

# SMD Power Inductor CDRH6D12/LD



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

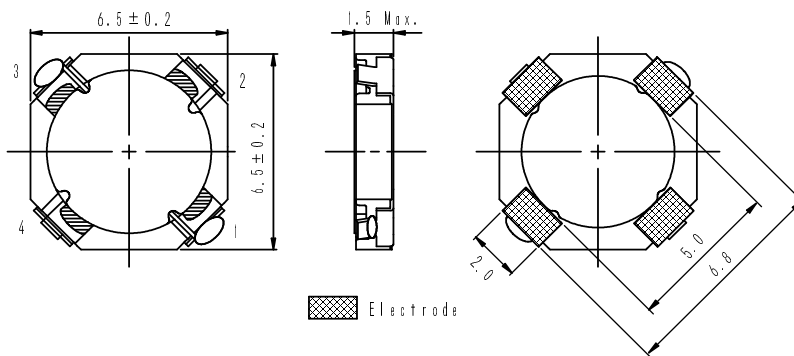
## Packaging

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

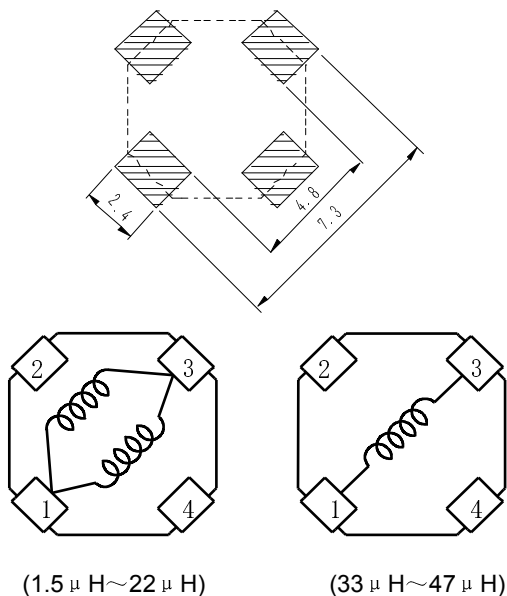
## Applications

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

## Dimension - [mm]



## Land pattern and Schematics - [mm]



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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
				at 20°C	at 105°C	
CDRH6D12LDNP-1R5NC	1R5	1.5 $\pm$ 30%	37.4(30.0)	2.60	2.10	2.70
CDRH6D12LDNP-2R2NC	2R2	2.2 $\pm$ 30%	43.5(34.8)	2.20	1.80	2.50
CDRH6D12LDNP-2R7NC	2R7	2.7 $\pm$ 30%	51.2(40.9)	1.95	1.55	2.20
CDRH6D12LDNP-3R3NC	3R3	3.3 $\pm$ 30%	58.8(46.9)	1.80	1.45	2.10
CDRH6D12LDNP-4R7NC	4R7	4.7 $\pm$ 30%	74.8(59.8)	1.50	1.20	1.90
CDRH6D12LDNP-5R6NC	5R6	5.6 $\pm$ 30%	83.1(66.4)	1.35	1.10	1.65
CDRH6D12LDNP-6R8NC	6R8	6.8 $\pm$ 30%	95.3(76.3)	1.25	1.00	1.60
CDRH6D12LDNP-100NC	100	10.0 $\pm$ 25%	132(105)	1.00	0.82	1.30
CDRH6D12LDNP-150NC	150	15.0 $\pm$ 25%	180(144)	0.85	0.70	1.10
CDRH6D12LDNP-220NC	220	22.0 $\pm$ 25%	265(212)	0.68	0.55	0.90
CDRH6D12LDNP-330NC	330	33.0 $\pm$ 25%	436(349)	0.60	0.48	0.65
CDRH6D12LDNP-470NC	470	47.0 $\pm$ 25%	603(482)	0.48	0.38	0.55

※1. Inductance measuring condition: at 100kHz.

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

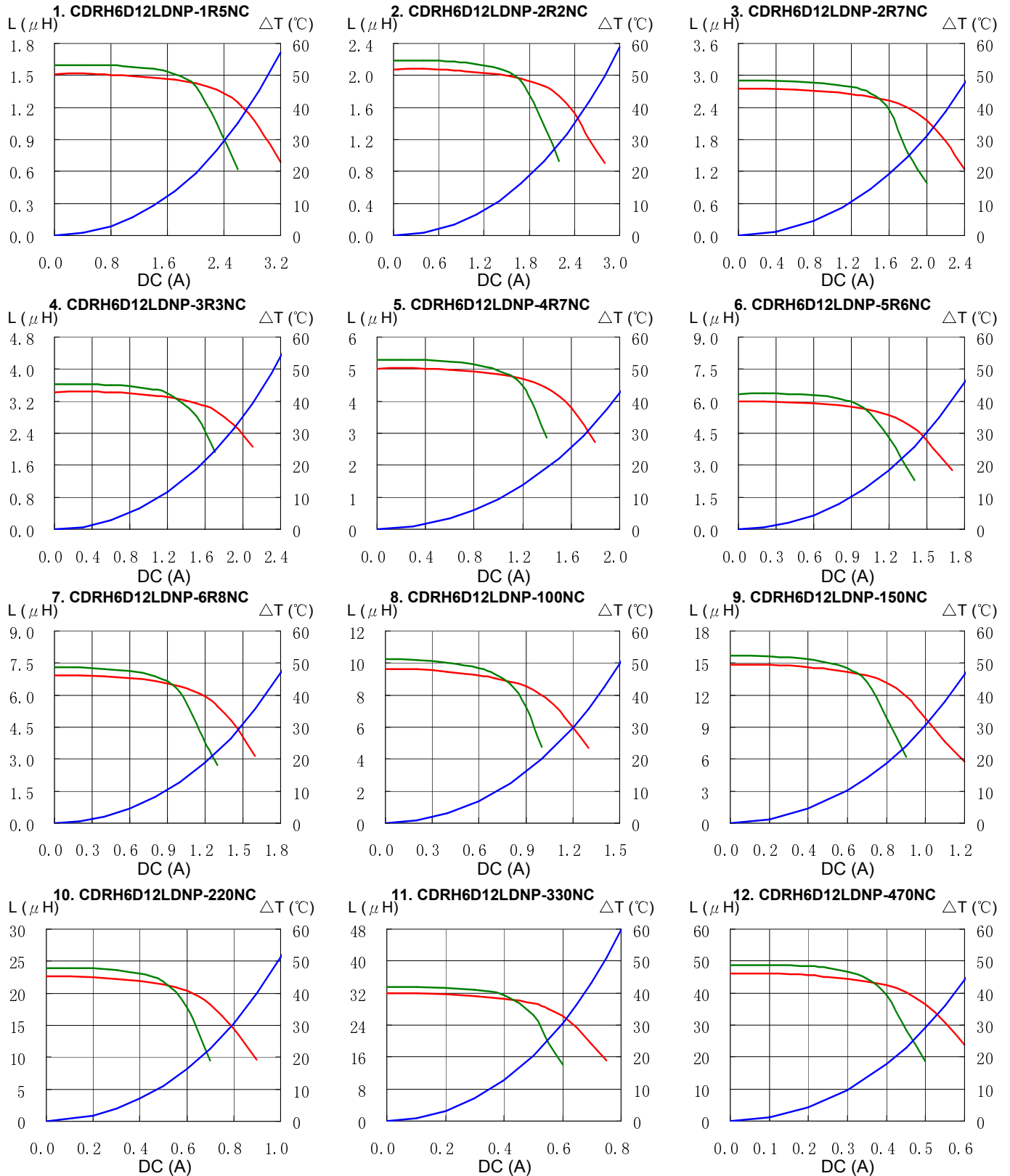
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

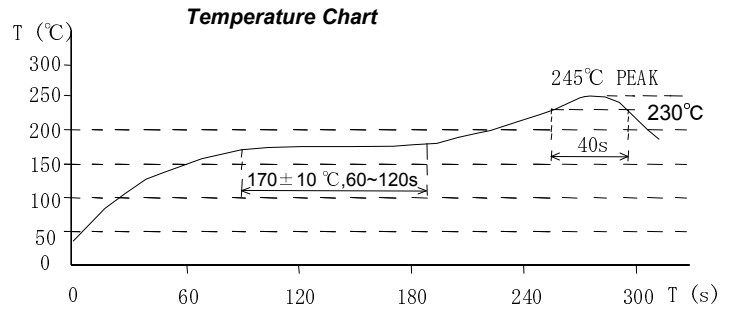
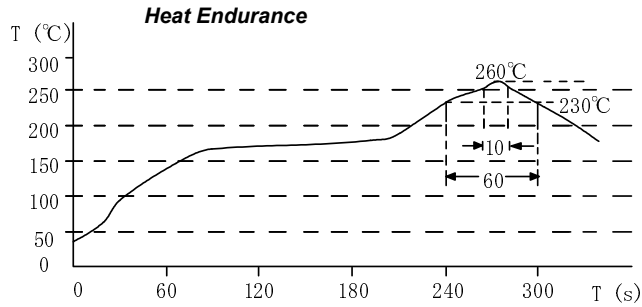
— L (20°C) — L (105°C) —  $\Delta T$



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## Solder Reflow Condition



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