

SMD Power Inductor

CDC90D48



Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 9.7 × 9.3 × 5.0 mm Max.
- Product weight: 1.1 g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: -40℃ ~ +105℃ (including coil's self temperature rise)
- Storage temperature range: -40℃ ~ +105℃
- Solder reflow temperature: 260 ℃ peak.

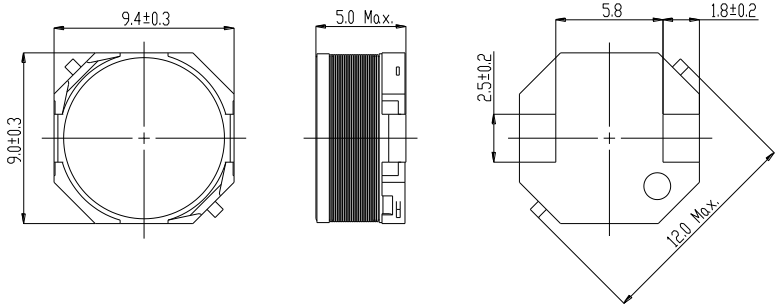
Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 500pcs per reel

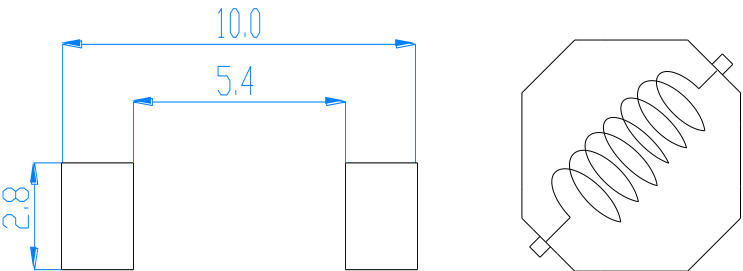
Applications

- Ideally used in smoke alarm as DC-DC inverter inductors.

Dimension - [mm]



Land pattern and Schematics - [mm]



Electrical Characteristics

Part No.	Stamp	Inductance [mH] [Within] ※1	D. C. R. (Ω) [Max.] (Typ.) (at 25℃)	Saturation current (mA) ※2 (at 20℃)	Temperature rise current (mA) ※3
CDC90D48NP-103MC	103M	10±20%	38.2 (31.8)	120	78
CDC90D48NP-123MC	123M	12±20%	52.1 (43.3)	104	68
CDC90D48NP-153MC	153M	15±20%	62.0 (51.6)	97	59
CDC90D48NP-183MC	183M	18±20%	86.1 (71.6)	86	42
CDC90D48NP-223MC	223M	22±20%	99.4 (82.8)	56	31

※1. Inductance measuring condition: at 100kHz.
※2. Saturation current: The value of DC current when the inductance is over 90% of the initial value.
※3. Temperature rise current: The actual value of DC current when the temperature rise is ΔT=40℃ (Ta=20℃).

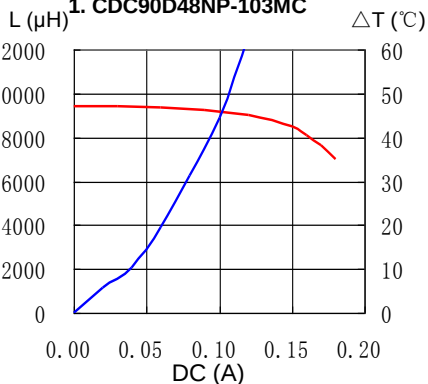
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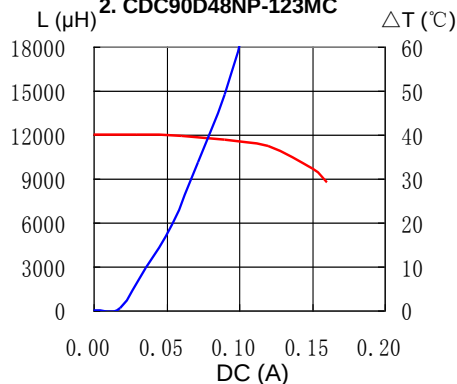
Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

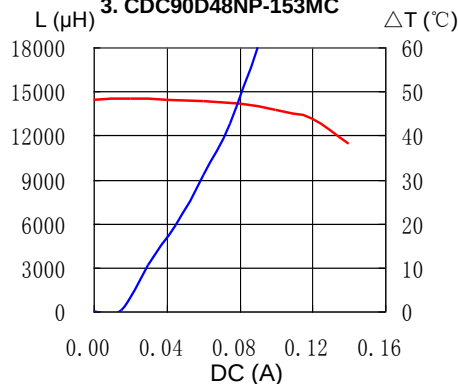
1. CDC90D48NP-103MC



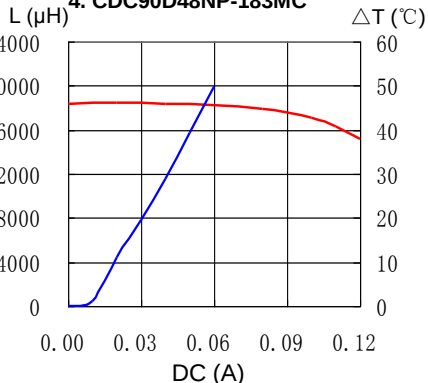
2. CDC90D48NP-123MC



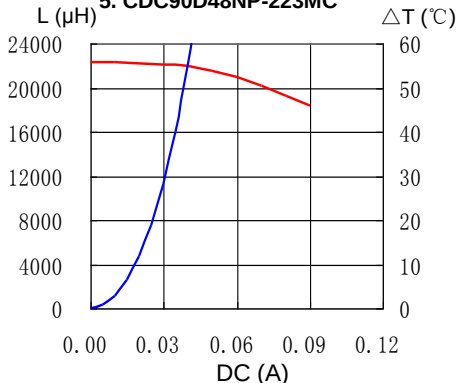
3. CDC90D48NP-153MC



4. CDC90D48NP-183MC

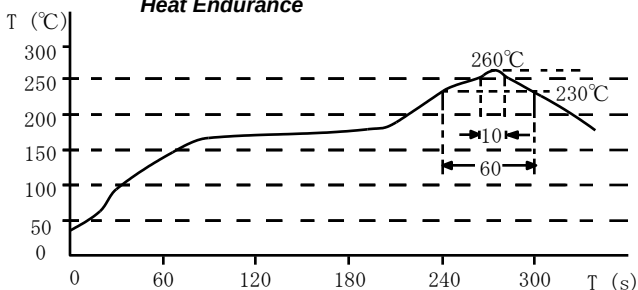


5. CDC90D48NP-223MC

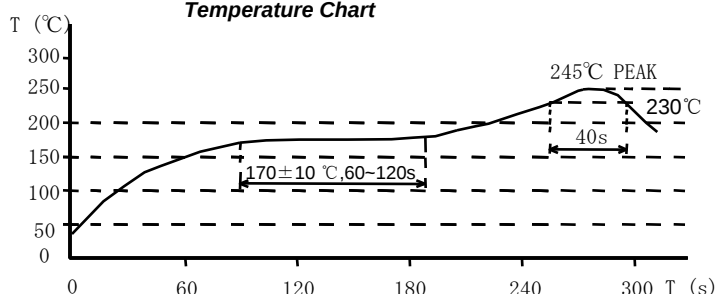


Solder Reflow Condition

Heat Endurance



Temperature Chart



Please refer to the sales offices on our website - <http://www.sumida.com>

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DC (A)

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