

# SMD Power Inductor

## CDRH125/L125



### Description

- Ferrite drum core construction
- Magnetically shielded
- LxWxH: 12.3x12.3x6.0 mm Max.
- Product weight: 3.0g(Ref.)
- Moisture Sensitivity Level: 1
- Qualified to AEC-Q200



### Environmental Data

- Operating Temperature: -40°C to +125°C (including self-heating)
- Storage temperature range: -40°C~+125°C

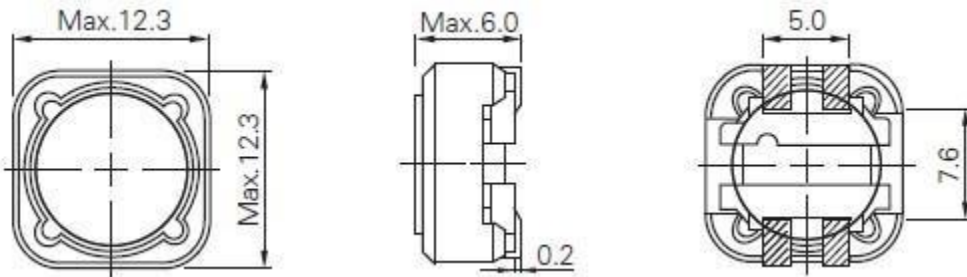
### Packaging

- Carrier tape and reel packaging

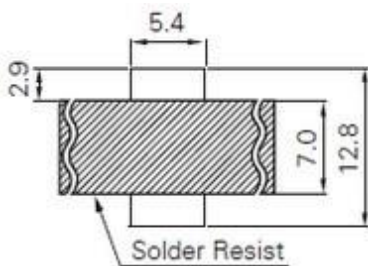
### Applications

- High temp and high reliability automotive applications

### Dimension - [mm]

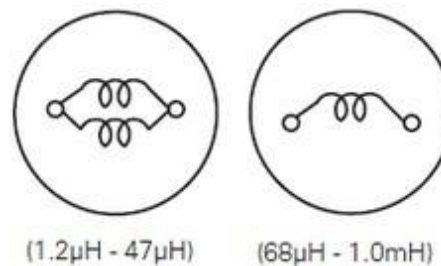


### Recommended Land pattern - [mm]



No vias and traces in the restricted area underneath the coil

### Wire Connection



# SMD Power Inductor

## CDRH125/L125



### Electrical Characteristics

Part Number	Inductance [Within] ( $\mu$ H) ※1	D.C.R. at 20°C Max.(Typ.) (m $\Omega$ )	Saturation Current (A) Max.(Typ.) ※2	Temperature Rise Current (A) Max.(Typ.) ※3
CDRH125L125NP-1R2NC	1.20 $\pm$ 30%	8.50 (6.80)	14.20 (16.70)	9.00 (10.20)
CDRH125L125NP-1R8NC	1.80 $\pm$ 30%	10.60 (8.50)	12.60 (14.10)	8.00 (9.00)
CDRH125L125NP-2R7NC	2.70 $\pm$ 30%	12.80 (10.20)	10.20 (11.50)	7.40 (8.40)
CDRH125L125NP-3R9NC	3.90 $\pm$ 30%	15.00 (12.00)	8.20 (9.30)	6.80 (7.70)
CDRH125L125NP-5R1NC	5.10 $\pm$ 30%	17.50 (14.00)	7.20 (8.50)	6.50 (7.30)
CDRH125L125NP-6R8NC	6.80 $\pm$ 30%	20.00 (16.00)	6.20 (7.10)	5.90 (6.60)
CDRH125L125NP-100MC	10.00 $\pm$ 20%	25.00 (20.00)	5.20 (6.00)	5.30 (6.10)
CDRH125L125NP-150MC	15.00 $\pm$ 20%	33.80 (27.00)	4.40 (5.10)	4.50 (5.20)
CDRH125L125NP-220MC	22.00 $\pm$ 20%	39.50 (31.50)	3.50 (4.00)	3.70 (4.20)
CDRH125L125NP-330MC	33.00 $\pm$ 20%	59.00 (47.00)	2.93 (3.30)	3.00 (3.50)
CDRH125L125NP-470MC	47.00 $\pm$ 20%	93.30 (74.00)	2.44 (2.80)	2.42 (2.70)
CDRH125L125NP-680MC	68.00 $\pm$ 20%	131 (105)	2.02 (2.32)	2.05 (2.34)
CDRH125L125NP-101MC	100 $\pm$ 20%	166 (133)	1.70 (1.90)	1.82 (2.07)
CDRH125L125NP-151MC	150 $\pm$ 20%	271 (217)	1.36 (1.57)	1.40 (1.60)
CDRH125L125NP-221MC	220 $\pm$ 20%	394 (315)	1.12 (1.28)	1.15 (1.31)
CDRH125L125NP-331MC	330 $\pm$ 20%	674 (539)	0.90 (1.05)	0.90 (1.03)
CDRH125L125NP-471MC	470 $\pm$ 20%	858 (686)	0.75 (0.87)	0.81 (0.92)
CDRH125L125NP-681MC	680 $\pm$ 20%	1220 (1020)	0.62 (0.71)	0.65 (0.74)
CDRH125L125NP-102MC	1000 $\pm$ 20%	1900 (1580)	0.52 (0.60)	0.50 (0.57)

※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  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

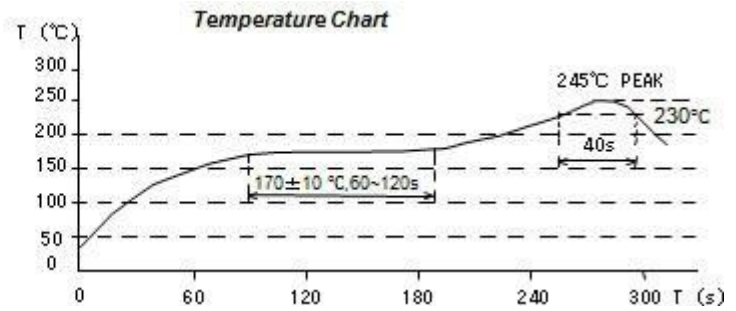
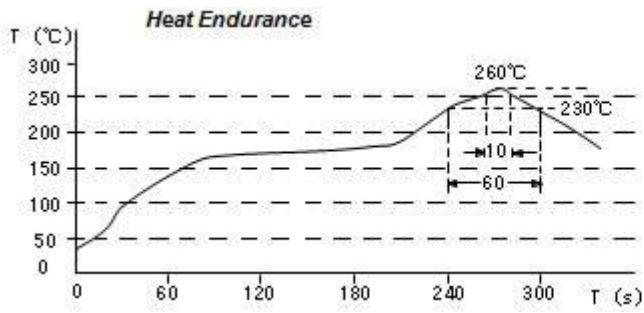
# SMD Power Inductor

## CDRH125/L125



Recommended Type

### Solder Reflow Condition



# SMD Power Inductor

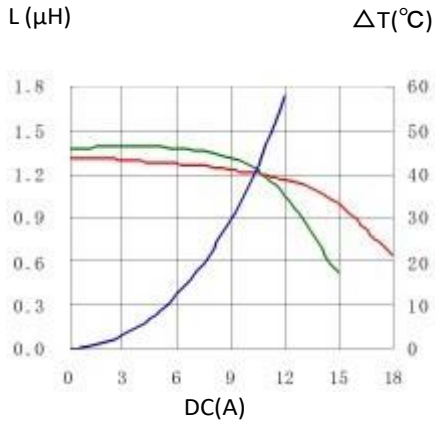
## CDRH125/L125



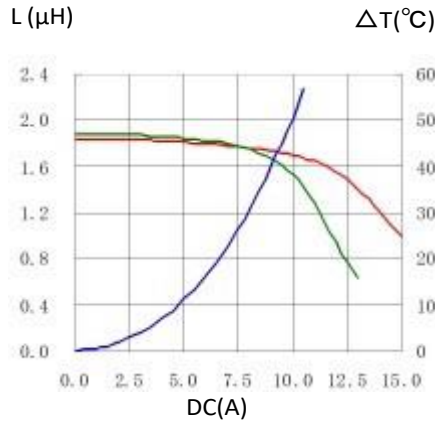
### Saturation Current & Temperature Rise Graph

— L (20°C) — L (125°C) —  $\Delta T$

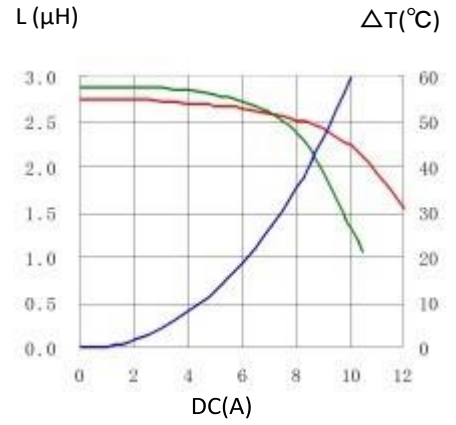
1. CDRH125L125NP-1R2NC



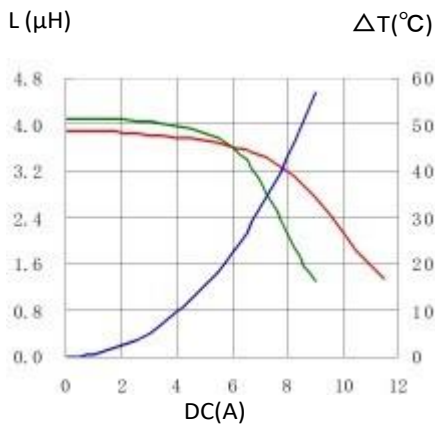
2. CDRH125L125NP-1R8NC



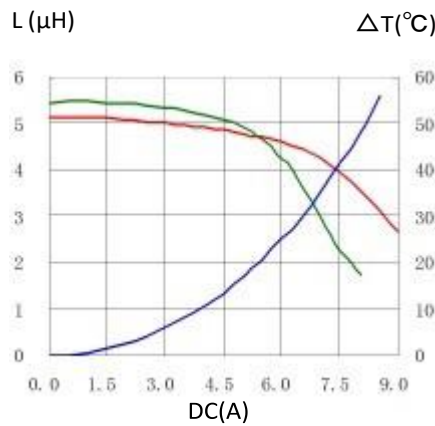
3. CDRH125L125NP-2R7NC



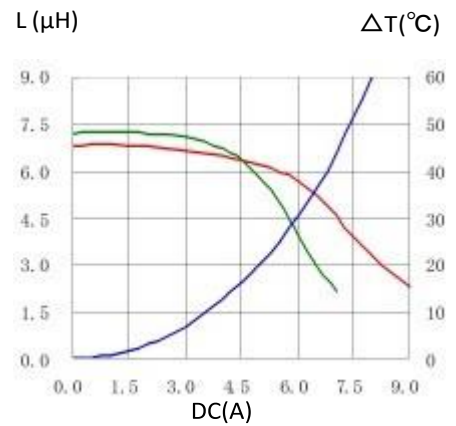
4. CDRH125L125NP-3R9NC



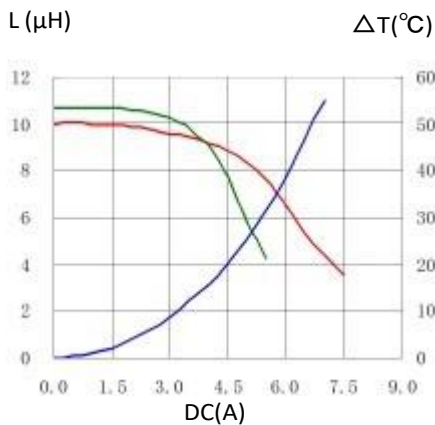
5. CDRH125L125NP-5R1NC



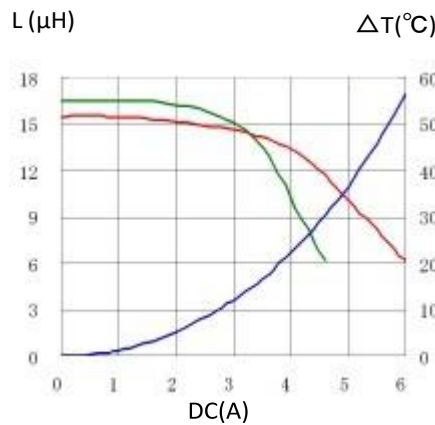
6. CDRH125L125NP-6R8NC



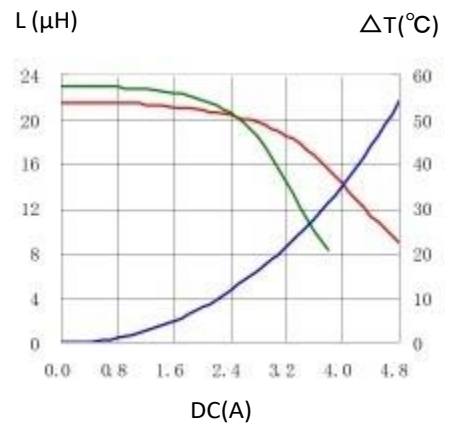
7. CDRH125L125NP-100MC



8. CDRH125L125NP-150MC



9. CDRH125L125NP-220MC

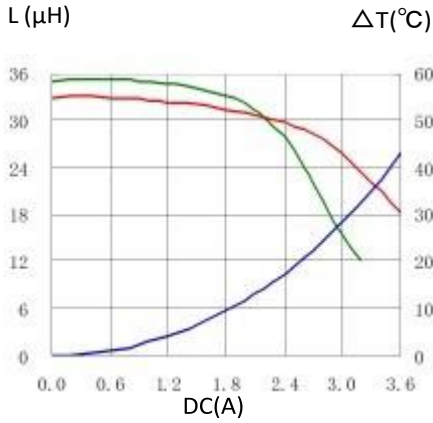


# SMD Power Inductor

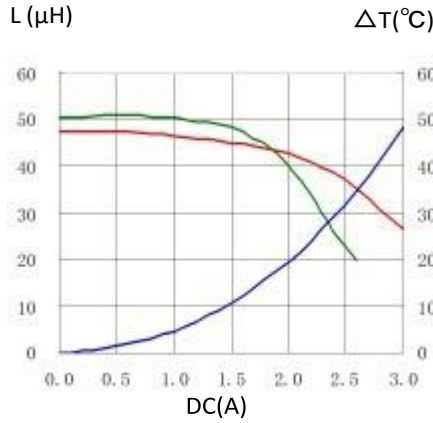
## CDRH125/L125



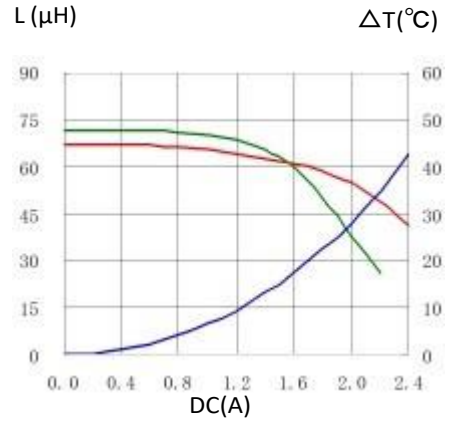
10. CDRH125L125NP-330MC



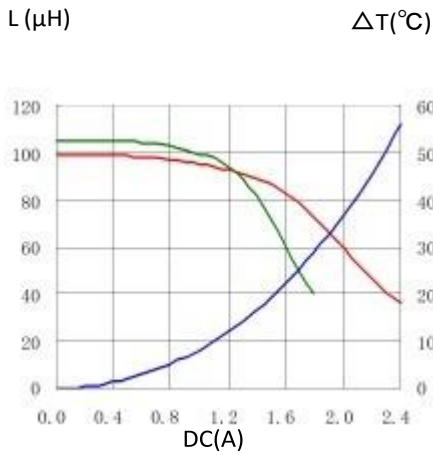
11. CDRH125L125NP-470MC



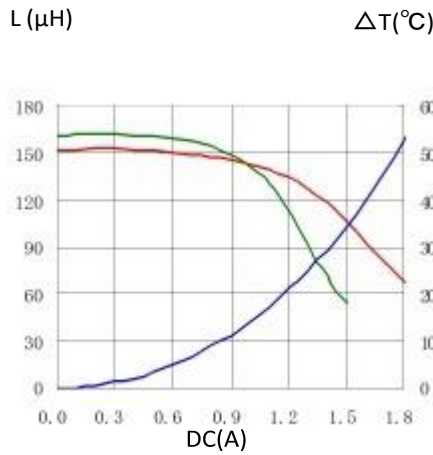
12. CDRH125L125NP-680MC



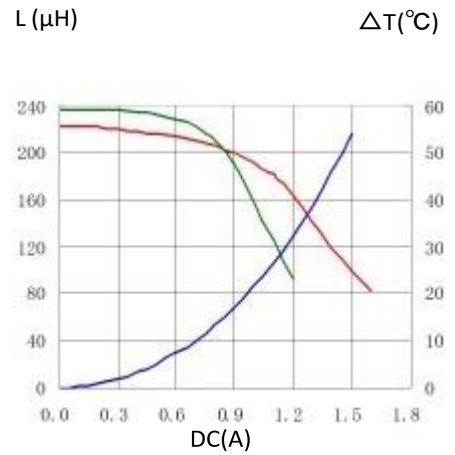
13. CDRH125L125NP-101MC



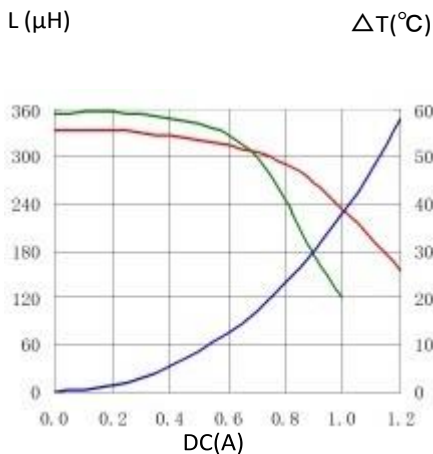
14. CDRH125L125NP-151MC



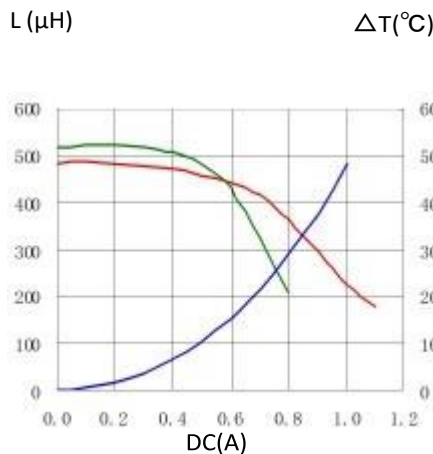
15. CDRH125L125NP-221MC



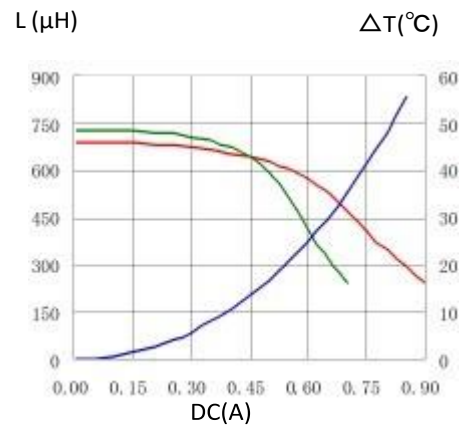
16. CDRH125L125NP-331MC



17. CDRH125L125NP-471MC



18. CDRH125L125NP-681MC



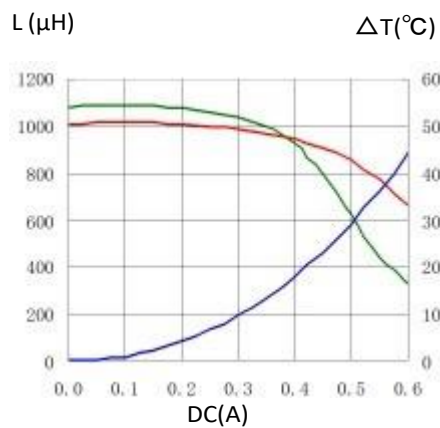
# SMD Power Inductor

## CDRH125/L125



 Recommended Type

19. CDRH125L125NP-102MC



For sales office information, please [click here](#) to visit our website.