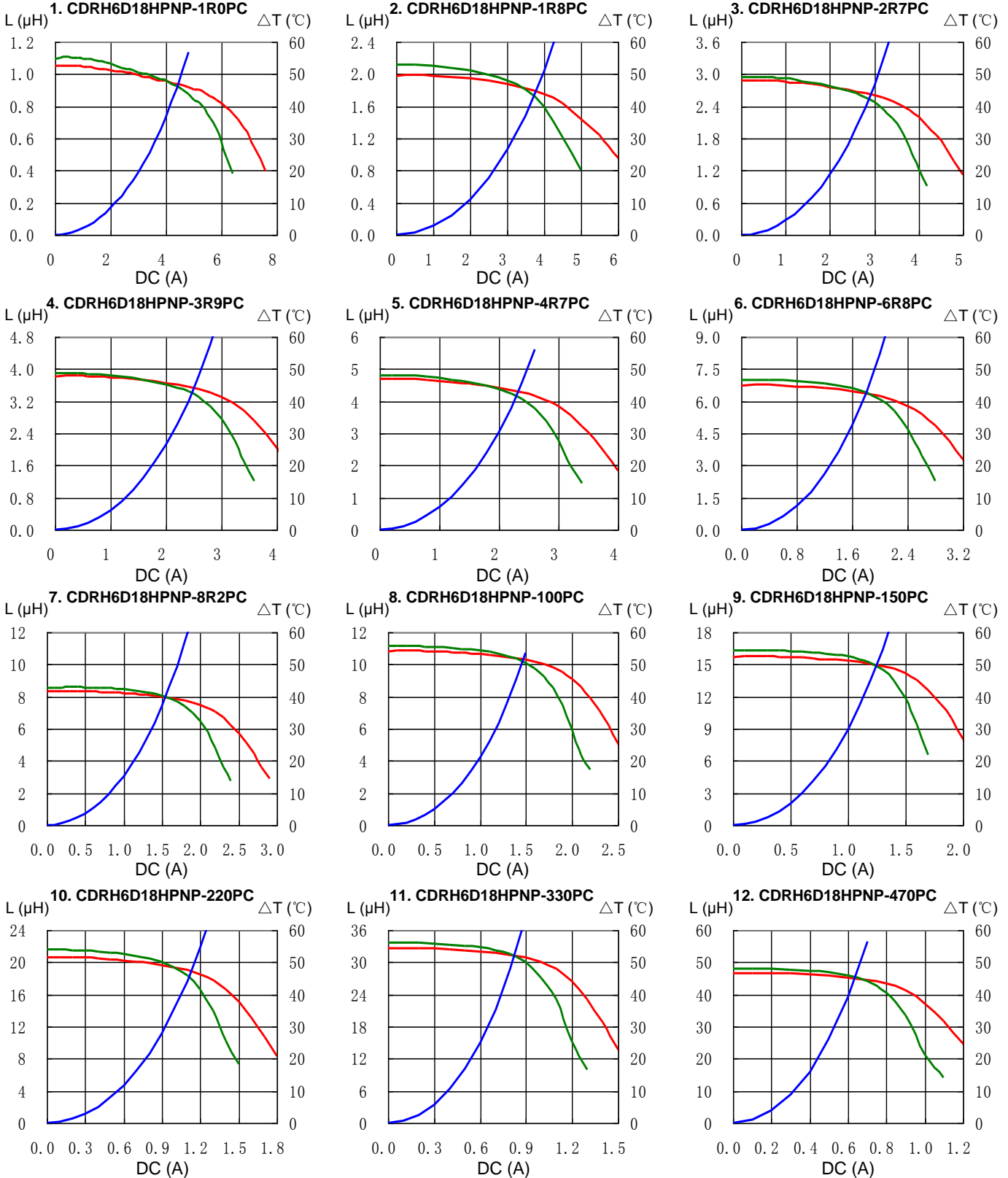
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^\circ\text{C}$  ( $T_a=20^\circ\text{C}$ ).

# SMD Power Inductor CDRH6D18/HP

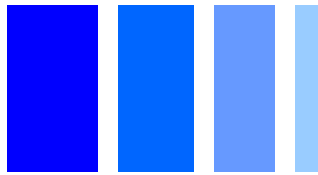


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

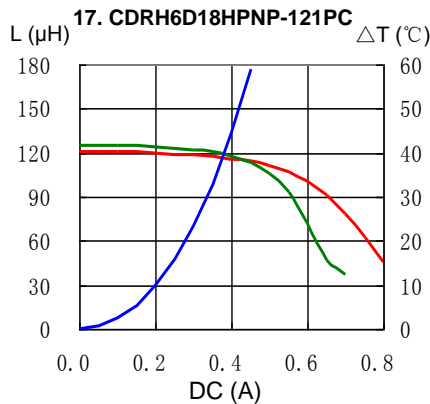
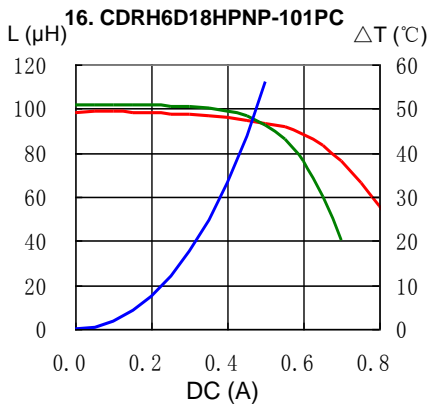
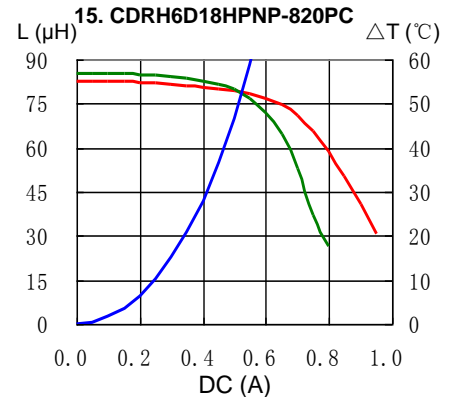
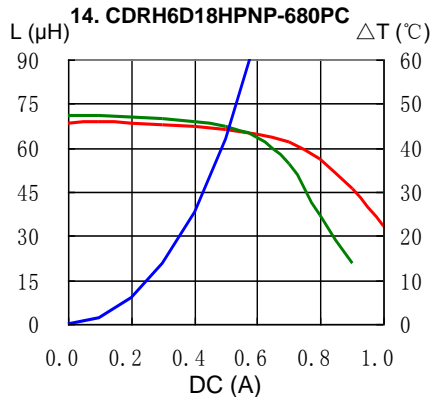
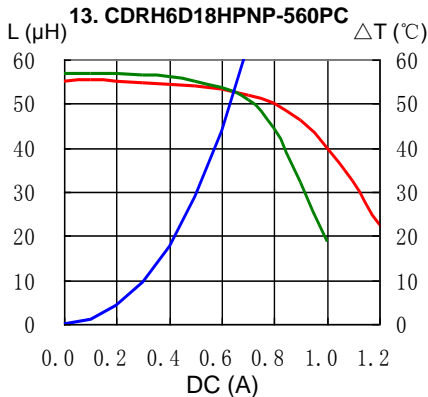


# SMD Power Inductor CDRH6D18/HP



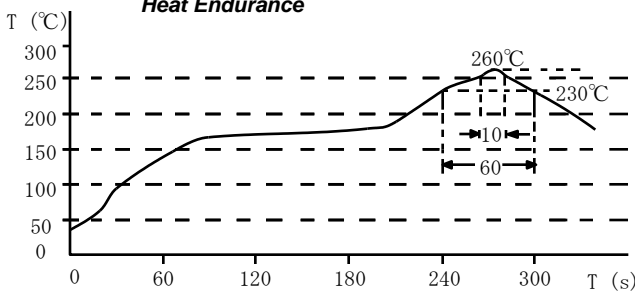
## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

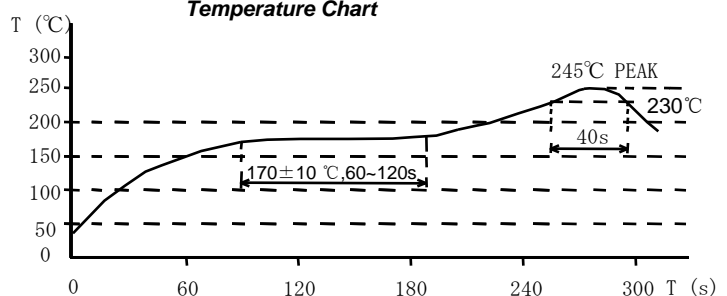


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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