

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

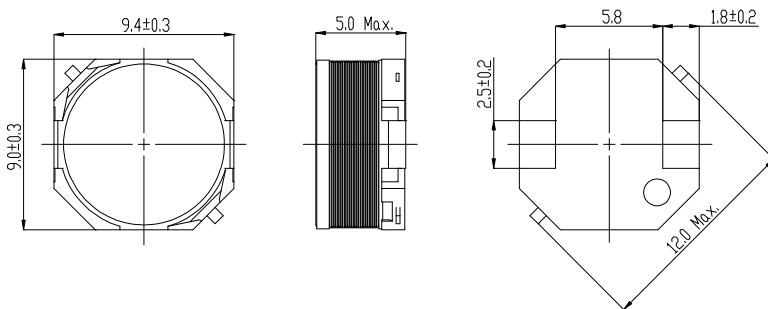
Packaging

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

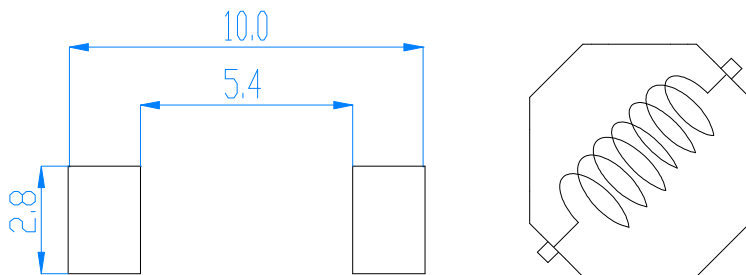
Applications

- 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°C)	Saturation current (mA) ※2 (at 20°C)	Temperature rise current (mA) ※3
CDC90D48NP-103MC	103M	$10 \pm 20\%$	38.2(31.8)	120	78
CDC90D48NP-123MC	123M	$12 \pm 20\%$	52.1(43.3)	104	68
CDC90D48NP-153MC	153M	$15 \pm 20\%$	62.0(51.6)	97	59
CDC90D48NP-183MC	183M	$18 \pm 20\%$	86.1(71.6)	86	42
CDC90D48NP-223MC	223M	$22 \pm 20\%$	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.

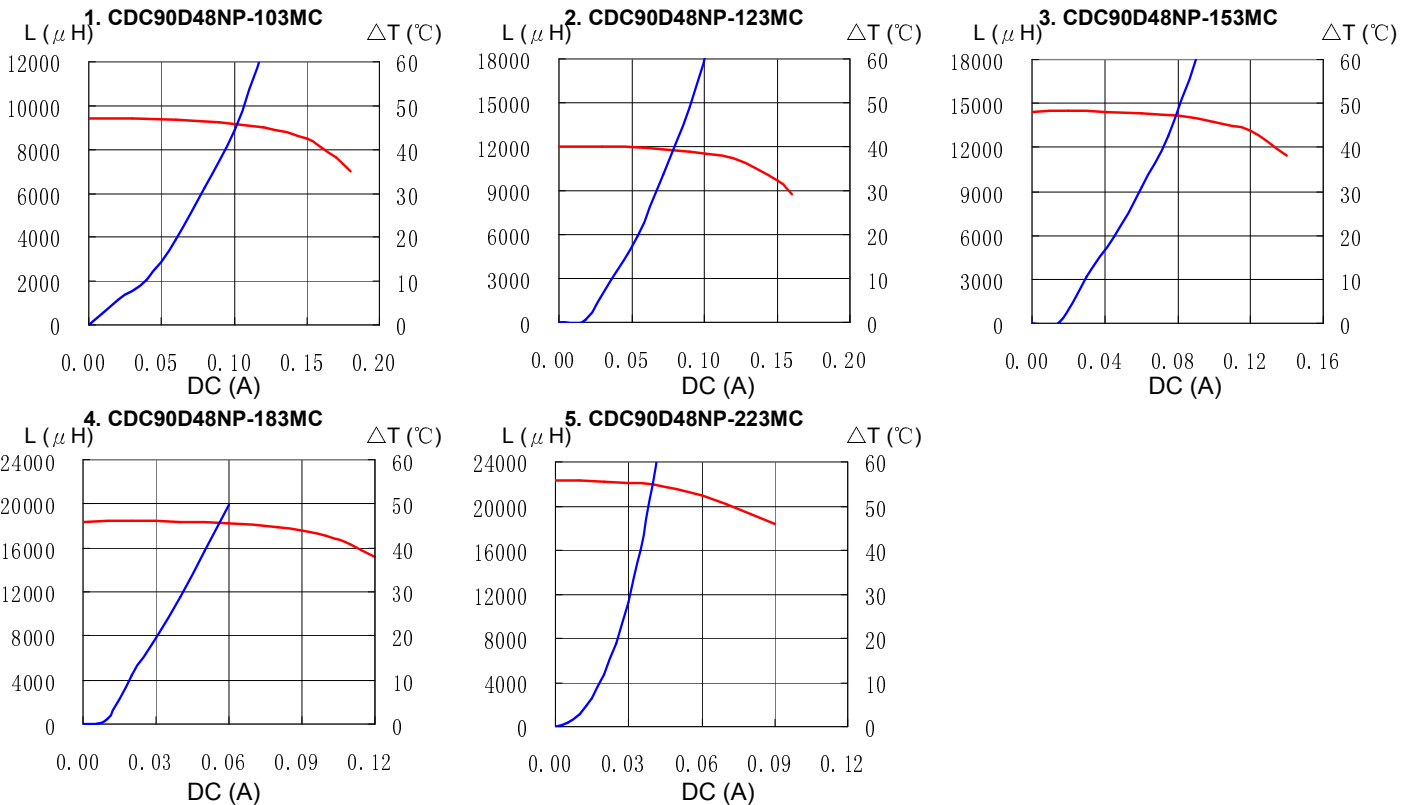
※3. Temperature rise current: The actual value of DC current when the temperature rise is $\Delta T = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

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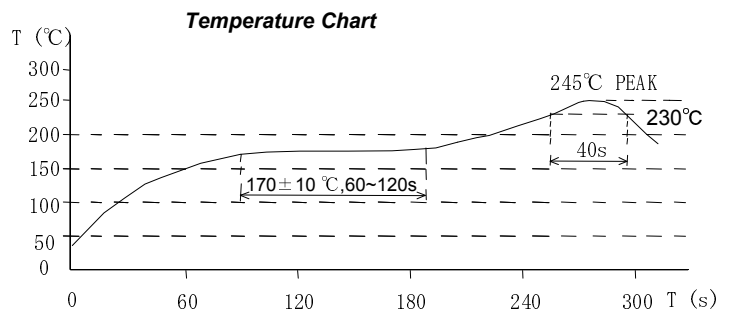
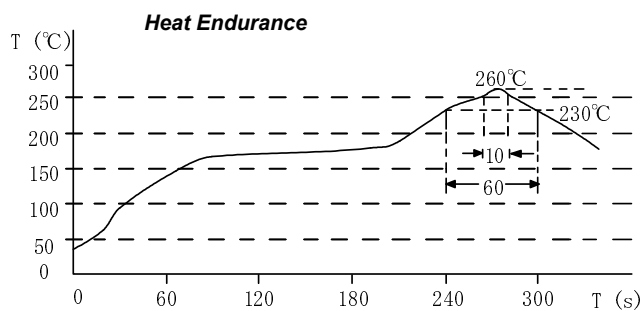


Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT



Solder Reflow Condition



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Hong Kong
 Tel.+852-2880-6781
 FAX.+852-2565-9600
sales@hk.sumida.com
Saitama(Japan)
 Tel.+81-48-691-7300
 FAX.+81-48-691-7340
sales@jp.sumida.com
Chicago
 Tel.+1-847-545-6700
 FAX. +1-847-545-6720
sales@us.sumida.com

Shanghai
 Tel.+86-21-5836-3299
 FAX.+86-21-5836-3266
shanghai.sales@cn.sumida.com
Seoul
 Tel.+82-2-6237-0777
 FAX.+82-2-6237-0778
sales@kr.sumida.com
Oberzell
 Tel.+49-8591-937-0
 FAX. +49-8591-937-103
contact@eu.sumida.com

Shenzhen
 Tel.+86-755-8291-0228
 FAX.+86-755-8291-0338
shenzhen.sales@cn.sumida.com
Singapore
 Tel.+65-6296-3388
 FAX.+65-6841-4426
sales@sg.sumida.com
Neumarkt
 Tel.+49-9181-4509-110
 FAX. +49-9181-4509-310
infocomp@eu.sumida.com

Taipei
 Tel.+886-2-8751-2737
 FAX.+886-2-8751-2738
sales@tw.sumida.com
San Jose
 Tel.+1-408-321-9660
 FAX.+1-408-321-9308
sales@us.sumida.com