



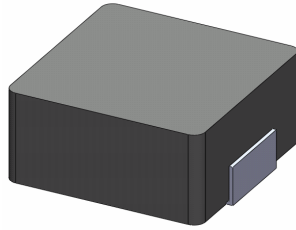
**THE DATASHEET OF
0530CDMCCDS-1R0MC**



SMD Power Inductor 0530CDMCC/DS



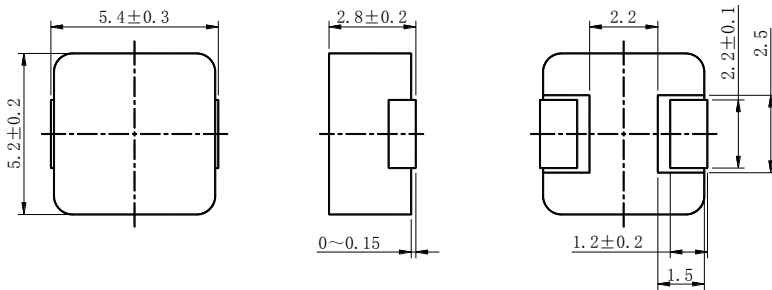
Halogen
Free



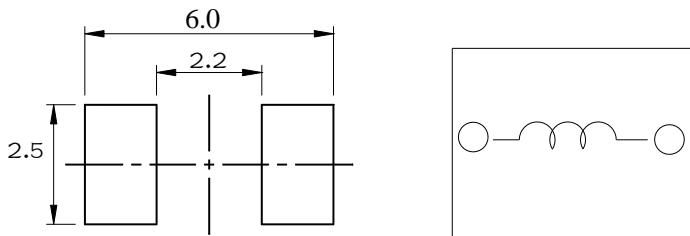
Description

- Metal compound molding type construction.
- Magnetically shielded.
- Low audible core noise.
- Suitable for large current.
- L × W × H: 5.7 × 5.4 × 3.0mm Max.
- Product weight: 0.43g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Dimension - [mm]



Land pattern and Schematics - [mm]



Environmental Data

- Operating temperature range: -55°C ~ +125°C (including coil's self temperature rise)
- Storage temperature range: -55°C ~ +125°C
- Solder reflow temperature: 260 °C peak.

Packaging

- Carrier tape and reel packaging.
- 2000pcs/Reel.

Applications

- Ideally used in notebook, ultrabook, 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.



Electrical Characteristics

Part No.	Stamp	Inductance (μ H) [Within] ※1	D.C.R (m Ω) (at 25°C) Max.(Typ.)	Saturation Current (A)※2 Max.(Typ.) (at 25°C)	Temperature rise current (A)※3 Typ.
0530CDMCCDS-R10MC	R10	0.10 \pm 20%	2.8(2.4)	24.5(29.0)	21.0
0530CDMCCDS-R20MC	R20	0.20 \pm 20%	3.9(3.5)	18.7(22.0)	14.0
0530CDMCCDS-R33MC	R33	0.33 \pm 20%	5.0(4.4)	16.0(19.0)	13.5
0530CDMCCDS-R47MC	R47	0.47 \pm 20%	8.5(7.4)	15.3(18.0)	10.5
0530CDMCCDS-R68MC	R68	0.68 \pm 20%	12.0(11.0)	11.9(14.0)	9.6
0530CDMCCDS-1R0MC	1R0	1.0 \pm 20%	14.0(13.0)	10.2(12.0)	9.4
0530CDMCCDS-1R2MC	1R2	1.2 \pm 20%	16.0(15.0)	11.5(13.5)	8.7
0530CDMCCDS-1R5MC	1R5	1.5 \pm 20%	25.0(20.0)	11.1(13.0)	7.2
0530CDMCCDS-2R2MC	2R2	2.2 \pm 20%	29.0(25.0)	7.6(9.0)	5.8
0530CDMCCDS-3R3MC	3R3	3.3 \pm 20%	38.0(32.0)	6.8(8.0)	5.1
0530CDMCCDS-4R7MC	4R7	4.7 \pm 20%	60.0(50.0)	5.1(6.0)	3.8
0530CDMCCDS-5R6MC	5R6	5.6 \pm 20%	54.0(47.0)	3.6(4.3)	4.0
0530CDMCCDS-6R8MC	6R8	6.8 \pm 20%	90.0(75.0)	3.8(4.5)	3.3
0530CDMCCDS-100MC	100	10 \pm 20%	125(110)	3.4(4.0)	2.8

※1 Measuring frequency Inductance at 100kHz ,1.0V

※2 Saturation current: The value of DC current when the inductance is over 70% of its initial value. (at 25°C)

※3 Temperature rise current: The actual value of DC current when temperature of coil rise is

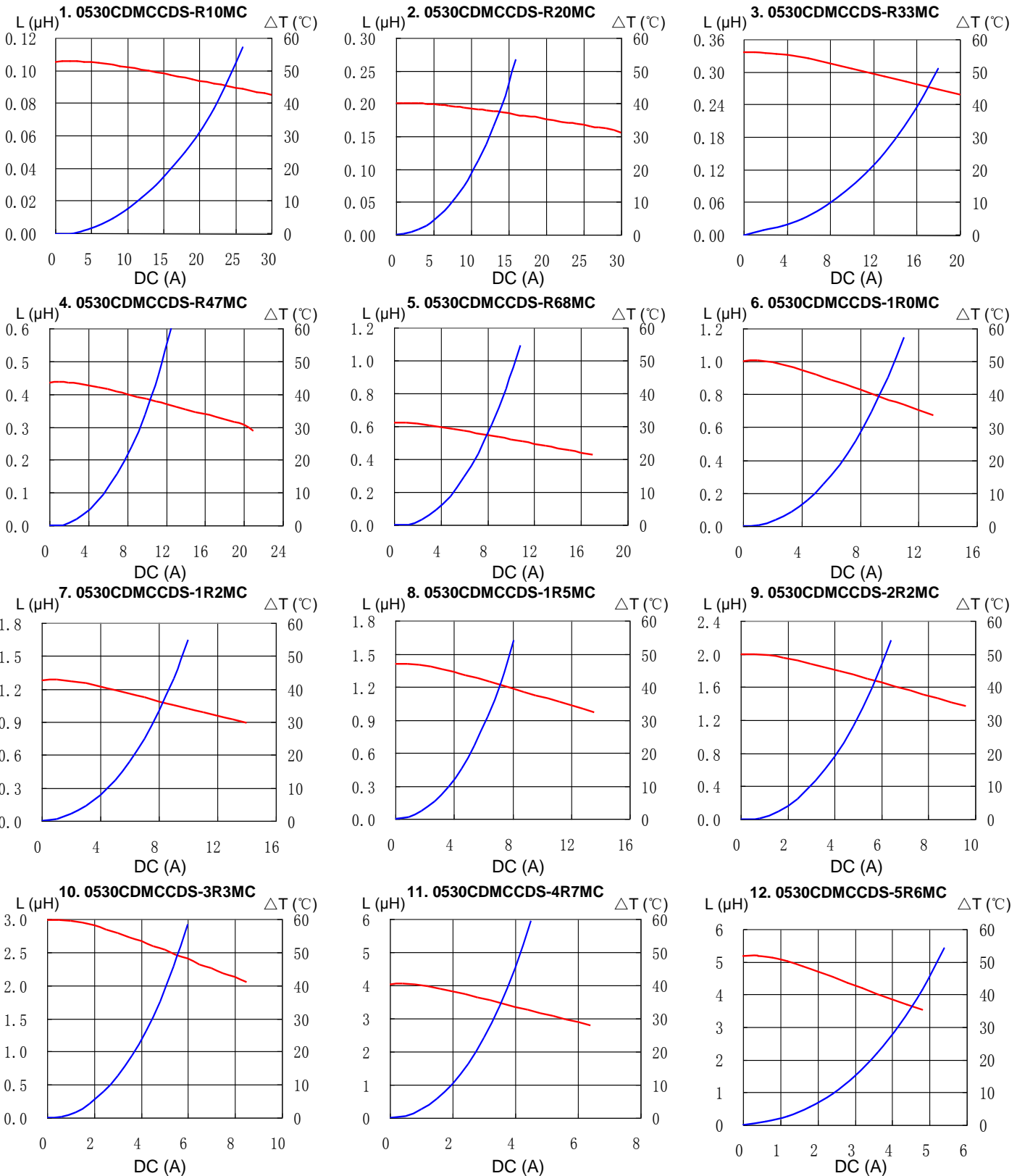
$\Delta T=40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$) Board conditions: FR4, Copper=70 μm , four-layer PWB, $t=1.6\text{mm}$.

SMD Power Inductor 0530CDMCC/DS



Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

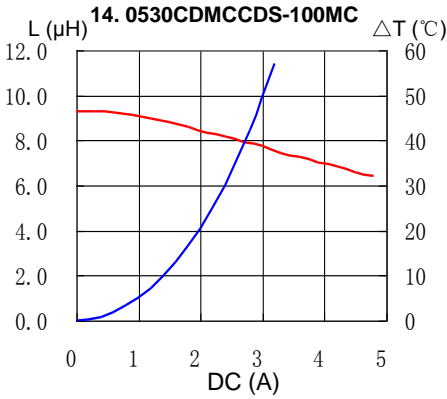
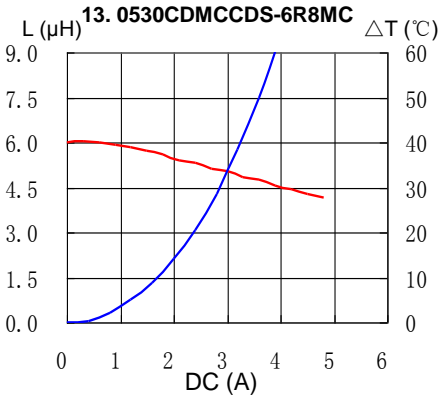


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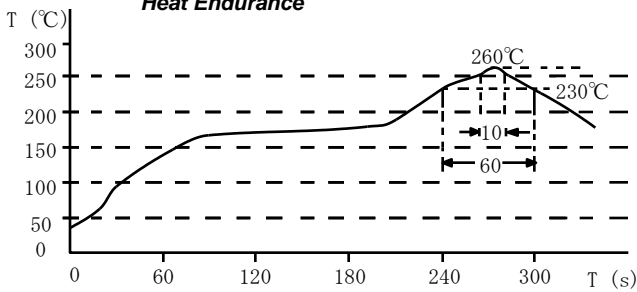
Saturation Current & Temperature Rise Graph

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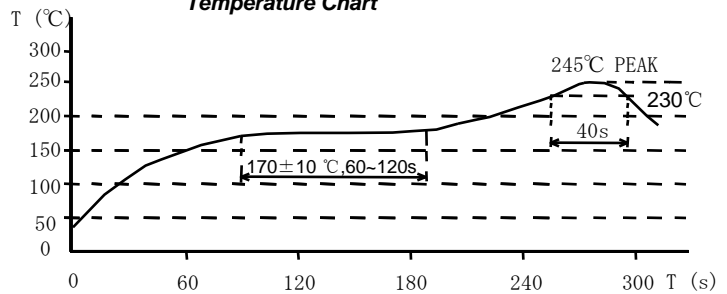


Solder Reflow Condition

Heat Endurance



Temperature Chart



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