

# SMD Power Inductor CDH5D16/S



Halogen Free



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 6.0 × 6.0 × 1.7 mm Max.
- Product weight: 0.2g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## 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.

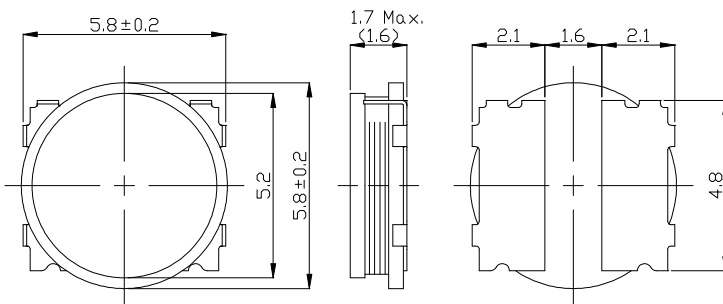
## Packaging

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

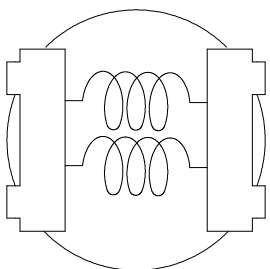
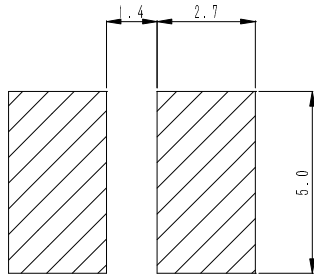
## Applications

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

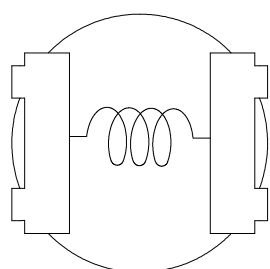
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(1.1 μH ~ 3.1 μH)



(4.7 μH ~ 33 μH)

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## Electrical Characteristics

Part No.	Stamp	Inductance ( $\mu$ H) [Within] ※1	D.C.R. (m $\Omega$ ) [Within] (at 20°C)	Saturation Current (A)※2 (at20°C)	Temperature rise current (A) ※3
CDH5D16SHF-1R1MC	1R1	1.1 $\pm$ 20%	23 $\pm$ 20%	4.72	4.05
CDH5D16SHF-1R5MC	1R5	1.5 $\pm$ 20%	28 $\pm$ 20%	4.08	3.70
CDH5D16SHF-2R5MC	2R5	2.5 $\pm$ 20%	40 $\pm$ 20%	3.26	3.10
CDH5D16SHF-3R1MC	3R1	3.1 $\pm$ 20%	46 $\pm$ 20%	2.96	2.90
CDH5D16SHF-4R7MC	4R7	4.7 $\pm$ 20%	69 $\pm$ 20%	2.40	2.32
CDH5D16SHF-6R8MC	6R8	6.8 $\pm$ 20%	97 $\pm$ 20%	2.00	1.90
CDH5D16SHF-100MC	100	10 $\pm$ 20%	120 $\pm$ 20%	1.65	1.68
CDH5D16SHF-150MC	150	15 $\pm$ 20%	205 $\pm$ 20%	1.34	1.24
CDH5D16SHF-220MC	220	22 $\pm$ 20%	311 $\pm$ 20%	1.10	1.03
CDH5D16SHF-330MC	330	33 $\pm$ 20%	465 $\pm$ 20%	0.90	0.84

※1. Inductance measuring condition: at 100kHz.

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

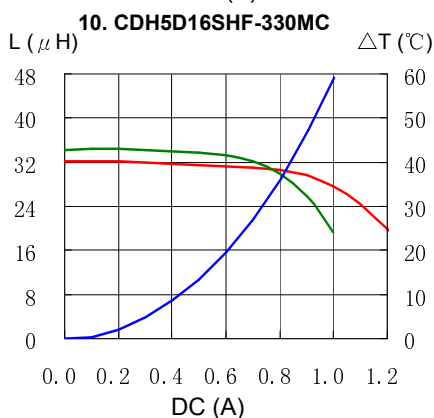
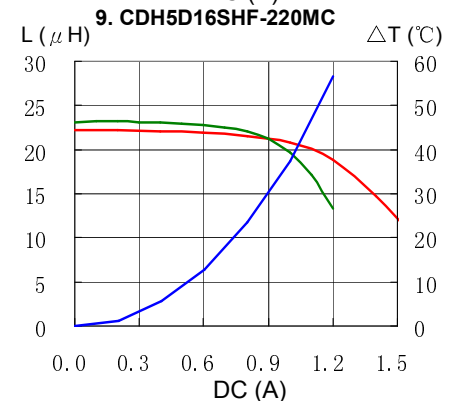
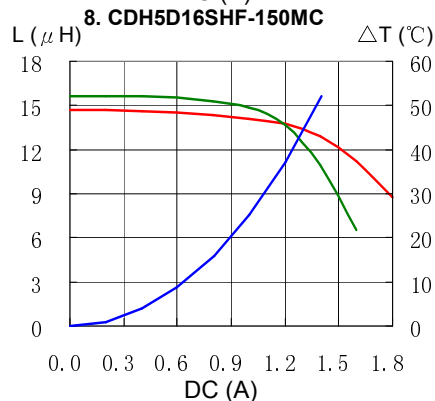
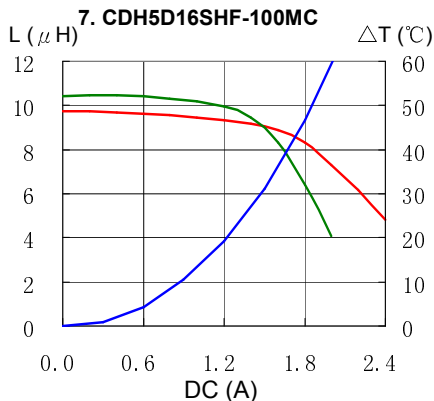
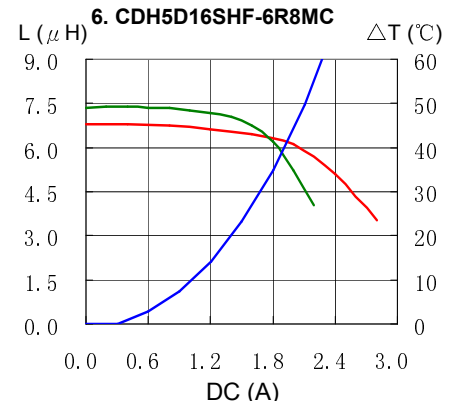
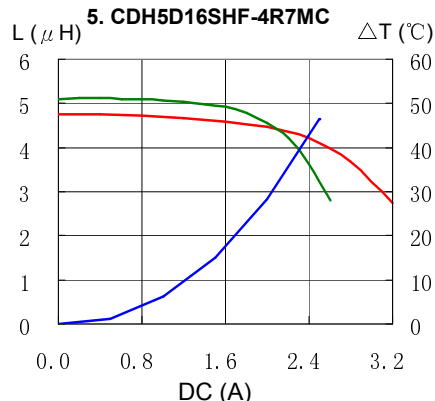
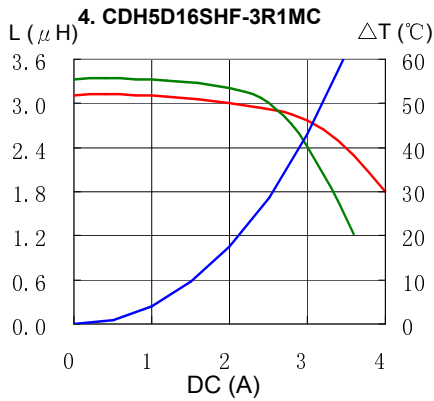
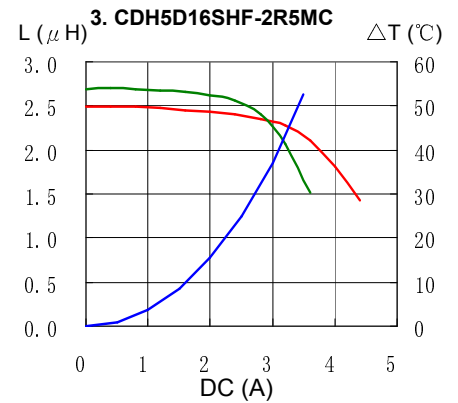
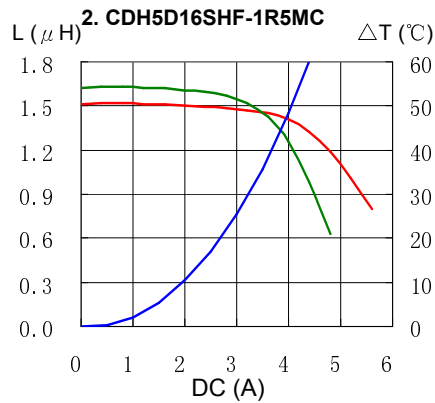
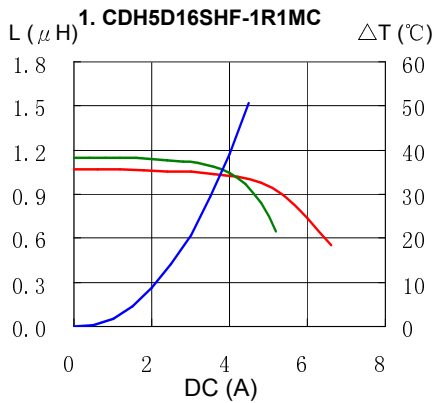
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

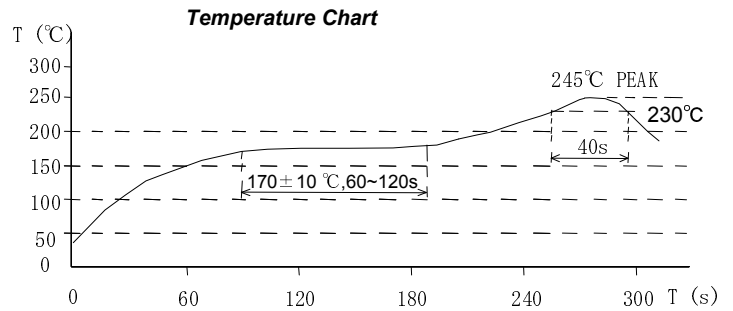
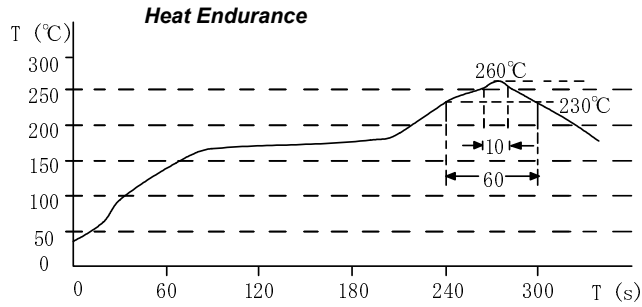
— L (20°C) — L (105°C) —  $\Delta T$



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## Solder Reflow Condition



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