

SMD Power Inductor

104CDMCD/DS



Description

- Metal compound molding type construction
- Magnetically shielded
- Low audible core noise
- Suitable for large current
- LxWxH: 11.5x10.3x4.0mm Max.
- Product weight: 2.2 g (Ref.)
- Moisture Sensitivity Level: 1



Environmental Data

- Operating temperature range: -55°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -55°C~+125°C

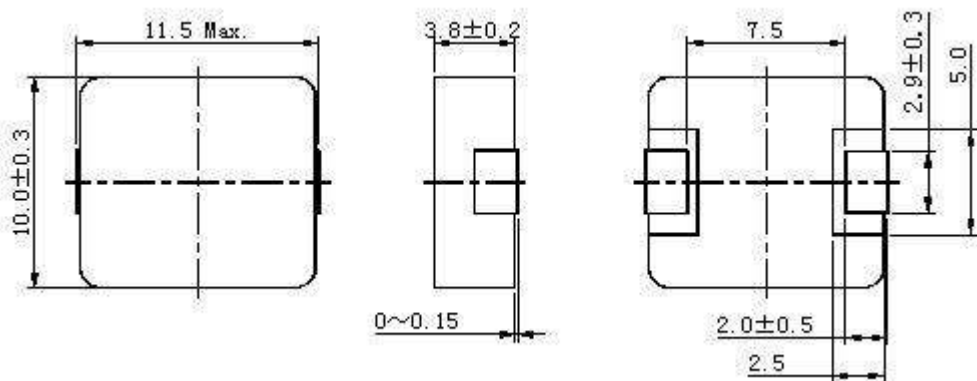
Packaging

- Carrier tape and reel packaging
- 500pcs per reel

Applications

- Ideally used in notebook, tablet PC, LCD display, Server application
- High current, POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems

Dimension - [mm]

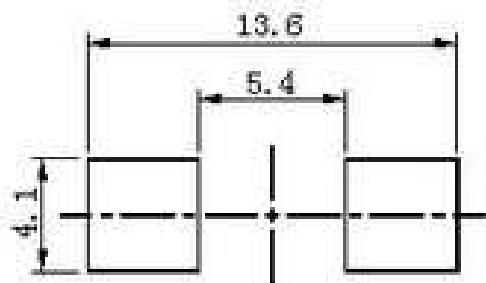


SMD Power Inductor

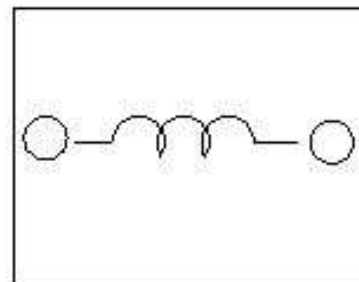
104CDMCD/DS



Recommended Land pattern - [mm]



Wire Connection



SMD Power Inductor

104CDMCD/DS



Electrical Characteristics

Part Number	Inductance [Within] (μ H) ※1	D.C.R. at 20°C (A) Max. (Typ.) (m Ω)	Saturation Current (A) Max. (Typ.) ※2	Temperature Rise Current (A) (Typ.) ※3
104CDMCDDS-R19MC	0.19 \pm 20%	0.78 (0.65)	76.50 (90.00)	(62.00)
104CDMCDDS-R24MC	0.24 \pm 20%	1.15 (0.96)	70.40 (82.80)	(43.00)
104CDMCDDS-R36MC	0.36 \pm 20%	1.44 (1.20)	67.30 (79.20)	(40.00)
104CDMCDDS-R47MC	0.47 \pm 20%	1.80 (1.50)	53.60 (63.00)	(34.00)
104CDMCDDS-R56MC	0.56 \pm 20%	2.16 (1.80)	36.70 (43.20)	(33.00)
104CDMCDDS-R82MC	0.82 \pm 20%	2.76 (2.30)	32.60 (38.50)	(25.00)
104CDMCDDS-1R0MC	1.00 \pm 20%	3.36 (2.80)	31.40 (37.00)	(24.00)
104CDMCDDS-1R5MC	1.50 \pm 20%	6.60 (5.50)	30.60 (36.00)	(16.50)
104CDMCDDS-2R2MC	2.20 \pm 20%	8.60 (7.20)	26.00 (30.60)	(14.00)
104CDMCDDS-3R3MC	3.30 \pm 20%	13.00 (11.00)	19.00 (22.50)	(11.80)
104CDMCDDS-4R7MC	4.70 \pm 20%	18.00 (15.00)	15.30 (18.00)	(9.50)
104CDMCDDS-5R6MC	5.60 \pm 20%	22.50 (19.00)	14.00 (16.50)	(9.00)
104CDMCDDS-6R8MC	6.80 \pm 20%	24.00 (20.00)	14.50 (17.00)	(8.80)
104CDMCDDS-100MC	10.00 \pm 20%	39.00 (32.50)	10.70 (12.60)	(6.60)

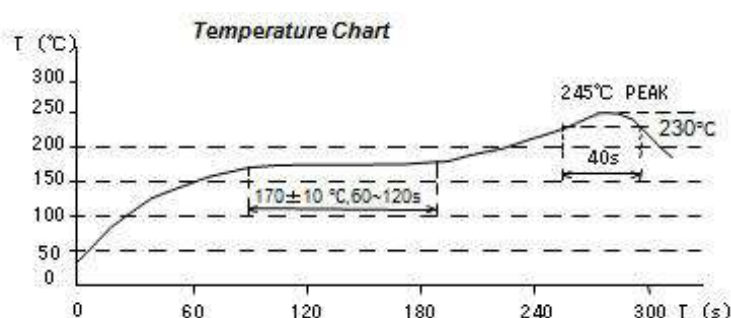
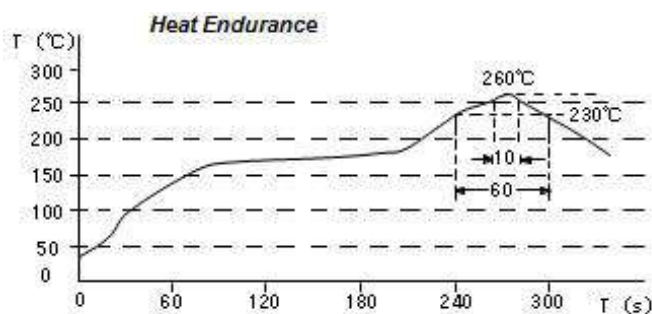
※1 Measuring frequency Inductance at 100kHz, 1.0V.

※2 Saturation current: This indicates the value of D.C. current when the inductance becomes 20% lower than its initial value.

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

(Test board condition: FR4, Copper=70 μ m, four-layer PWB t=1.6mm)

Solder Reflow Condition



SMD Power Inductor

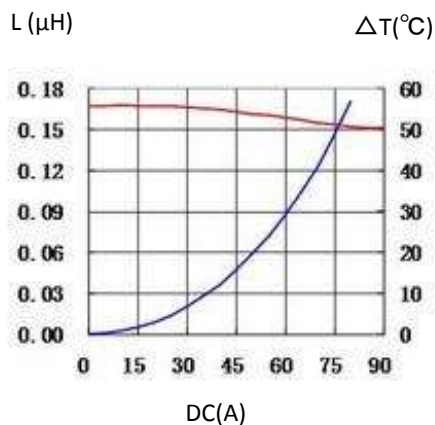
104CDMCD/DS



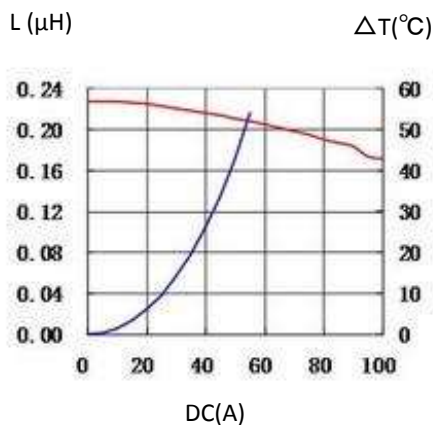
Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

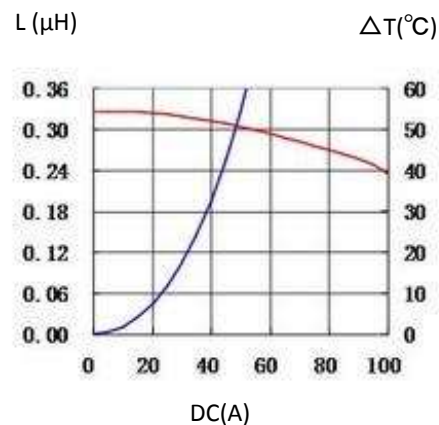
1. 104CDMCDDS-R19MC



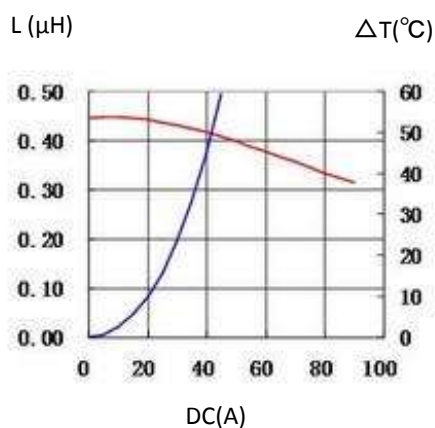
2. 104CDMCDDS-R24MC



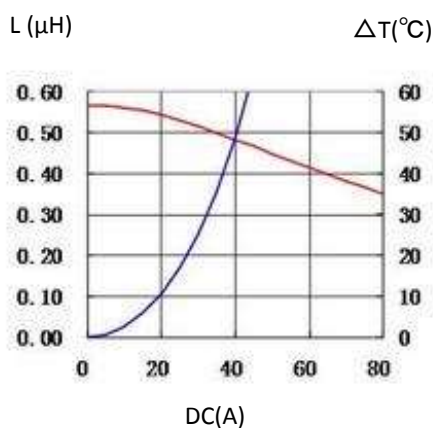
3. 104CDMCDDS-R36MC



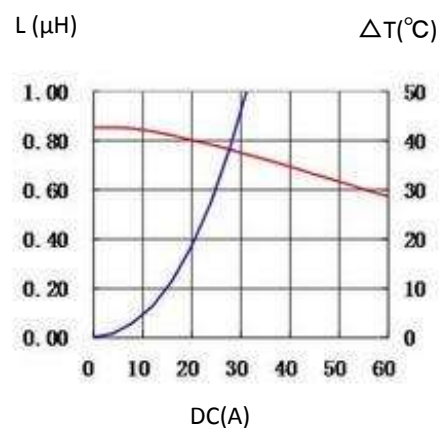
4. 104CDMCDDS-R47MC



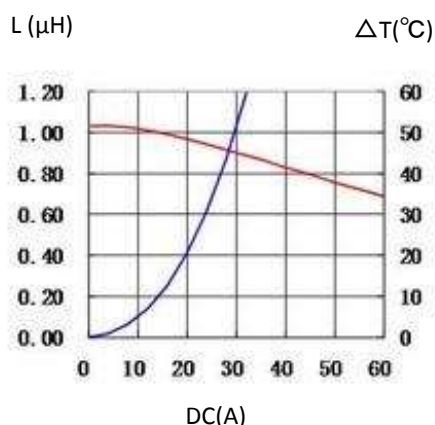
5. 104CDMCDDS-R56MC



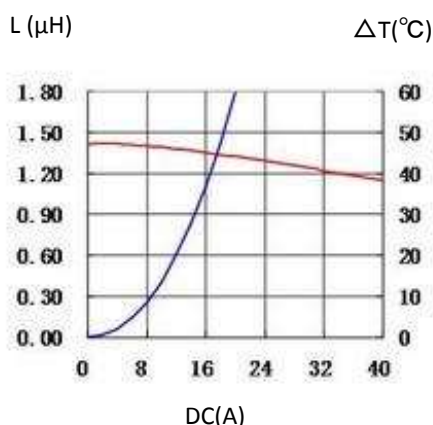
6. 104CDMCDDS-R82MC



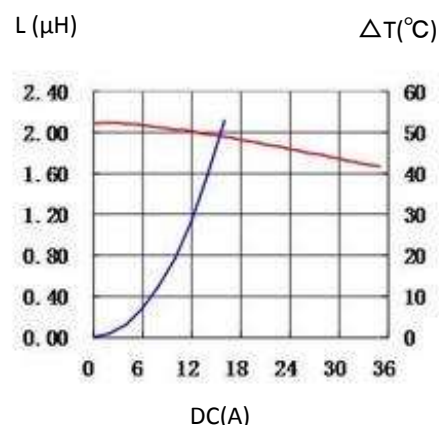
7. 104CDMCDDS-1R0MC



8. 104CDMCDDS-1R5MC



9. 104CDMCDDS-2R2MC



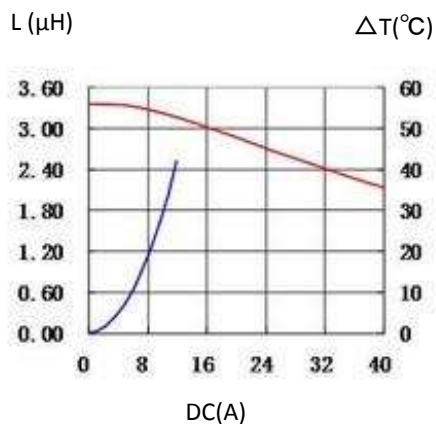
Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

SMD Power Inductor

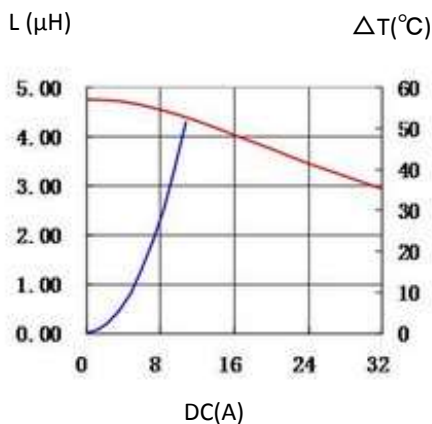
104CDMCD/DS



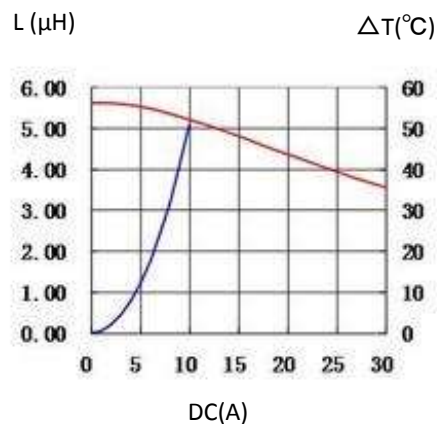
10. 104CDMCDDS-3R3MC



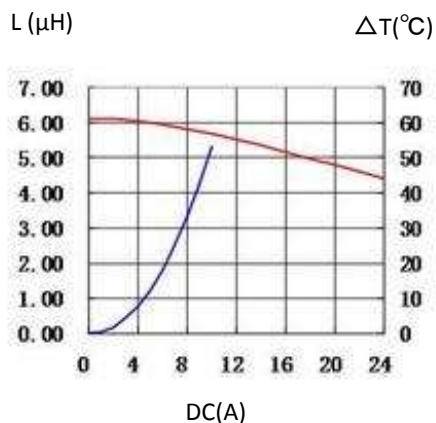
11. 104CDMCDDS-4R7MC



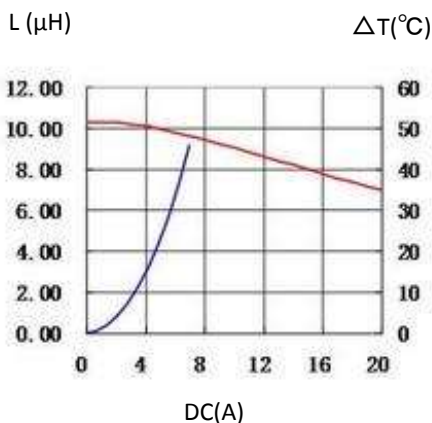
12. 104CDMCDDS-5R6MC



13. 104CDMCDDS-6R8MC



14. 104CDMCDDS-100MC



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