

SMD Power Inductor

CDRH50D28B/T150



Description

- Ferrite drum core construction
- Magnetically shielded
- LxWxH: 5.3x5.6x H3.0 mm Max.
- Product weight: 0.24g (Ref.)
- Qualified AEC-Q200
- RoHS compliance



Environmental Data

- Operating Temperature: -55°C to +150°C (including self-heating)

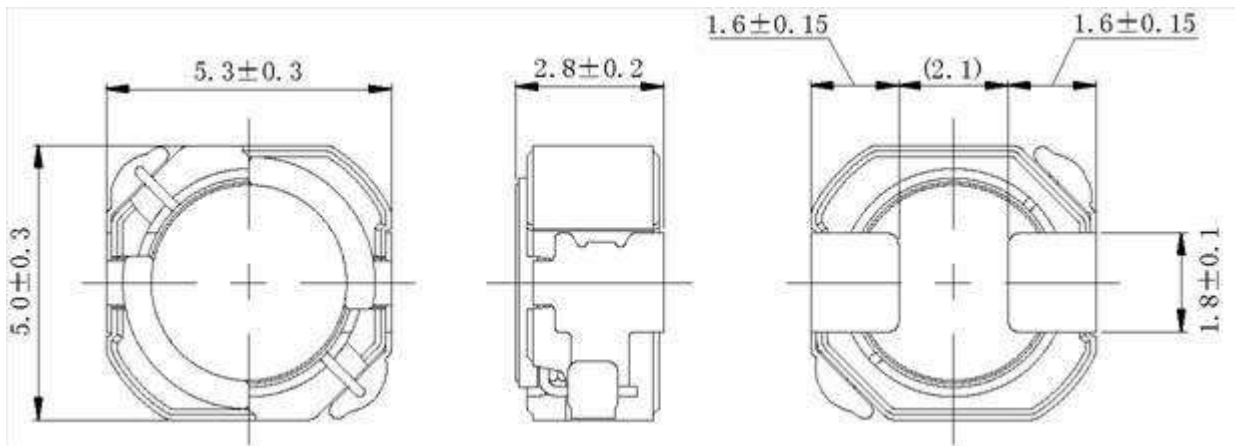
Packaging

- Carrier tape and reel packaging

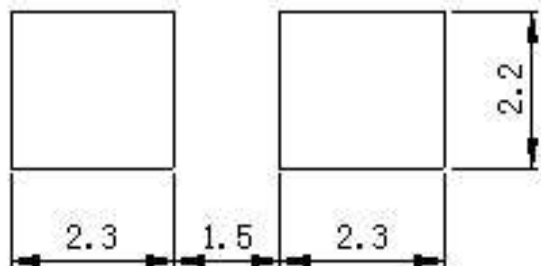
Applications

- ADAS DC/DC converter
- Other high temperature / high reliability applications for automotive

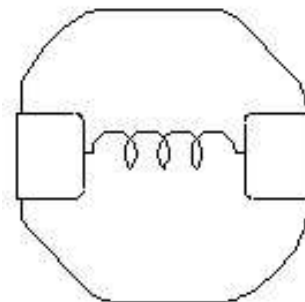
Dimension - [mm]



Recommended Land pattern - [mm]



Wire Connection



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Electrical Characteristics

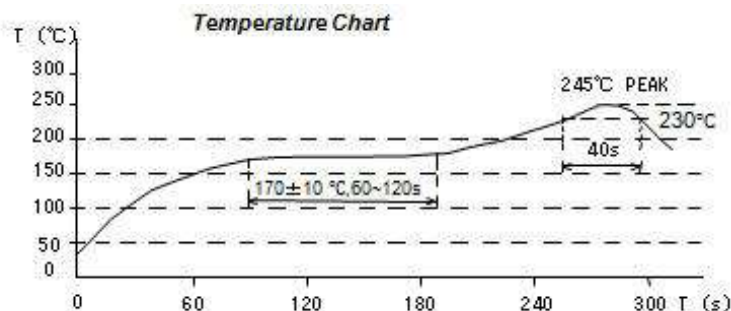
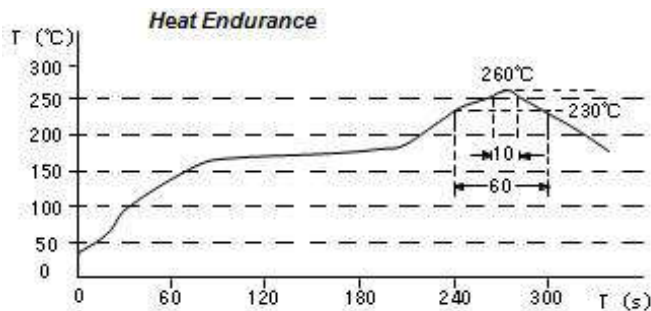
Part Number	Inductance [Within] (μ H) ※1	D.C.R. at 20°C Max.(Typ.) (m Ω)	Saturation Current (A) Max.(Typ.) ※2	Temperature Rise Current (A) Max.(Typ.) ※3
CDRH50D28BT150NP-1R0NC	1.00 \pm 30%	23.40 (18.00)	5.50 (6.50)	3.20 (3.60)
CDRH50D28BT150NP-1R5NC	1.50 \pm 30%	26.00 (20.00)	5.50 (5.20)	3.00 (3.40)
CDRH50D28BT150NP-2R2NC	2.20 \pm 30%	33.80 (26.00)	3.50 (4.20)	2.80 (3.20)
CDRH50D28BT150NP-3R3NC	3.30 \pm 30%	41.60 (32.00)	2.90 (3.40)	2.40 (2.70)
CDRH50D28BT150NP-4R7NC	4.70 \pm 30%	67.60 (52.00)	2.40 (2.90)	2.20 (2.50)
CDRH50D28BT150NP-6R8NC	6.80 \pm 30%	97.50 (75.00)	2.00 (2.40)	1.70 (1.92)
CDRH50D28BT150NP-100MC	10.00 \pm 20%	114 (95.00)	1.70 (2.00)	1.55 (1.75)
CDRH50D28BT150NP-150MC	15.00 \pm 20%	156 (130)	1.40 (1.70)	1.22 (1.38)
CDRH50D28BT150NP-220MC	22.00 \pm 20%	180 (150)	1.20 (1.40)	1.00 (1.14)
CDRH50D28BT150NP-330MC	33.00 \pm 20%	336 (280)	0.93 (1.10)	0.88 (0.90)
CDRH50D28BT150NP-470MC	47.00 \pm 20%	516 (430)	0.78 (0.92)	0.68 (0.76)
CDRH50D28BT150NP-680MC	68.00 \pm 20%	756 (630)	0.67 (0.79)	0.56 (0.65)
CDRH50D28BT150NP-101MC	100 \pm 20%	930 (780)	0.55 (0.65)	0.40 (0.46)

※1 Measuring frequency : Inductance at 100kHz

※2 Saturation current: This indicates the value of D.C. current when the inductance becomes 30% lower than its nominal value.

※3 Temperature rise current: The actual current when temperature of coil becomes $\Delta T=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

Solder Reflow Condition



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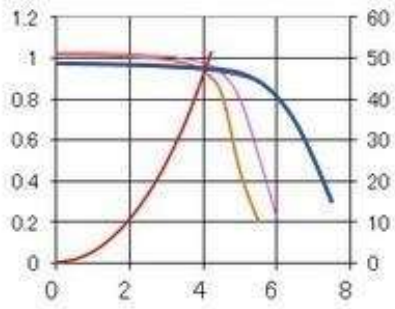


Saturation Current & Temperature Rise Graph

— L (20°C) — L (125°C) — L (150°C) — ΔT

1. CDRH50D28BT150NP-1R0NC

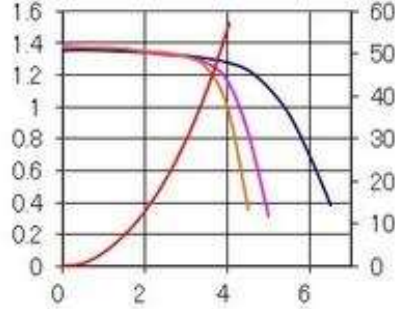
L (μH) ΔT(°C)



DC(A)

2. CDRH50D28BT150NP-1R5NC

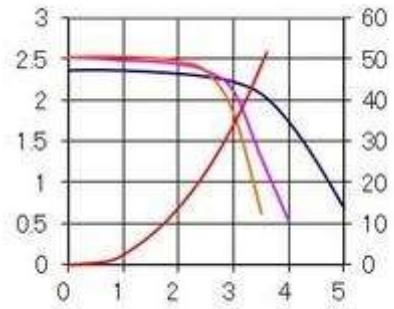
L (μH) ΔT(°C)



DC(A)

3. CDRH50D28BT150NP-2R2NC

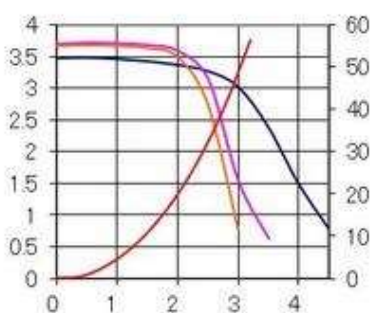
L (μH) ΔT(°C)



DC(A)

4. CDRH50D28BT150NP-3R3NC

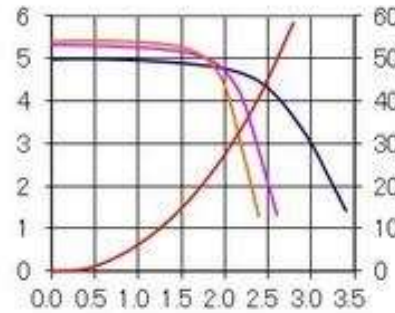
L (μH) ΔT(°C)



DC(A)

5. CDRH50D28BT150NP-4R7NC

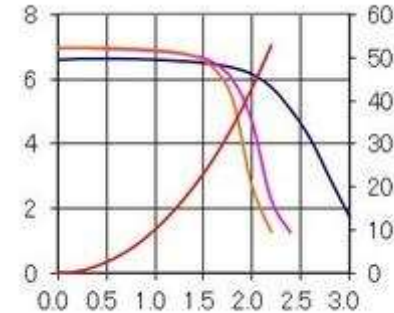
L (μH) ΔT(°C)



DC(A)

6. CDRH50D28BT150NP-6R8NC

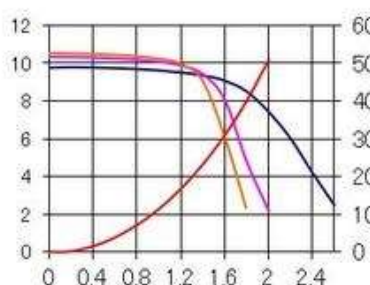
L (μH) ΔT(°C)



DC(A)

7. CDRH50D28BT150NP-100MC

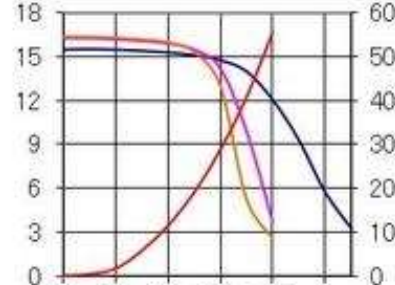
L (μH) ΔT(°C)



DC(A)

8. CDRH50D28BT150NP-150MC

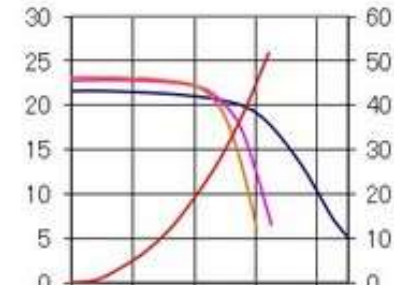
L (μH) ΔT(°C)



DC(A)

9. CDRH50D28BT150NP-220MC

L (μH) ΔT(°C)



DC(A)

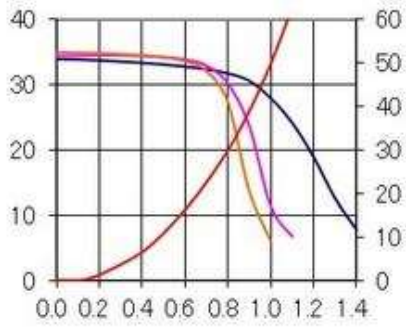
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10. CDRH50D28BT150NP-330MC

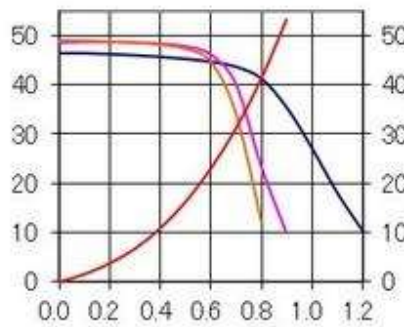
L (μH) $\Delta\text{T}(\text{°C})$



DC(A)

11. CDRH50D28BT150NP-470MC

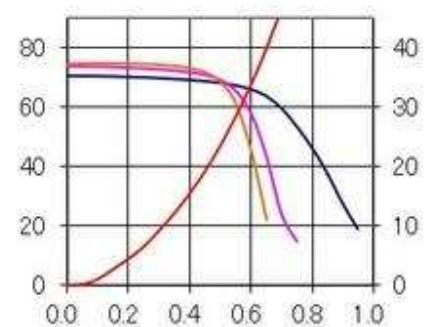
L (μH) $\Delta\text{T}(\text{°C})$



DC(A)

12. CDRH50D28BT150NP-680MC

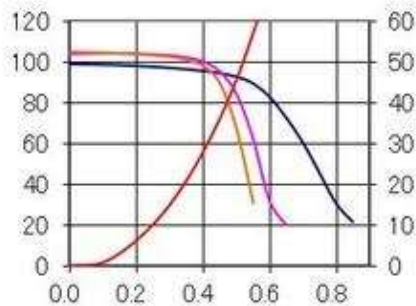
L (μH) $\Delta\text{T}(\text{°C})$



DC(A)

13. CDRH50D28BT150NP-101MC

L (μH) $\Delta\text{T}(\text{°C})$



DC(A)



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