

# SMD Power Inductor

## CD43/T125



### Description

- Ferrite drum core construction
- Magnetically unshielded
- LxWxH: 4.8x4.3x3.5mm Max.
- Product weight :165mg(Ref.)
- Moisture Sensitivity Level: 1



### Environmental Data

- Operating Temperature: -40°C to +125°C (including self-heating)
- Storage temperature range: -40°C~+100°C

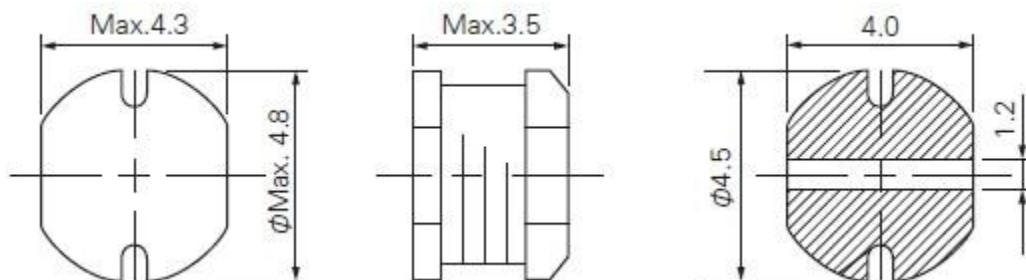
### Packaging

- Carrier tape and reel packaging

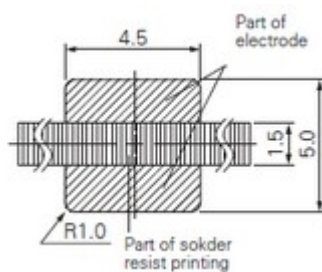
### Applications

- High temp and high reliability automotive applications

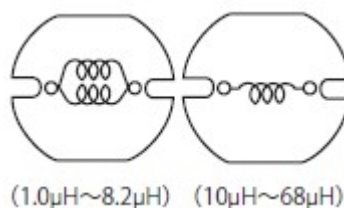
### Dimension - [mm]



### Recommended Land pattern - [mm]



### Wire Connection



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### 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
CD43T125NP-1R0MC	1.00 $\pm$ 20%	48.70 (24.00)	5.20 (6.50)	2.70 (3.50)
CD43T125NP-1R4MC	1.40 $\pm$ 20%	56.20 (27.60)	4.80 (6.00)	2.50 (3.30)
CD43T125NP-1R8MC	1.80 $\pm$ 20%	63.70 (32.00)	4.40 (5.50)	2.33 (3.00)
CD43T125NP-2R2MC	2.20 $\pm$ 20%	71.20 (36.50)	4.00 (5.00)	2.25 (2.80)
CD43T125NP-2R7MC	2.70 $\pm$ 20%	78.70 (40.70)	3.60 (4.50)	2.16 (2.70)
CD43T125NP-3R3MC	3.30 $\pm$ 20%	86.20 (45.20)	3.20 (4.00)	2.00 (2.50)
CD43T125NP-3R9MC	3.90 $\pm$ 20%	93.70 (62.30)	3.00 (3.80)	1.84 (2.30)
CD43T125NP-4R7MC	4.70 $\pm$ 20%	109 (73.50)	2.60 (3.20)	1.62 (2.20)
CD43T125NP-5R6MC	5.60 $\pm$ 20%	126 (80.20)	2.40 (3.00)	1.48 (2.00)
CD43T125NP-6R8MC	6.80 $\pm$ 20%	131 (92.40)	2.10 (2.60)	1.43 (1.90)
CD43T125NP-8R2MC	8.20 $\pm$ 20%	146 (106)	2.00 (2.50)	1.37 (1.70)
CD43T125NP-100MC	10.00 $\pm$ 20%	182 (126)	1.04 (1.60)	1.20 (1.50)
CD43T125NP-120MC	12.00 $\pm$ 20%	210 (140)	0.97 (1.30)	1.10 (1.45)
CD43T125NP-150MC	15.00 $\pm$ 20%	235 (163)	0.85 (1.20)	1.00 (1.40)
CD43T125NP-180MC	18.00 $\pm$ 20%	338 (221)	0.74 (1.00)	0.90 (1.20)
CD43T125NP-220MC	22.00 $\pm$ 20%	378 (251)	0.68 (0.90)	0.80 (1.10)
CD43T125NP-270MC	27.00 $\pm$ 20%	522 (330)	0.62 (0.80)	0.70 (0.95)
CD43T125NP-330KC	33.00 $\pm$ 20%	540 (379)	0.56 (0.70)	0.65 (0.90)
CD43T125NP-390KC	39.00 $\pm$ 20%	587 (419)	0.52 (0.65)	0.60 (0.80)
CD43T125NP-470KC	47.00 $\pm$ 20%	844 (587)	0.44 (0.60)	0.55 (0.70)
CD43T125NP-560KC	56.00 $\pm$ 20%	937 (651)	0.42 (0.50)	0.50 (0.65)
CD43T125NP-680KC	68.00 $\pm$ 20%	1120 (736)	0.37 (0.45)	0.45 (0.60)

※1: Inductance measuring frequency: 1.0  $\mu$ H  $\sim$  8.2  $\mu$ H, at 7.96 MHz. 10  $\mu$ H  $\sim$  68  $\mu$ H, at 2.52 MHz.

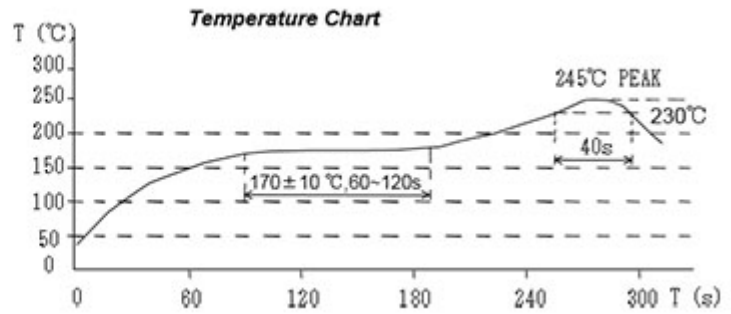
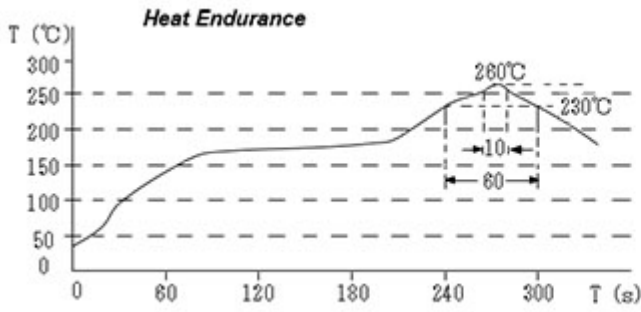
※2: Rated current: The DC current at which the inductance decreases to 90 % of it's initial value or when  $\Delta t = 40^\circ\text{C}$ , whichever is lower ( $T_a = 20^\circ\text{C}$ ).

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### Solder Reflow Condition



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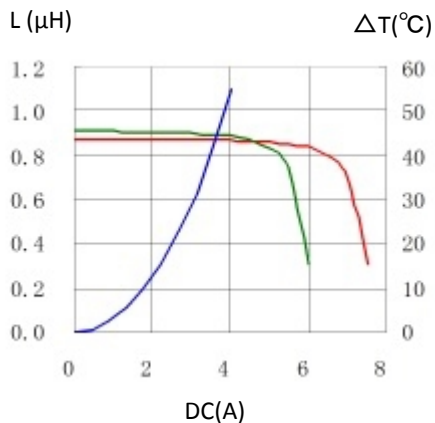
## CD43/T125



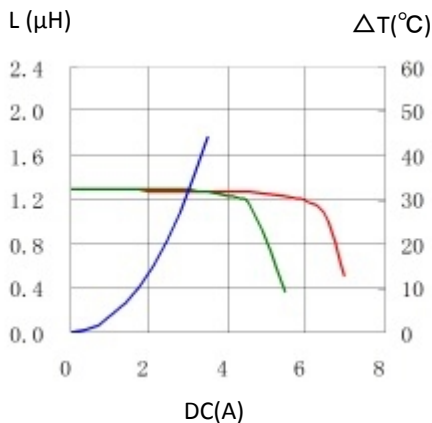
### Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

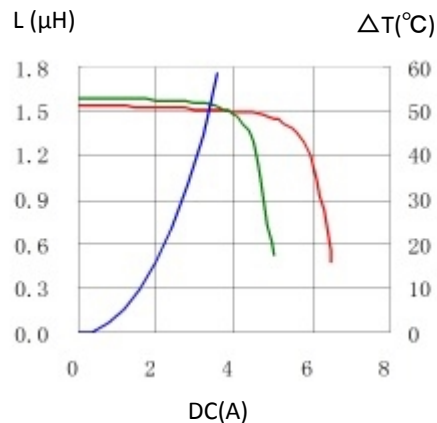
1. CD43T125NP-1R0MC



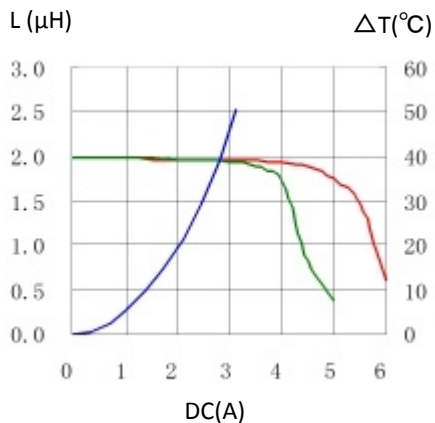
2. CD43T125NP-1R4MC



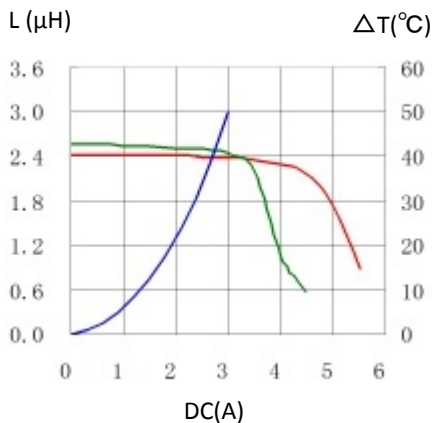
3. CD43T125NP-1R8MC



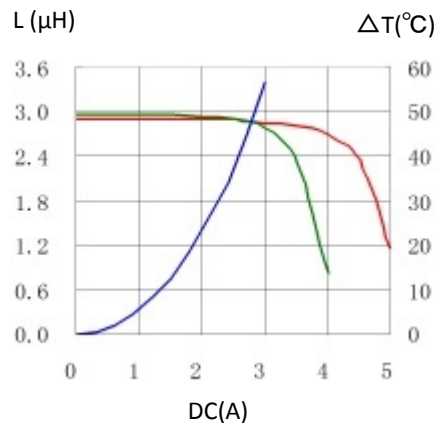
4. CD43T125NP-2R2MC



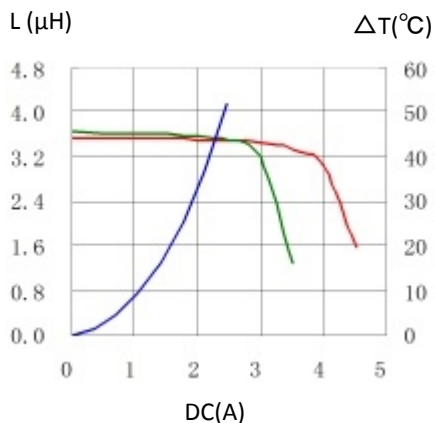
5. CD43T125NP-2R7MC



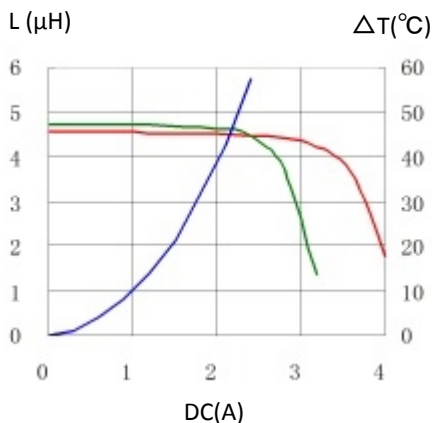
6. CD43T125NP-3R3MC



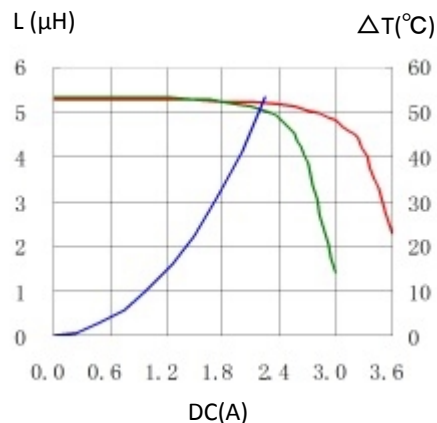
7. CD43T125NP-3R9MC



8. CD43T125NP-4R7MC



9. CD43T125NP-5R6MC



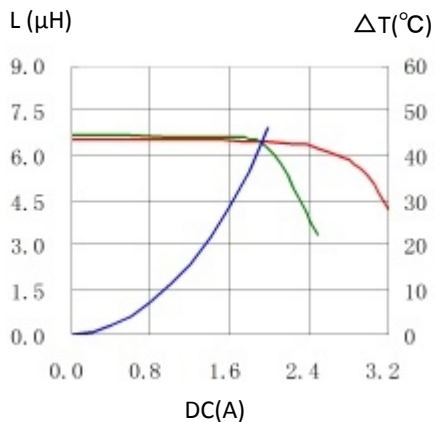
Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

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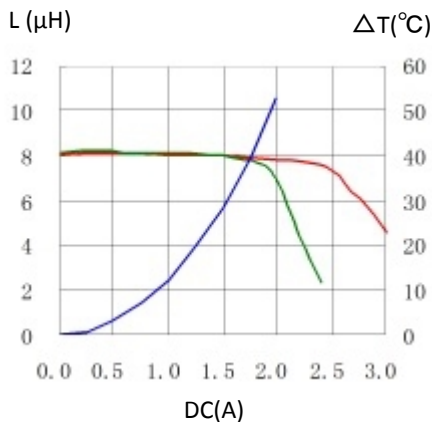
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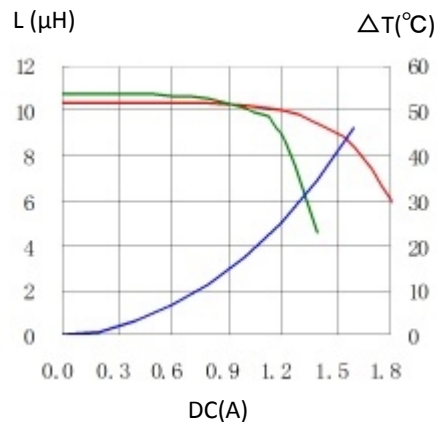
10. CD43T125NP-6R8MC



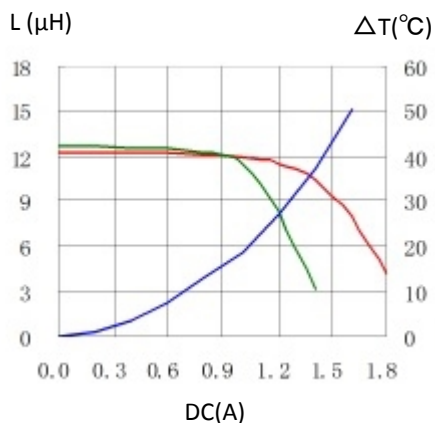
11. CD43T125NP-8R2MC



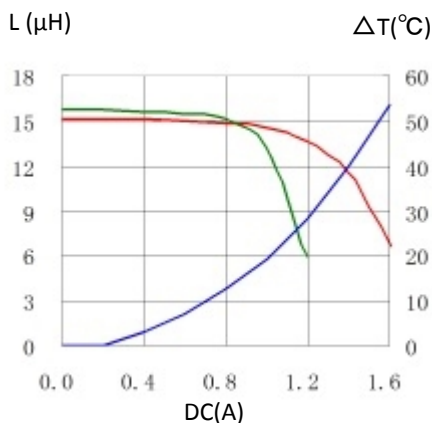
12. CD43T125NP-100MC



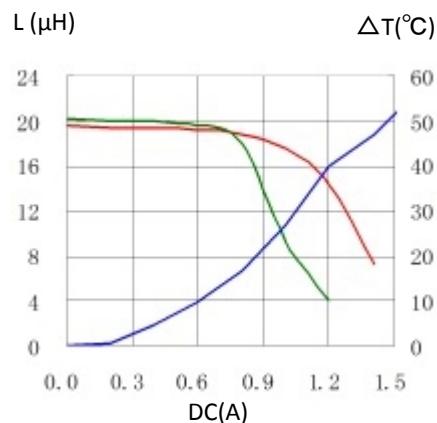
13. CD43T125NP-120MC



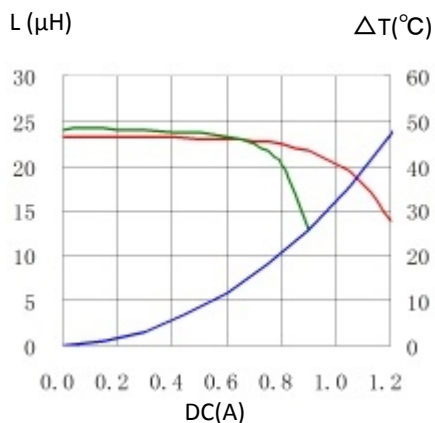
14. CD43T125NP-150MC



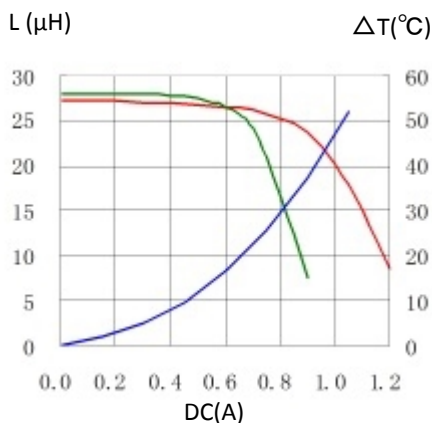
15. CD43T125NP-180MC



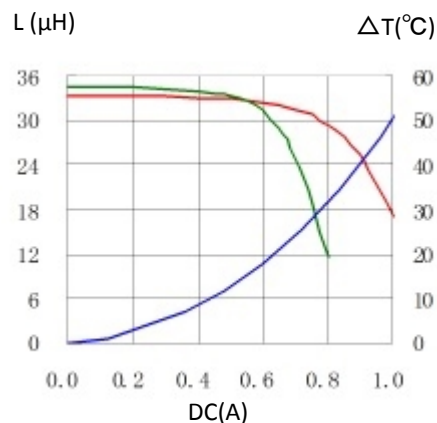
16. CD43T125NP-220MC



17. CD43T125NP-270MC



18. CD43T125NP-330KC

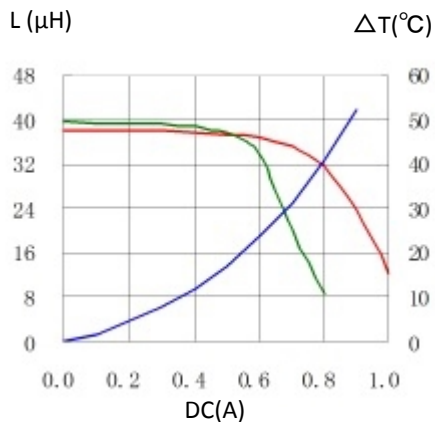


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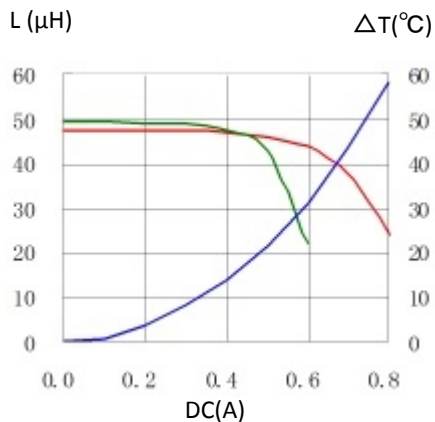
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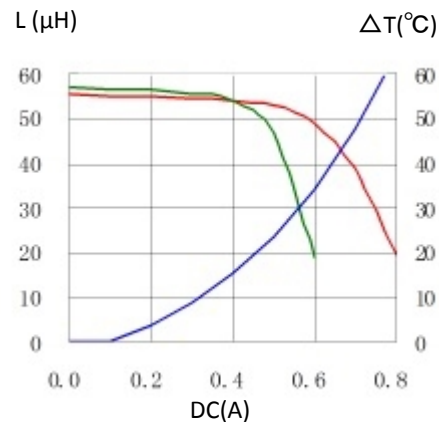
19. CD43T125NP-390KC



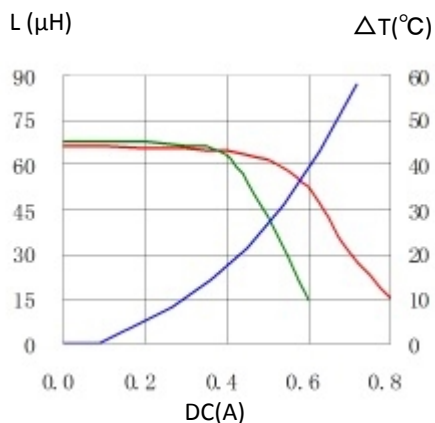
20. CD43T125NP-470KC



21. CD43T125NP-560KC



22. CD43T125NP-680KC



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