



**THE DATASHEET OF  
CDRH30D18/SNP-100NC**



# SMD Power Inductor CDRH30D18/S



Halogen Free



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 3.2 × 3.2 × 2.0 mm Max.
- Product weight: 64mg (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.

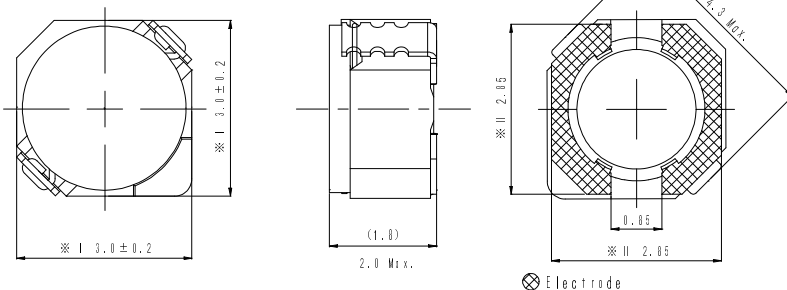
## Packaging

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

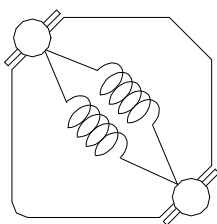
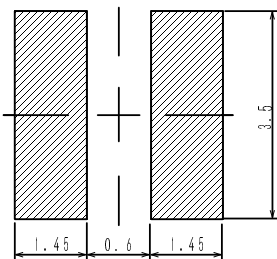
## Applications

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

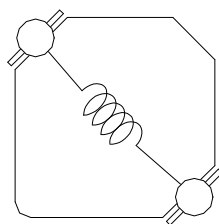
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(0.8 μ H ~ 3.3 μ H)



(4.7 μ H ~ 47 μ H)

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## Electrical Characteristics

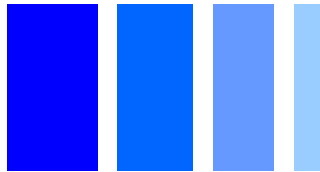
Part Name	Stamp	Inductance ( $\mu$ H) [ within ] ※1	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 105°C	
CDRH30D18SNP-0R8NC	A	0.8 $\pm$ 25%	35.8(28.6)	2.80	2.20	2.65
CDRH30D18SNP-1R2NC	B	1.2 $\pm$ 25%	42.4(33.9)	2.30	1.80	2.30
CDRH30D18SNP-1R5NC	C	1.5 $\pm$ 25%	46.9(37.5)	2.10	1.60	2.20
CDRH30D18SNP-1R8NC	D	1.8 $\pm$ 25%	60.0(48.0)	1.90	1.45	1.85
CDRH30D18SNP-2R2NC	E	2.2 $\pm$ 25%	69.0(55.2)	1.80	1.40	1.70
CDRH30D18SNP-2R7NC	F	2.7 $\pm$ 25%	85.3(68.2)	1.50	1.20	1.50
CDRH30D18SNP-3R3NC	G	3.3 $\pm$ 25%	94.8(75.8)	1.45	1.10	1.40
CDRH30D18SNP-4R7NC	H	4.7 $\pm$ 25%	149(119)	1.15	0.90	1.15
CDRH30D18SNP-5R6NC	I	5.6 $\pm$ 25%	164(131)	1.05	0.80	1.10
CDRH30D18SNP-6R8NC	J	6.8 $\pm$ 25%	196(157)	0.95	0.72	1.00
CDRH30D18SNP-8R2NC	K	8.2 $\pm$ 25%	229(183)	0.90	0.70	0.85
CDRH30D18SNP-100NC	L	10.0 $\pm$ 25%	276(221)	0.82	0.62	0.76
CDRH30D18SNP-150NC	M	15.0 $\pm$ 25%	376(301)	0.65	0.50	0.68
CDRH30D18SNP-220NC	N	22.0 $\pm$ 25%	610(488)	0.55	0.42	0.48
CDRH30D18SNP-330NC	O	33.0 $\pm$ 25%	890(712)	0.45	0.35	0.42
CDRH30D18SNP-470NC	P	47.0 $\pm$ 25%	1310(1050)	0.38	0.29	0.34

※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.

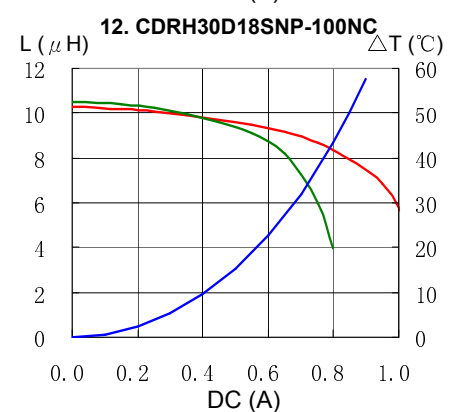
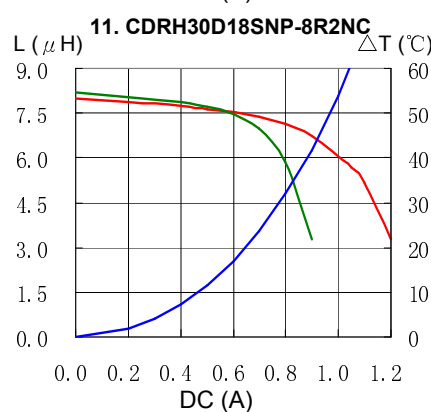
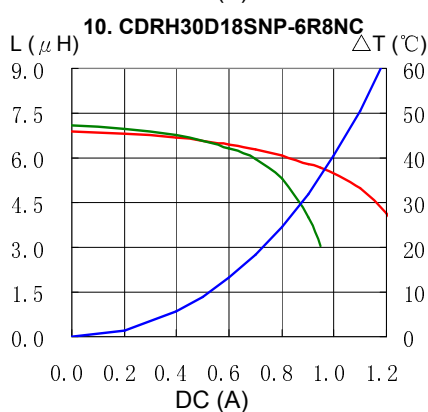
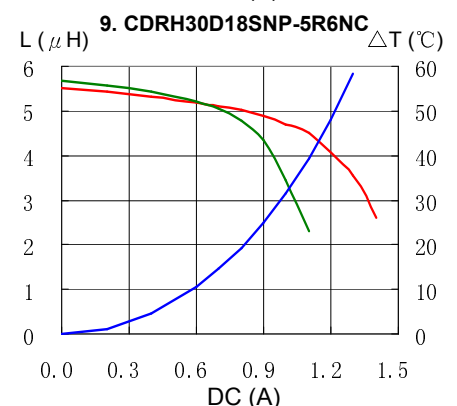
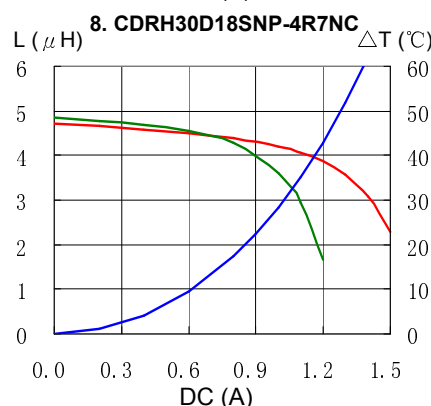
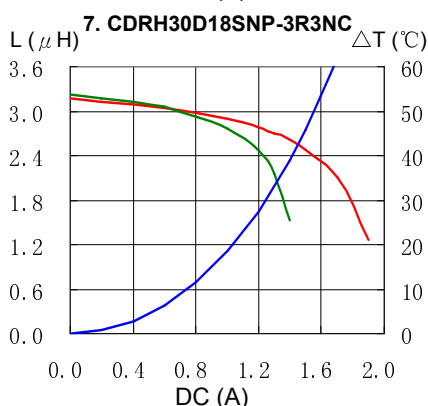
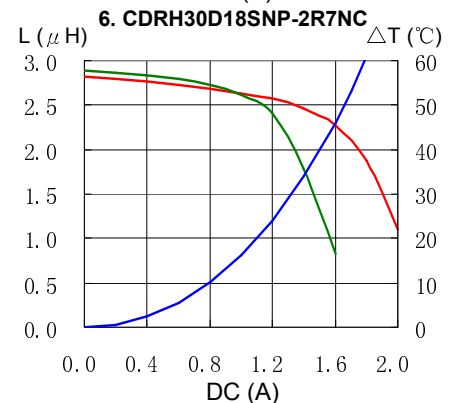
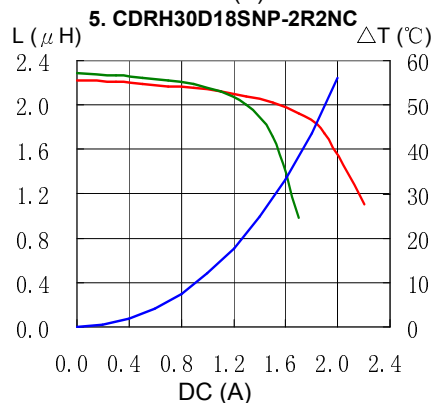
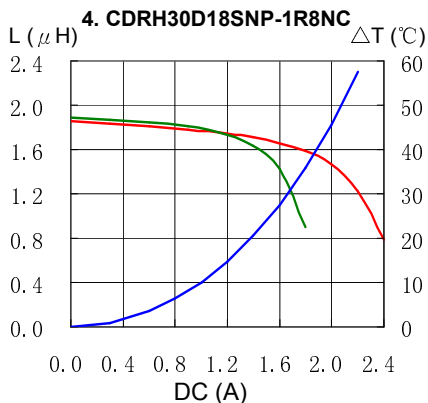
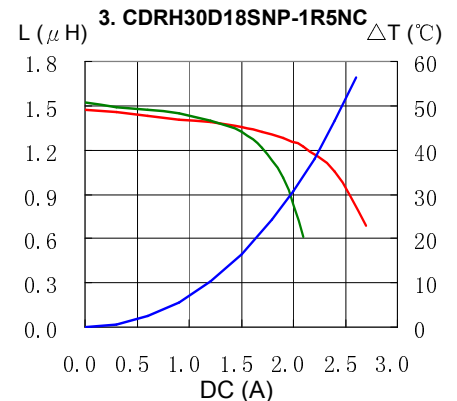
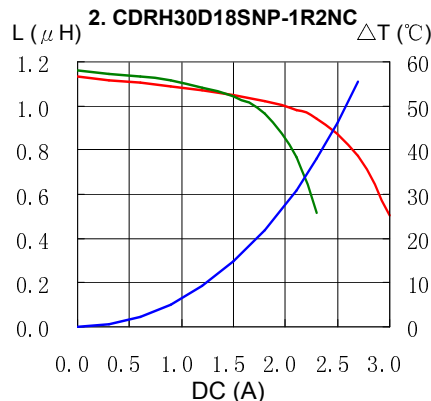
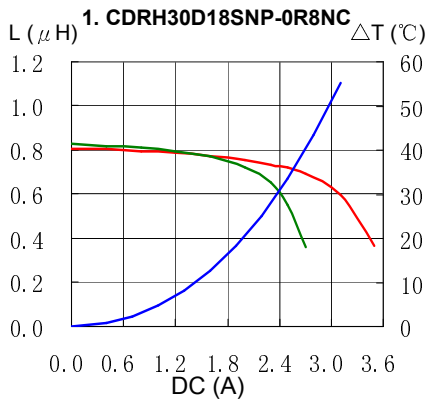
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) — (105°C) —  $\Delta T$

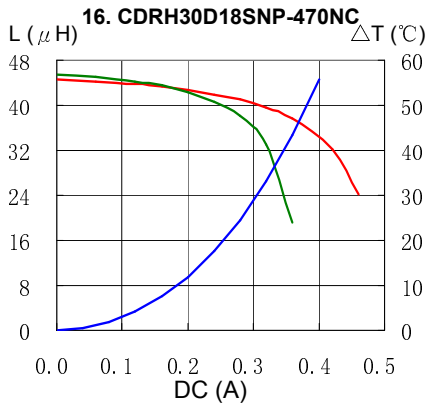
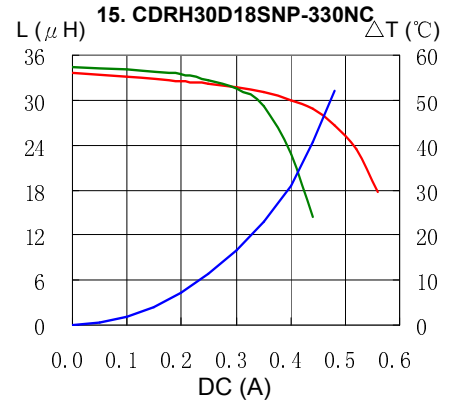
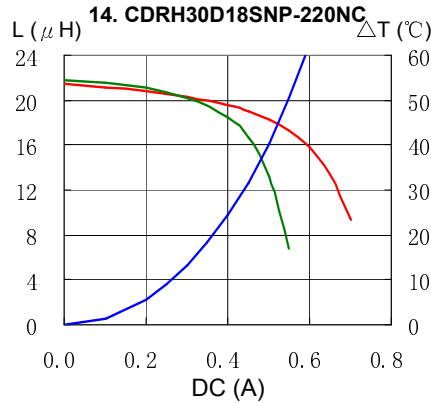
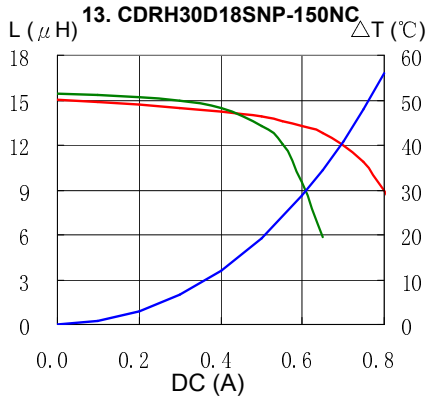


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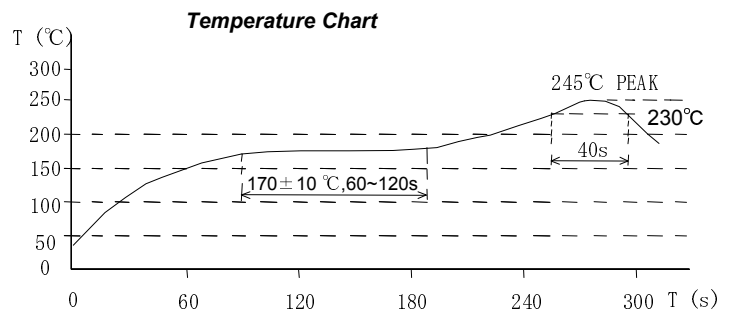
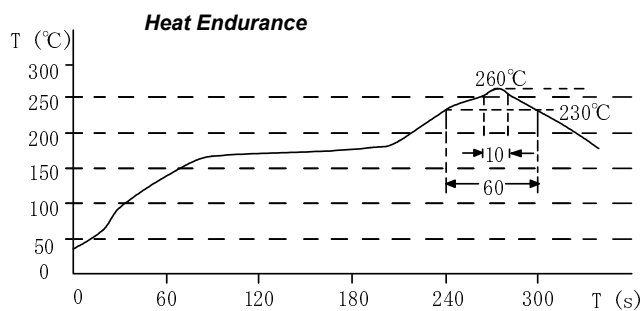


## Saturation Current & Temperature Rise Graph

— L (20°C) — (105°C) —  $\Delta T$



## Solder Reflow Condition



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