

# SMD Power Inductor CDRH6D12



Halogen Free



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.7 × 6.7 × 1.5 mm Max.
- Product weight: 165mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Environmental Data

- Operating temperature range: -40°C~+100°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+100°C
- Solder reflow temperature: 260 °C peak.

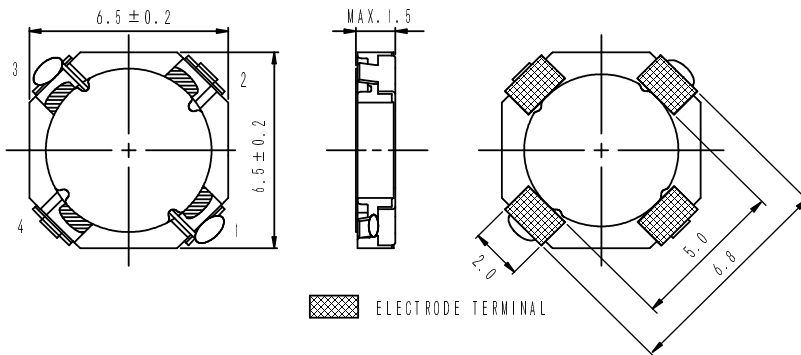
## Packaging

- Carrier tape and reel packaging
- 13.0" diameter reel
- 1000pcs per reel

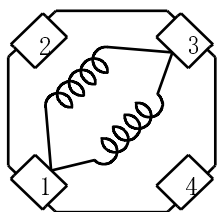
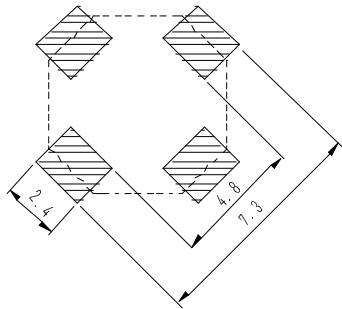
## Applications

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

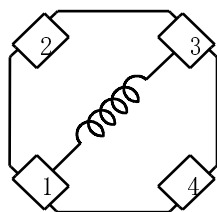
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(1.0 μH ~ 22 μH)



(33 μH ~ 68 μH)

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## Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [within] ※1	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
CDRH6D12-1R0NC	1R0	1.0 $\pm$ 30%	37.5(30.0)	3.50	2.80
CDRH6D12-1R5NC	1R5	1.5 $\pm$ 30%	41.3(33.0)	2.80	2.50
CDRH6D12-2R2NC	2R2	2.2 $\pm$ 30%	50.0(40.0)	2.50	2.30
CDRH6D12-2R6NC	2R6	2.6 $\pm$ 30%	56.3(45.0)	2.30	2.10
CDRH6D12-3R3NC	3R3	3.3 $\pm$ 30%	62.5(50.0)	2.20	1.90
CDRH6D12-4R2NC	4R2	4.2 $\pm$ 30%	75.0(60.0)	1.90	1.80
CDRH6D12-6R4NC	6R4	6.4 $\pm$ 30%	119.0(95.0)	1.50	1.40
CDRH6D12-100NC	100	10.0 $\pm$ 30%	165.0(132.0)	1.20	1.10
CDRH6D12-150NC	150	15.0 $\pm$ 30%	243.8(195.0)	0.95	0.90
CDRH6D12-220NC	220	22.0 $\pm$ 30%	325.0(260.0)	0.80	0.75
CDRH6D12-330NC	330	33.0 $\pm$ 30%	500.0(400.0)	0.65	0.60
CDRH6D12-470NC	470	47.0 $\pm$ 30%	675.0(540.0)	0.55	0.50
CDRH6D12-680NC	680	68.0 $\pm$ 30%	918.8(735.0)	0.45	0.40

※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.

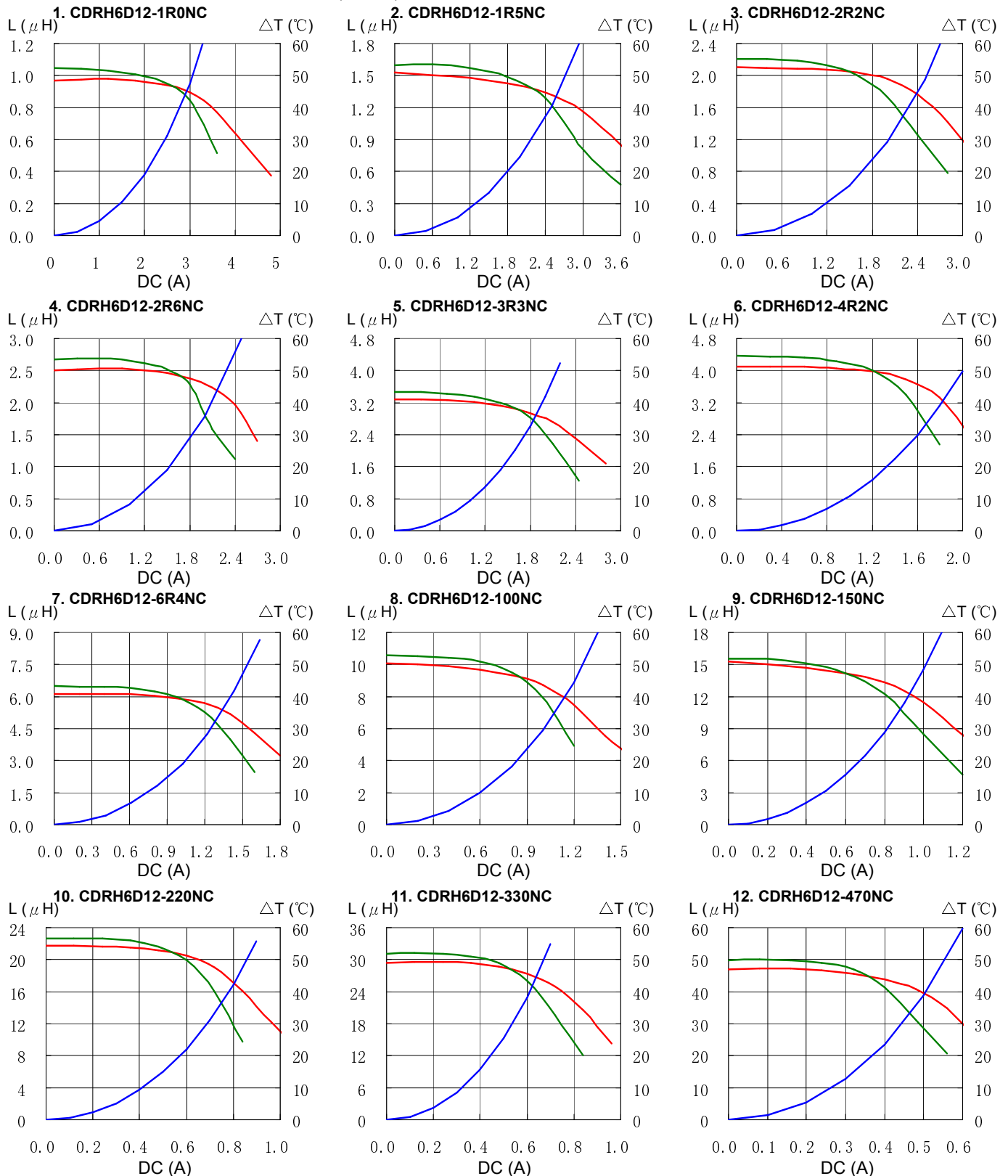
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

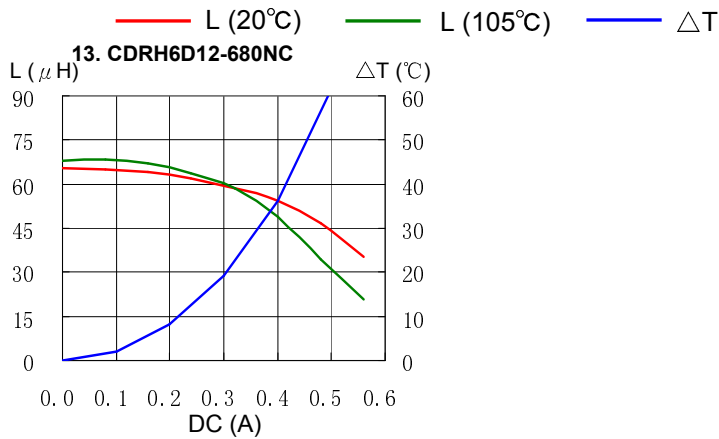
— L (20°C) — L (105°C) —  $\Delta T$



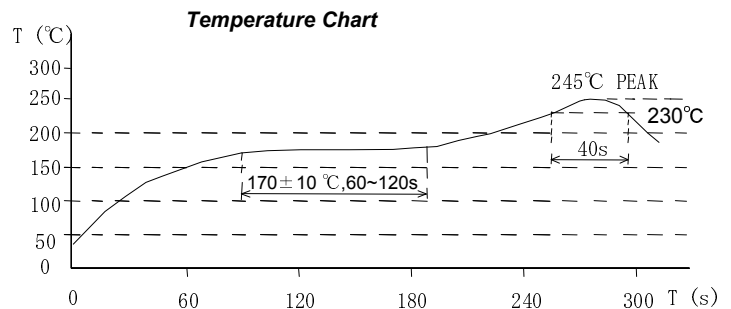
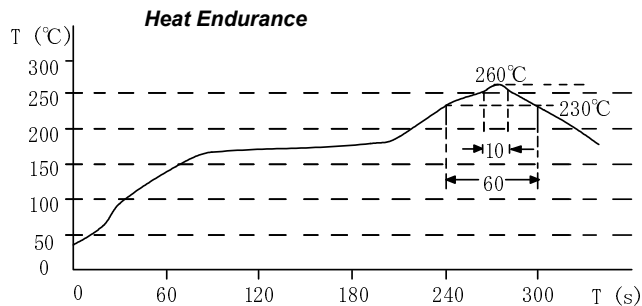
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## Saturation Current & Temperature Rise Graph



## Solder Reflow Condition



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