

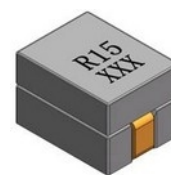
SMD Power Inductor

CDB78D68



Description

- Ferrite core construction.
- Magnetically shielded.
- LxWxH: 10.4x8.0x7.0mm Max.
- Product weight: 2.6g(Ref.)
- Moisture Sensitivity Level: 1



Environmental Data

- Operating temperature range: -40°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C

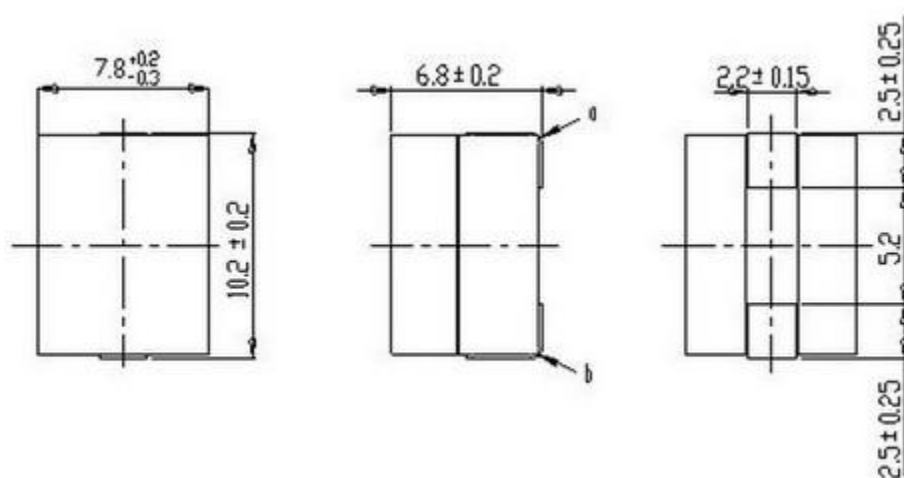
Packaging

- Carrier tape and reel packaging. 500pcs per reel.

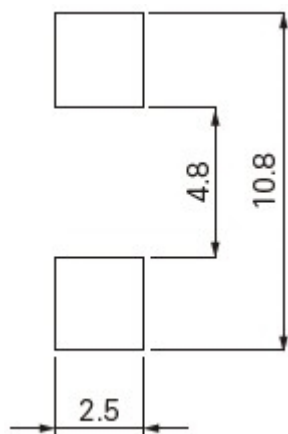
Applications

- Multi-phase and Vcore regulators.
- Voltage Regulator Modules (VRMs). Such as Server and desktop, Central processing unit(CPU), Graphics processing unit (GPU), Application specific integrated circuit(ASIC), High power density.
- Data networking density.
- Graphics cards and battery power systems.

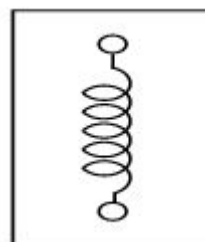
Dimension - [mm]



Recommended Land pattern - [mm]



Wire Connection



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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Electrical Characteristics

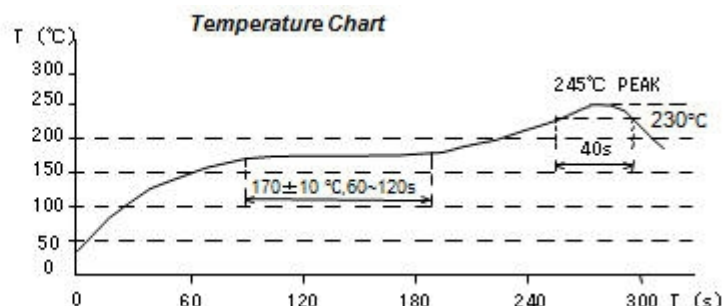
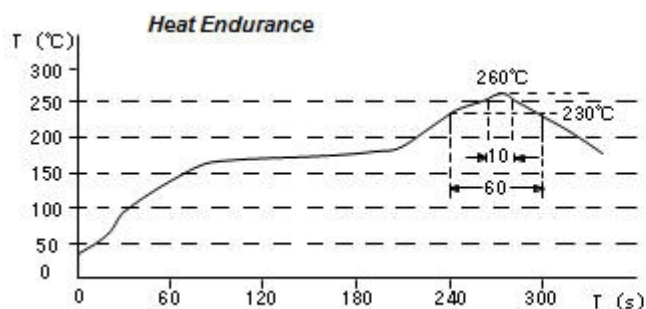
| Part Number | Inductance [Within] (μ H) ※1 | D.C.R. at 20°C Max.(Typ.) (m Ω) | Saturation Current (A) Max.(Typ.) ※2 | | Temperature Rise Current (A) Max.(Typ.) ※3 |
|------------------|---|--|---|------------------|---|
| | | | 20°C | 125°C | |
| CDB78D68NP-R15MC | 0.15 \pm 20% | (0.28) | 59.50 (70.00) | 42.50 (50.00) | (60.00) |
| CDB78D68NP-R22MC | 0.215 \pm 20% | (0.28) | 42.50 (50.00) | 32.00 (38.00) | (60.00) |
| CDB78D68NP-R30MC | 0.30 \pm 20% | (0.28) | 29.00 (34.00) | 22.00 (26.00) | (60.00) |
| CDB78D68NP-R47MC | 0.47 \pm 20% | (0.28) | 20.00 (23.50) | 14.50 (17.00) | (60.00) |

※1 Measuring frequency inductance at 1MHz.

※2 Saturation current: this indicates the actual value of D.C. current when the inductance becomes 20% lower than it's initial value..

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

Solder Reflow Condition



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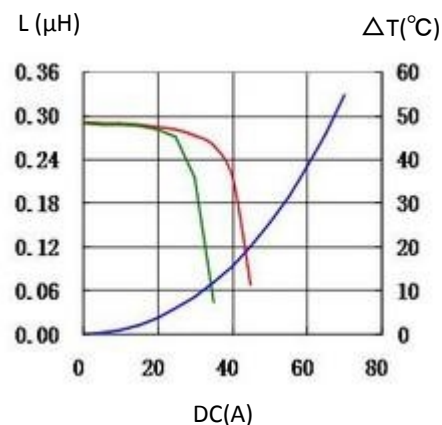
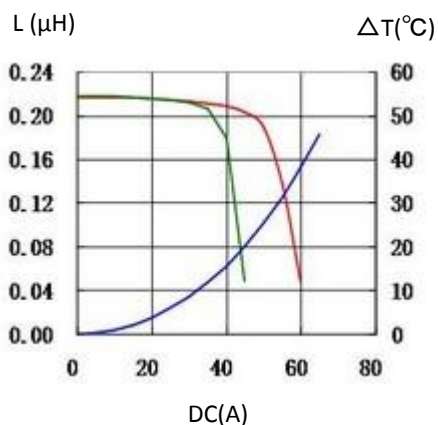
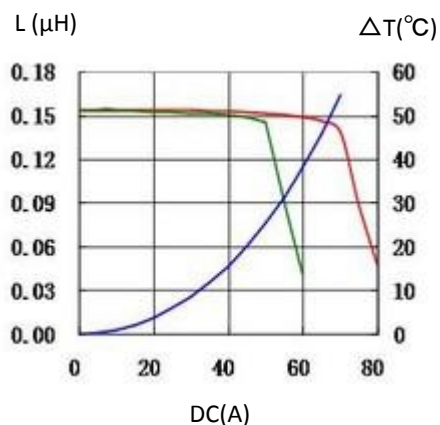
Saturation Current & Temperature Rise Graph

— L (20°C) — L (125°C) — ΔT

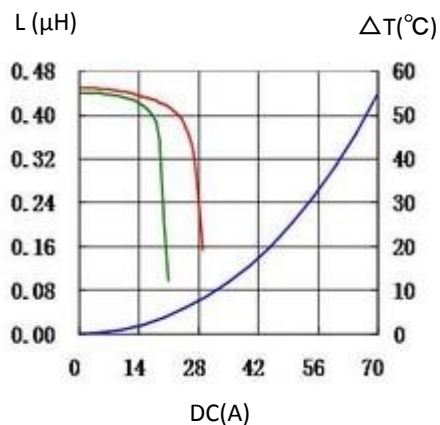
1. CDB78D68NP-R15MC

2. CDB78D68NP-R22MC

3. CDB78D68NP-R30MC



4. CDB78D68NP-R47MC



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