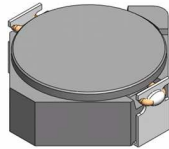


# SMD Power Inductor CDRH50D20/T150



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 5.2 × 5.2 × 2.2 mm Max.
- Product weight: 0.2g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Qualification to AEC-Q200.

## Environmental Data

- Operating temperature range: -40°C~+150°C
- (including coil's self temperature rise)
- Storage temperature range: -40°C~+150°C
- Solder reflow temperature: 260 °C peak.

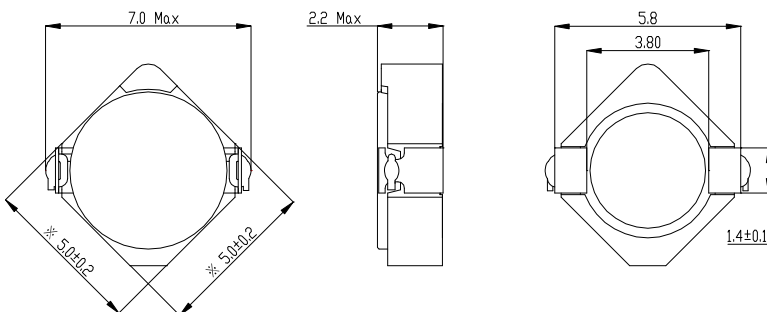
## Packaging

- Carrier tape and reel packaging

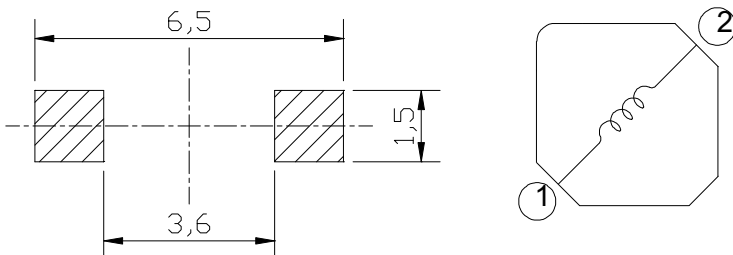
## Applications

- Automotive and other high temperature, high reliability application.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor CDRH50D20/T150



## Electrical Characteristics

Part No.	Stamp	Inductance [Within] [ $\mu$ H] ※1	D. C. R. (m $\Omega$ ) [Max.] (at 20°C)	Saturation Current (A) (at 20°C) ※2	Temperature Rise Current (A) typ. ※3
CDRH50D20T150NP-1R2NC	1R2	1.2 $\pm$ 30%	30 (24)	4.00	3.40
CDRH50D20T150NP-1R8NC	1R8	1.8 $\pm$ 30%	36 (29)	3.40	3.12
CDRH50D20T150NP-2R2NC	2R2	2.2 $\pm$ 30%	40 (33)	3.06	2.88
CDRH50D20T150NP-3R3NC	3R3	3.3 $\pm$ 30%	50 (41)	2.51	2.52
CDRH50D20T150NP-4R7NC	4R7	4.7 $\pm$ 30%	74 (62)	2.04	2.08
CDRH50D20T150NP-6R8NC	6R8	6.8 $\pm$ 30%	110 (91)	1.73	1.75
CDRH50D20T150NP-100MC	100	10.0 $\pm$ 20%	144 (120)	1.41	1.51
CDRH50D20T150NP-150MC	150	15.0 $\pm$ 20%	240 (200)	1.15	1.08
CDRH50D20T150NP-220MC	220	22.0 $\pm$ 20%	320 (265)	0.97	0.98
CDRH50D20T150NP-330MC	330	33.0 $\pm$ 20%	440 (365)	0.78	0.83
CDRH50D20T150NP-470MC	470	47.0 $\pm$ 20%	690 (575)	0.66	0.61
CDRH50D20T150NP-101MC	101	100 $\pm$ 20%	1280 (1100)	0.45	0.52

※1. Measuring condition: at 100 kHz.

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

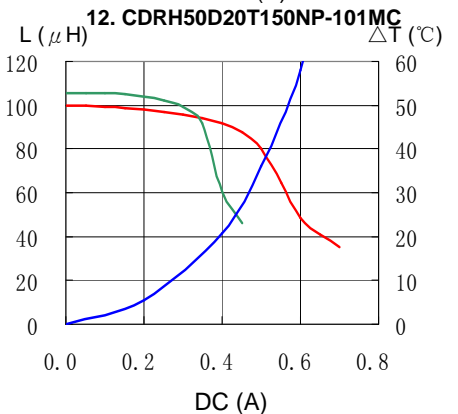
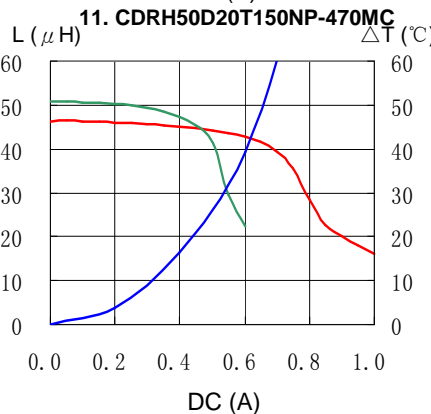
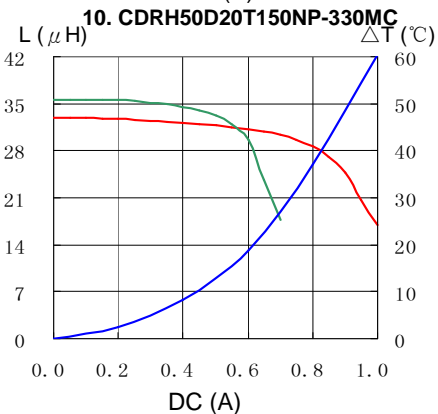
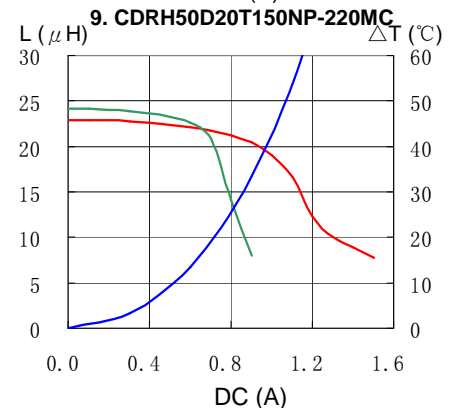
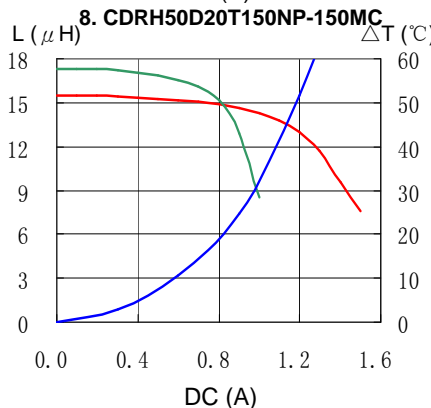
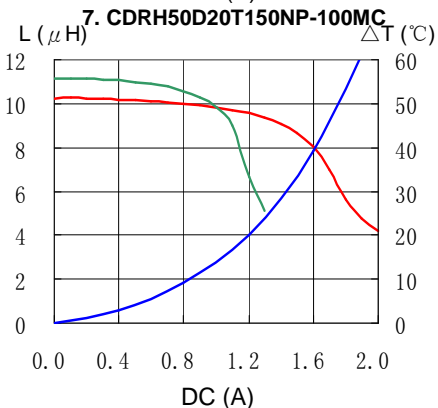
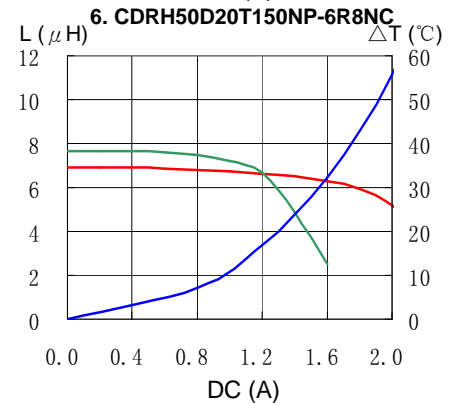
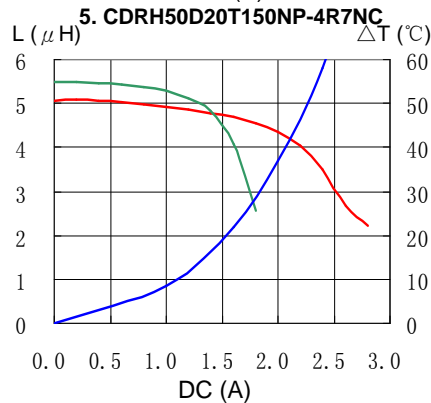
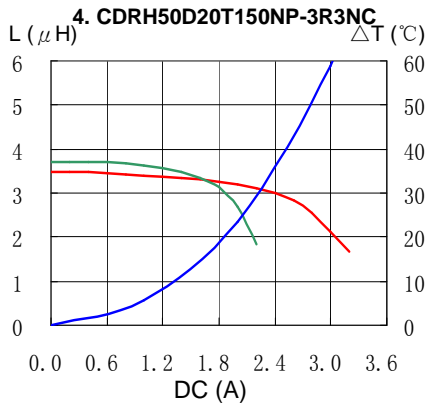
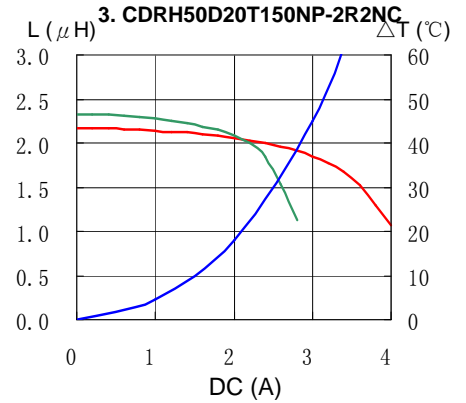
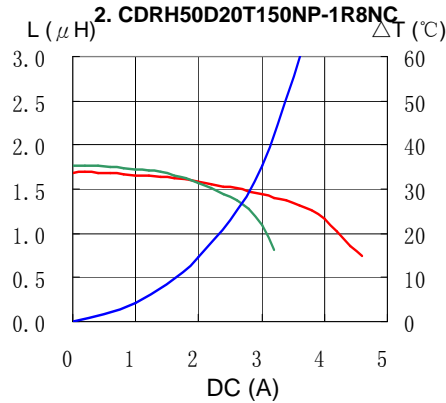
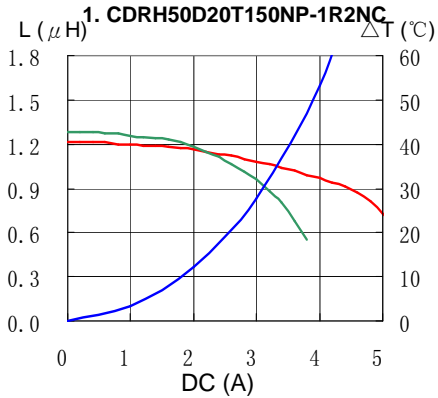
※3. Temperature rise current: The actual value of DC current when the top surface temperature of test sample rise is  $\Delta T=40^{\circ}\text{C}$  ( $T_a=25^{\circ}\text{C}$ ).

# SMD Power Inductor CDRH50D20/T150



## Saturation Current & Temperature Rise Graph

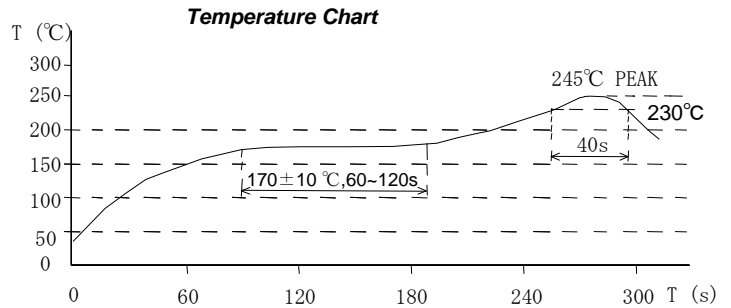
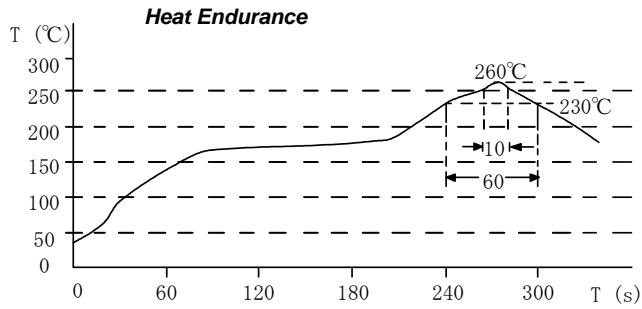
— L (25°C) — L (150°C) —  $\Delta T$



# SMD Power Inductor CDRH50D20/T150



## Solder Reflow Condition



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