

SMD Power Inductor

CD4012MB/DS



Description

- Ferrite core construction
- Low profile resin-shielded
- LxWxH: 4.2x4.2x1.2mm Max.
- Product weight: 0.068g(Ref.)
- Moisture Sensitivity Level: 1



Environmental Data

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

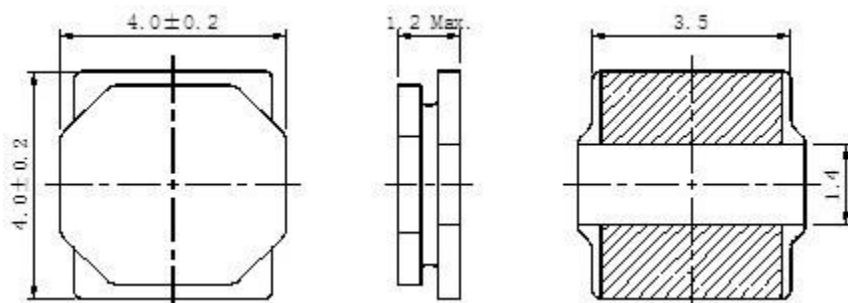
Packaging

- Carrier tape and reel packaging
- 1000pcs per reel

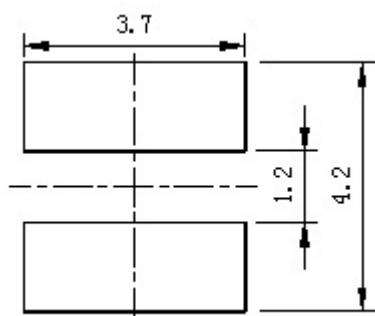
Applications

- DC/DC converter for CPU in notebook PC, smartphones, LCD displays, HDDs, DVDs, SSDs, DVCs, DSCs, PDAs etc.

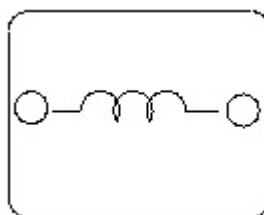
Dimension - [mm]



Recommended Land pattern - [mm]



Wire Connection



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Electrical Characteristics

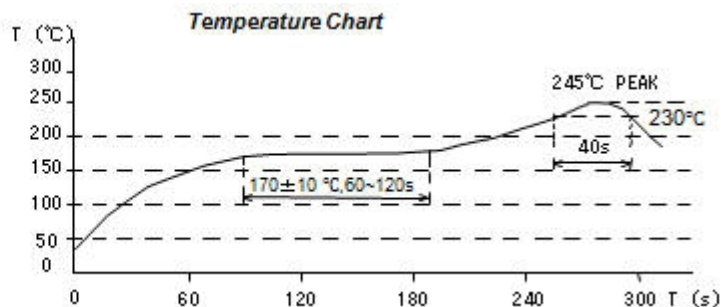
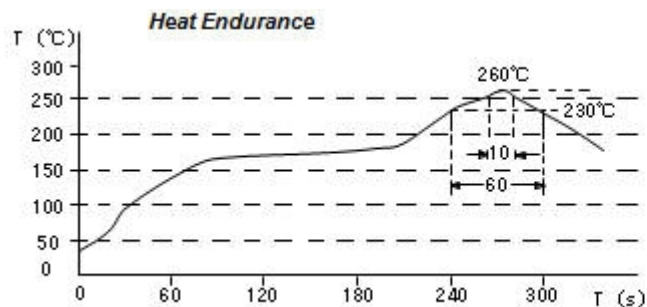
Part Number	Inductance [Within] (μ H) ※1	D.C.R. at 20°C Max.(Typ.) (m Ω)	Saturation Current (A) Max.(Typ.) ※2	Temperature Rise Current (A) Max.(Typ.) ※3
CD4012MBDS-1R0NC	1.00 \pm 30%	72.00 (60.00)	2.60 (3.00)	(2.00)
CD4012MBDS-2R2PC	2.20 \pm 25%	102 (85.00)	2.00 (2.30)	(1.80)
CD4012MBDS-3R3PC	3.30 \pm 25%	138 (115)	1.60 (1.80)	(1.60)
CD4012MBDS-4R7PC	4.70 \pm 25%	206 (172)	1.40 (1.60)	(1.30)
CD4012MBDS-6R8PC	6.80 \pm 25%	256 (213)	1.20 (1.40)	(1.10)
CD4012MBDS-100MC	10.00 \pm 20%	353 (294)	0.95 (1.10)	(1.00)
CD4012MBDS-150MC	15.00 \pm 20%	586 (488)	0.78 (0.91)	(0.70)
CD4012MBDS-220MC	22.00 \pm 20%	880 (733)	0.65 (0.76)	(0.64)

※1 Measuring frequency inductance at 100kHz 1V.

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

※3 Temperature rise current: The actual value of D.C. current when the temperature of coil becomes $\Delta T=40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).

Solder Reflow Condition



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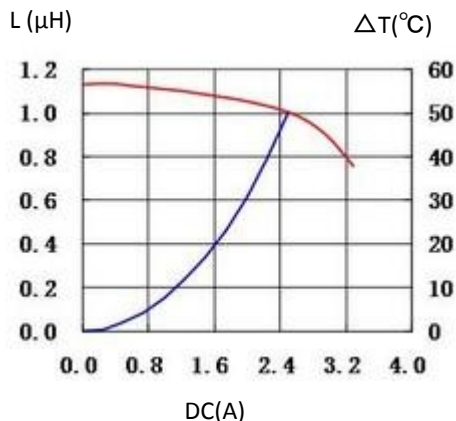
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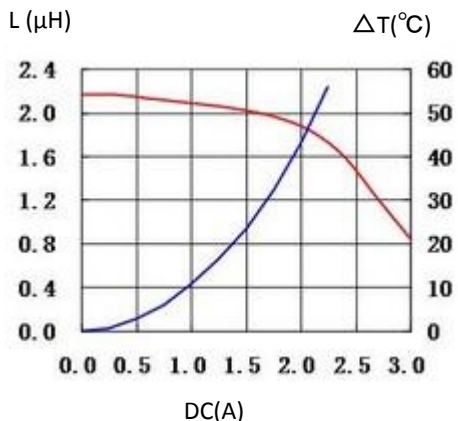
Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

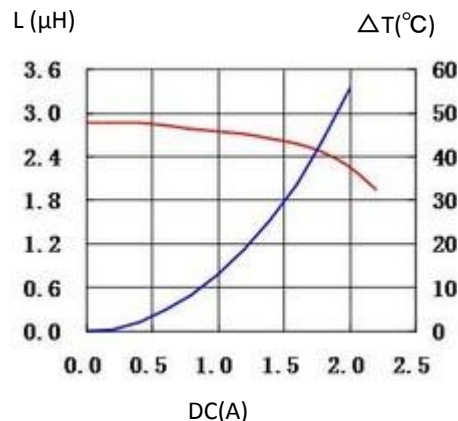
1. CD4012MBDS-1R0NC



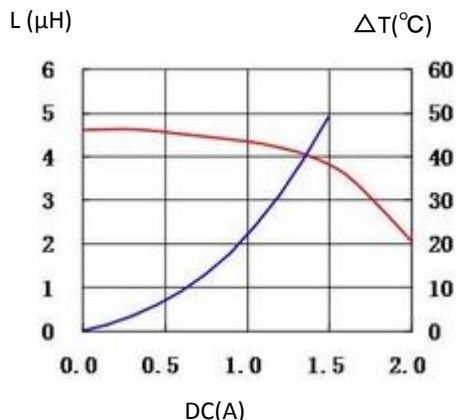
2. CD4012MBDS-2R2PC



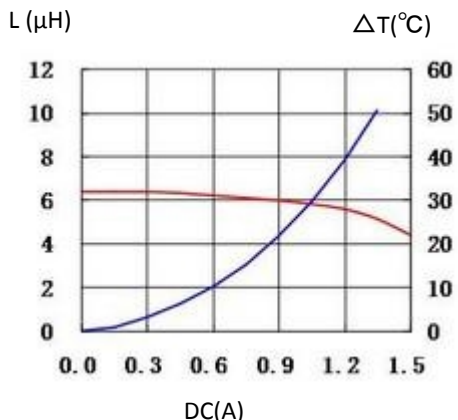
3. CD4012MBDS-3R3PC



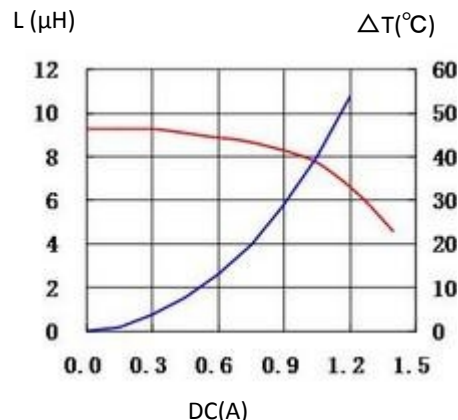
4. CD4012MBDS-4R7PC



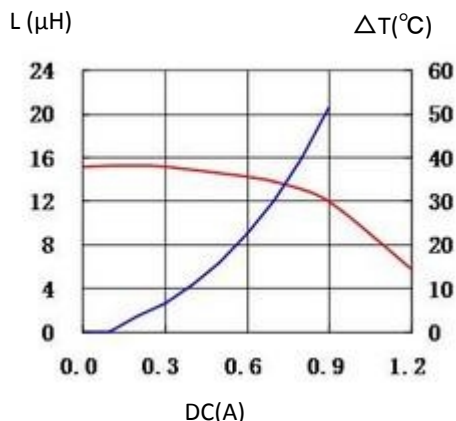
5. CD4012MBDS-6R8PC



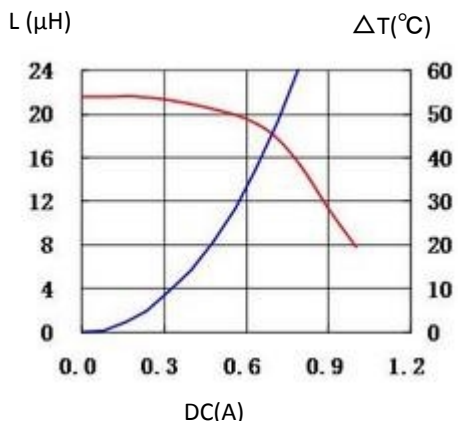
6. CD4012MBDS-100MC



7. CD4012MBDS-150MC



8. CD4012MBDS-220MC



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Recommended Type



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