

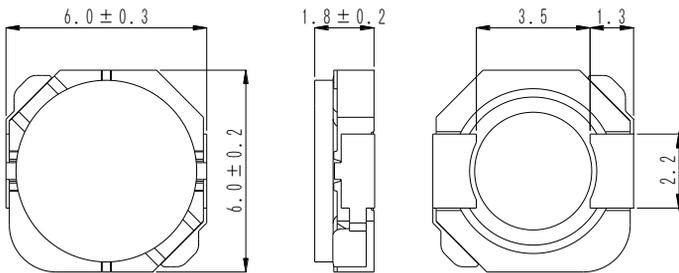
# SMD Power Inductor CDRH5D18B/HP



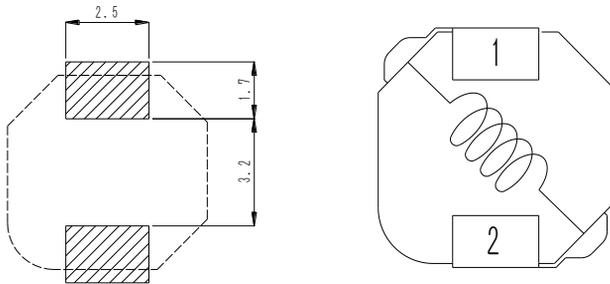
## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.3 × 6.2 × 2.0 mm Max.
- Product weight: 230mg (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## 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
- 12.9" diameter reel
- 2000 pcs per reel

## Applications

- Ideally used in Mobile phone, MP3, PDA, HDD, DSC/DVC, Game machine, etc as DC-DC converter inductors

## Electrical Characteristics

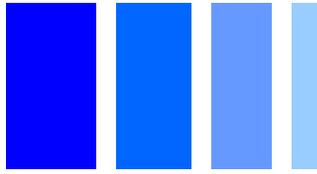
Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [ within ] ※1	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 100°C	
CDRH5D18BHPNP-0R6MC	0R6	0.6 ± 20%	25 (19)	8.2	6.8	4.4
CDRH5D18BHPNP-1R0MC	1R0	1.0 ± 20%	31 (24)	6.6	5.6	3.7
CDRH5D18BHPNP-1R5MC	1R5	1.5 ± 20%	38 (29)	5.3	4.6	2.8
CDRH5D18BHPNP-1R8MC	1R8	1.8 ± 20%	46 (35)	5.0	4.1	2.5
CDRH5D18BHPNP-2R7MC	2R7	2.7 ± 20%	65 (50)	3.9	3.3	2.3
CDRH5D18BHPNP-3R3MC	3R3	3.3 ± 20%	78 (60)	3.4	2.9	2.0
CDRH5D18BHPNP-4R2MC	4R2	4.2 ± 20%	98 (75)	3.1	2.5	1.8
CDRH5D18BHPNP-5R0MC	5R0	5.0 ± 20%	109 (84)	2.7	2.4	1.7

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

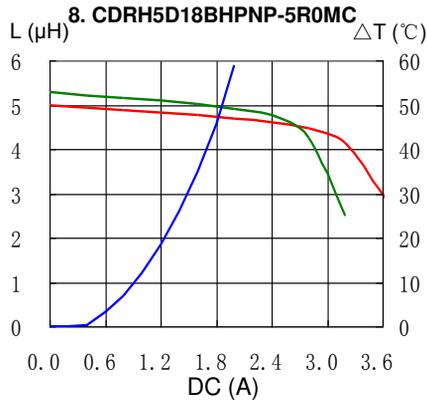
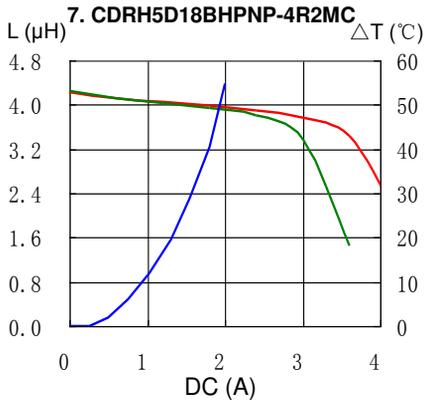
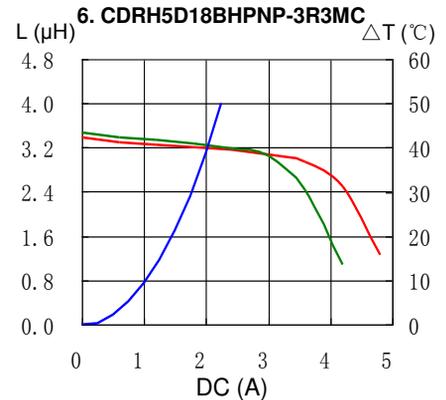
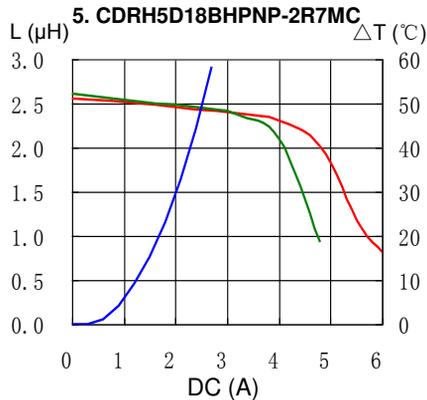
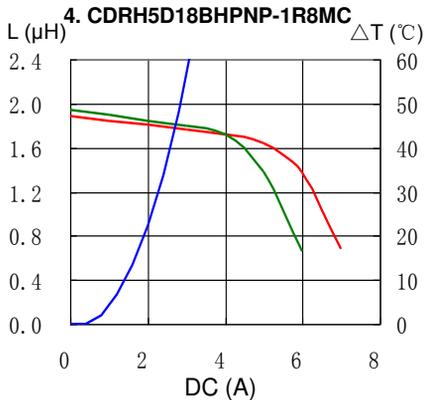
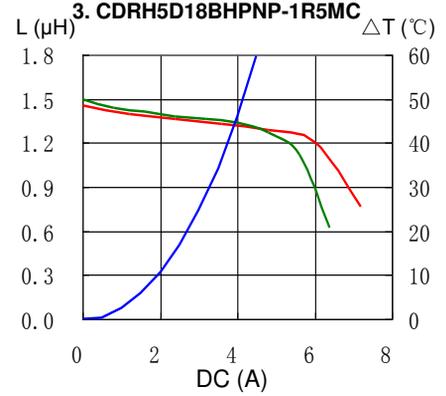
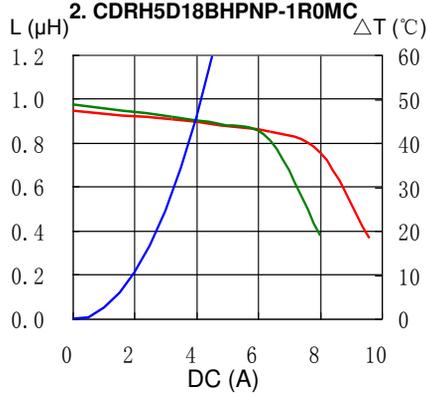
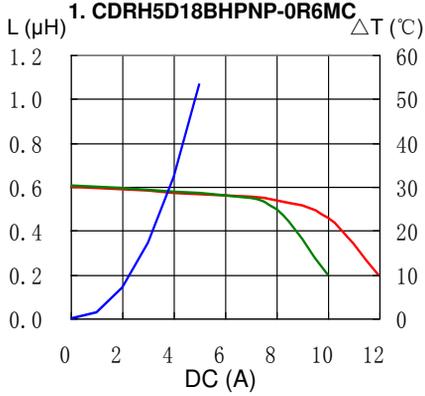
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

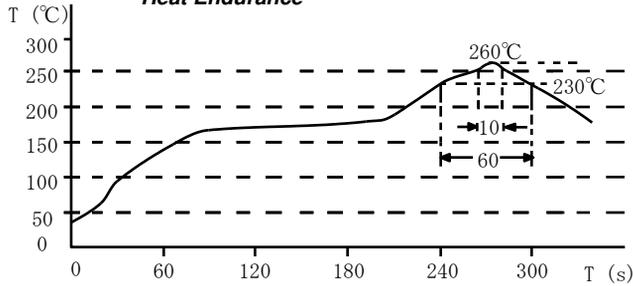


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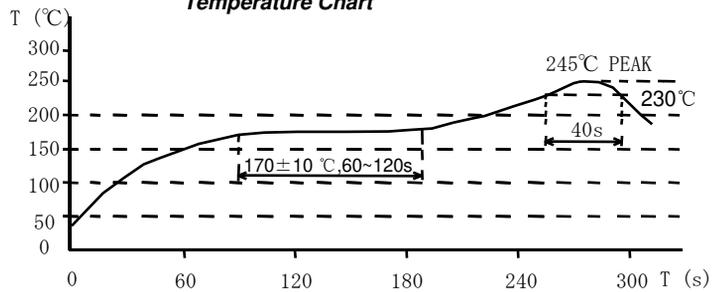


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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