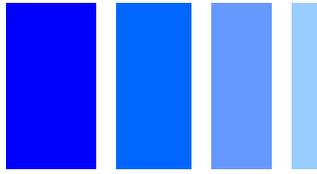


# SMD Power Inductor CDRH103R



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.3 × 3.1 mm Max.
- Product weight: 1.0g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## 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.

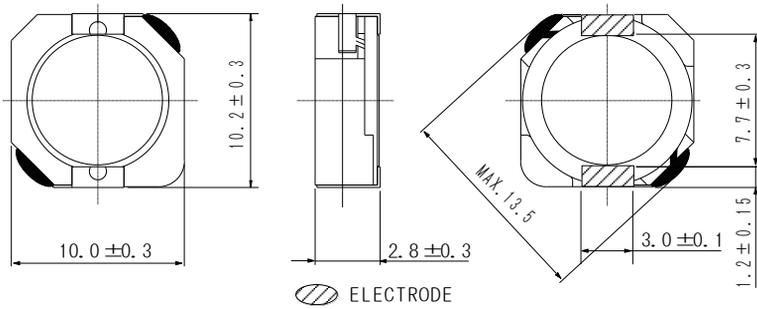
## Packaging

- Carrier tape and reel packaging.
- 12.9" diameter reel.
- 1000 pcs per reel.

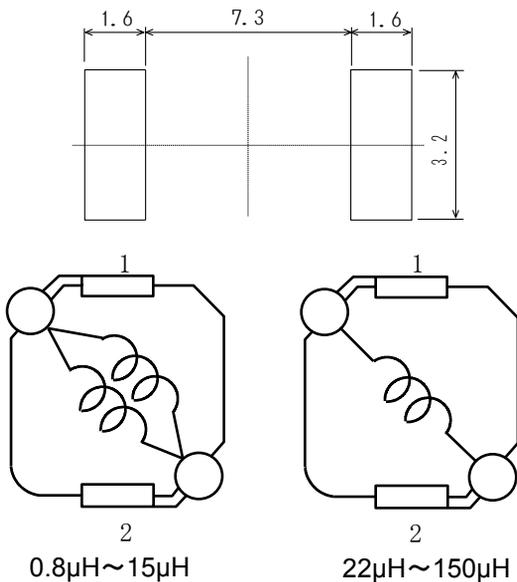
## Applications

- Ideally used in Notebook PC, LCD TV, DVD, Game machine, STB, Projector etc as DC-DC converter inductors.

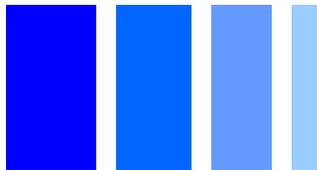
## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor CDRH103R



## Electrical Characteristics

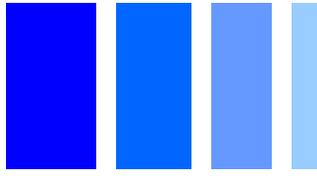
Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [ within ] ※1	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
CDRH103RNP-0R8NC-B	0R8	0.8 $\pm$ 30%	5.7(4.4)	11.2	8.30
CDRH103RNP-1R5NC-B	1R5	1.5 $\pm$ 30%	11.0(8.5)	8.0	5.80
CDRH103RNP-2R2NC-B	2R2	2.2 $\pm$ 30%	16.9(13)	6.7	5.10
CDRH103RNP-3R3NC-B	3R3	3.3 $\pm$ 30%	21.0(16)	5.56	4.70
CDRH103RNP-4R7NC-B	4R7	4.7 $\pm$ 30%	30.0(23)	4.65	4.00
CDRH103RNP-6R8NC-B	6R8	6.8 $\pm$ 30%	35.0(27)	3.84	3.60
CDRH103RNP-8R2NC-B	8R2	8.2 $\pm$ 30%	50.0(38)	3.54	3.00
CDRH103RNP-100NC-B	100	10 $\pm$ 30%	59.0(45)	3.18	2.80
CDRH103RNP-150NC-B	150	15 $\pm$ 30%	91.0(70)	2.60	2.05
CDRH103RNP-220NC-B	220	22 $\pm$ 30%	143(110)	2.16	1.60
CDRH103RNP-330NC-B	330	33 $\pm$ 30%	202(155)	1.74	1.35
CDRH103RNP-470NC-B	470	47 $\pm$ 30%	299(230)	1.43	1.20
CDRH103RNP-560NC-B	560	56 $\pm$ 30%	325(250)	1.36	1.15
CDRH103RNP-680NC-B	680	68 $\pm$ 30%	429(330)	1.22	0.95
CDRH103RNP-820NC-B	820	82 $\pm$ 30%	494(380)	1.14	0.80
CDRH103RNP-101NC-B	101	100 $\pm$ 30%	683(525)	1.02	0.70
CDRH103RNP-121NC-B	121	120 $\pm$ 30%	754(580)	0.89	0.65
CDRH103RNP-151NC-B	151	150 $\pm$ 30%	871(670)	0.84	0.51

※1 Inductance measuring condition: at 100kHz.

※2 The saturation current: This indicates the value of DC current when the inductance decreases to 65% of its nominal.

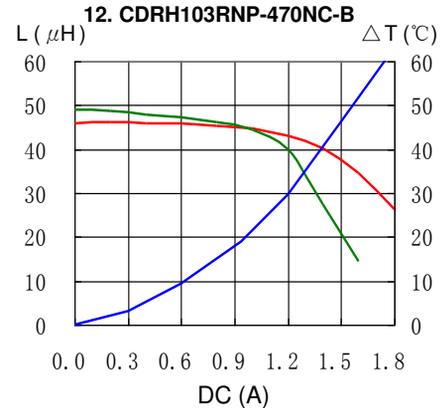
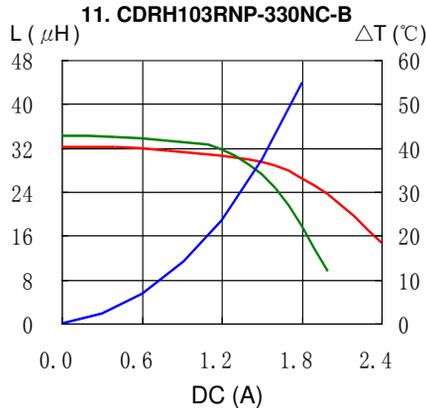
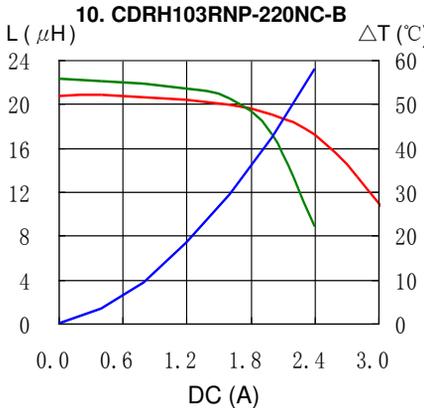
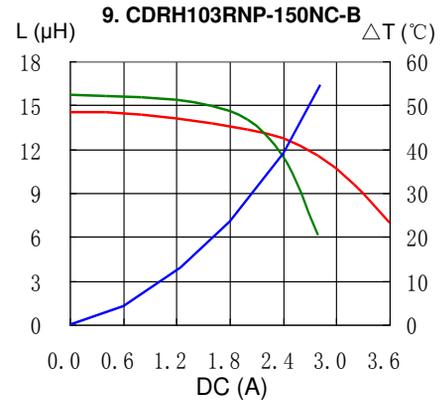
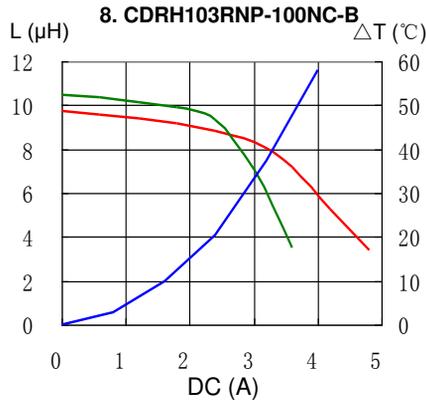
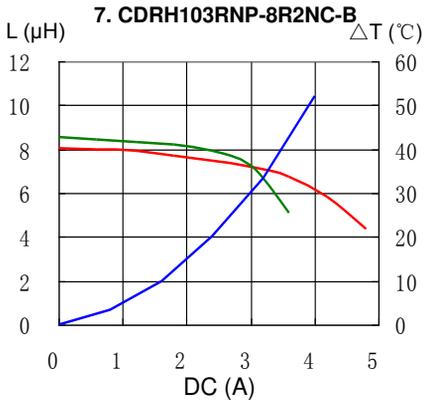
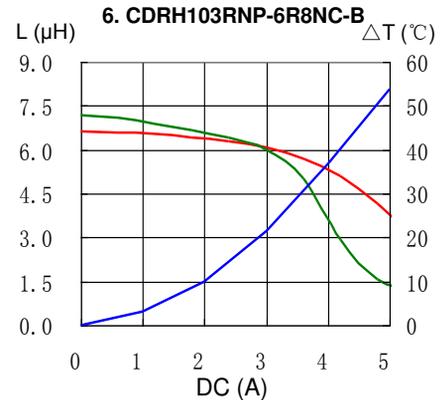
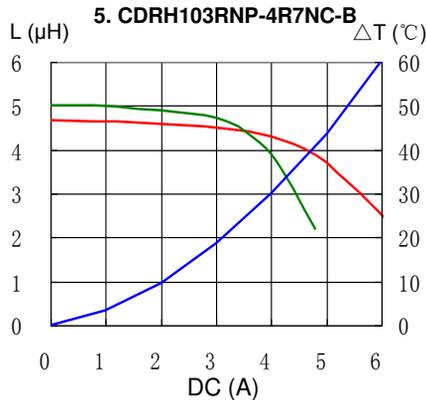
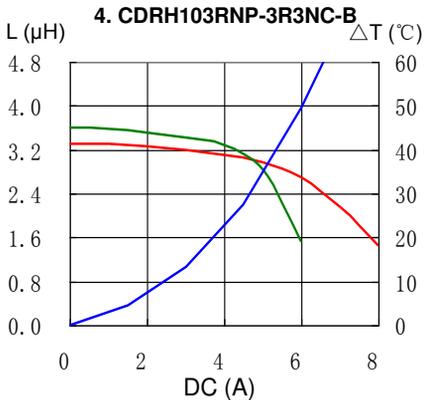
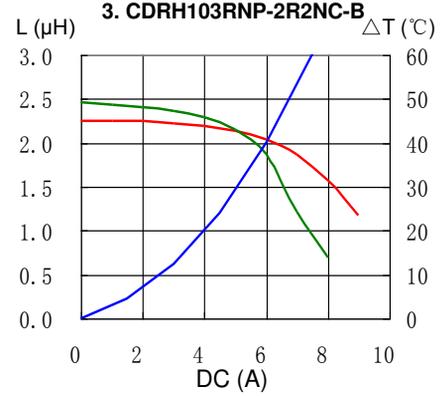
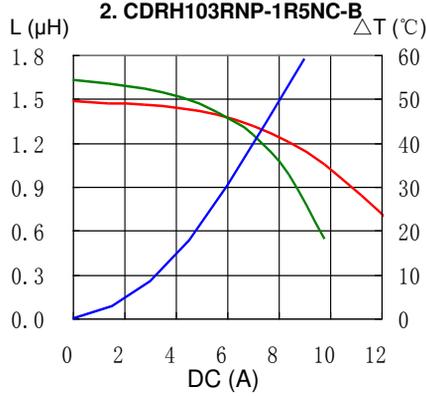
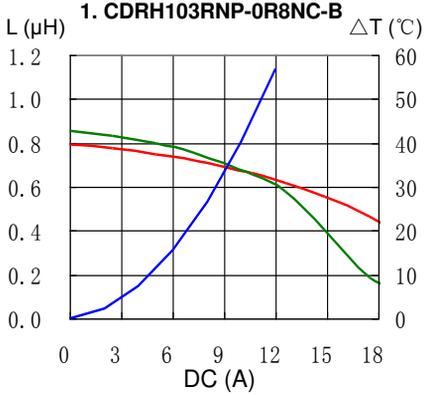
※3 The temperature rise: The value of DC current when the temperature rise is  $\Delta T=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

# SMD Power Inductor CDRH103R

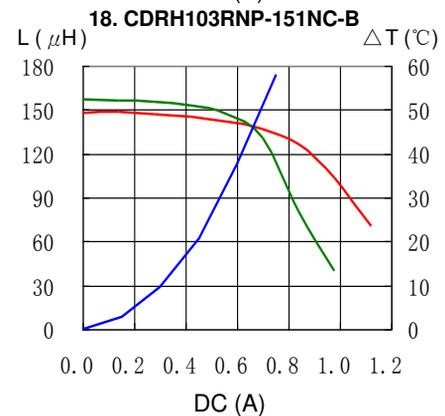
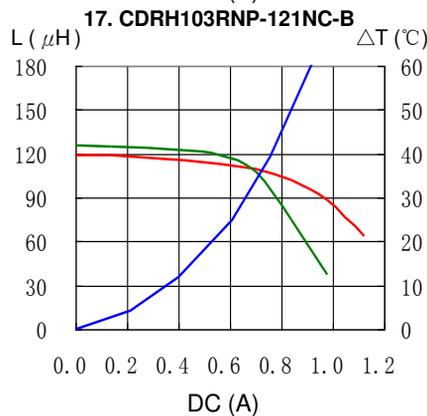
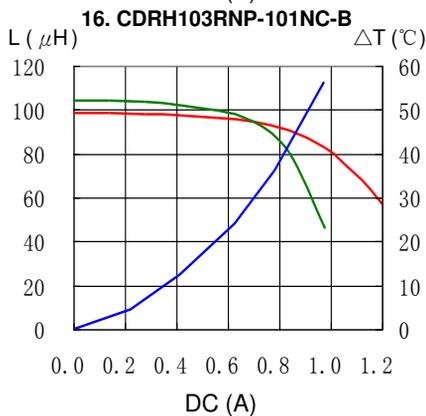
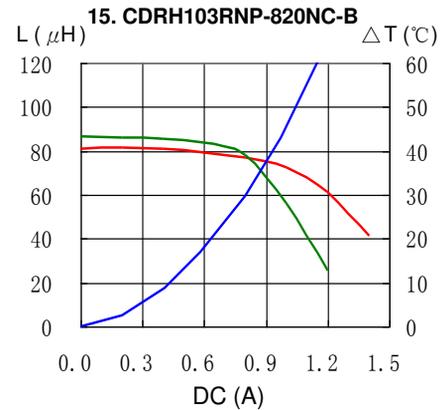
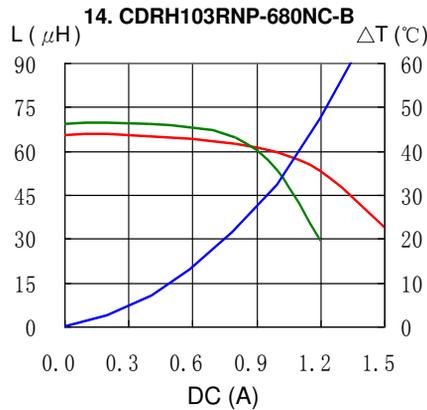
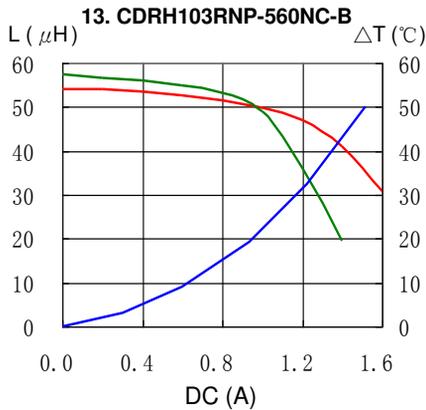


## Saturation Current & Temperature Rise Graph

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

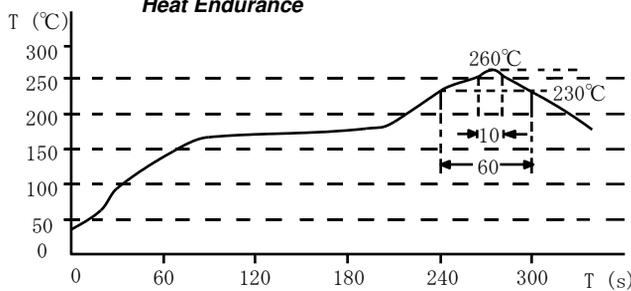


# SMD Power Inductor CDRH103R

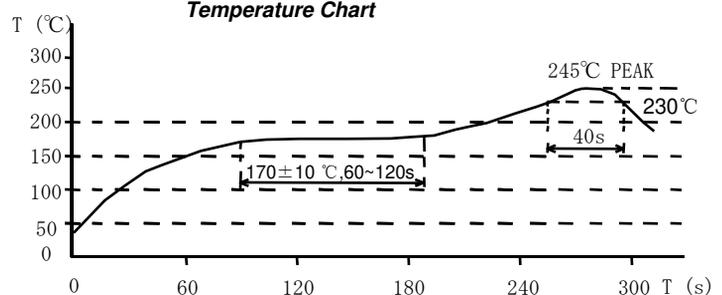


## Solder Reflow Condition

**Heat Endurance**



**Temperature Chart**



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