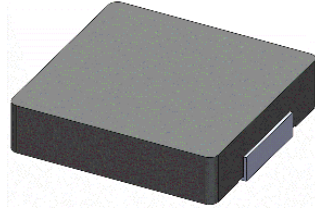


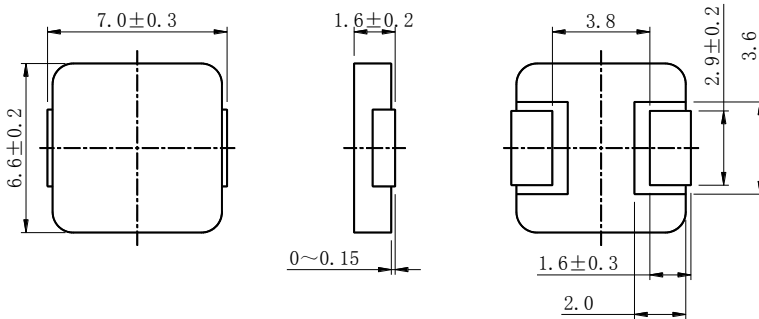
SMD Power Inductor 0618CDMCC/DS



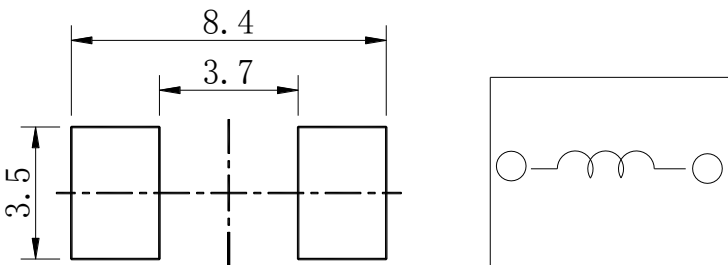
Halogen
Free



Dimension - [mm]



Land pattern and Schematics - [mm]



Description

- Metal compound molding type construction.
- Magnetically shielded.
- Low audible core noise.
- Suitable for large current.
- L × W × H: $7.3 \times 6.8 \times 1.8$ mm Max.
- Product weight: 0.45g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Environmental Data

- Operating temperature range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (including coil's self temperature rise)
- Storage temperature range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Solder reflow temperature: 260°C peak.

Packaging

- Carrier tape and reel packaging.
- 1500pcs/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 (μH) [Within] ※1	D.C.R ($\text{m}\Omega$) at 25°C Max.(Typ.)	Saturation Current (A)※2 Max.(Typ.) (at 25°C)	Temperature rise current (A)※3 Typ.
0618CDMCCDS-R10MC	R10	0.10 \pm 20%	2.4(2.05)	34.0(40.0)	25.0
0618CDMCCDS-R12MC	R12	0.12 \pm 20%	2.4(2.05)	30.0(36.0)	25.0
0618CDMCCDS-R15MC	R15	0.15 \pm 20%	2.4(2.05)	27.0(32.0)	25.0
0618CDMCCDS-R22MC	R22	0.22 \pm 20%	3.6(3.1)	23.0(27.0)	18.0
0618CDMCCDS-R68MC	R68	0.68 \pm 20%	12.0(10.0)	14.4(17.0)	9.8
0618CDMCCDS-1R0MC	1R0	1.0 \pm 20%	16.0(13.0)	12.1(14.3)	8.3
0618CDMCCDS-1R5MC	1R5	1.5 \pm 20%	24.0(20.0)	10.3(12.0)	7.0
0618CDMCCDS-2R2MC	2R2	2.2 \pm 20%	33.6(28.0)	9.2(10.8)	6.0
0618CDMCCDS-3R3MC	3R3	3.3 \pm 20%	50.0(43.0)	6.8(8.0)	4.7
0618CDMCCDS-4R7MC	4R7	4.7 \pm 20%	62.0(56.0)	5.3(6.3)	4.0
0618CDMCCDS-6R8MC	6R8	6.8 \pm 20%	110.0(101.0)	4.3(5.0)	3.0
0618CDMCCDS-8R2MC	8R2	8.2 \pm 20%	142.0(123.0)	4.0(4.7)	2.6
0618CDMCCDS-100MC	100	10.0 \pm 20%	165.0(150.0)	3.4(4.0)	2.3

※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

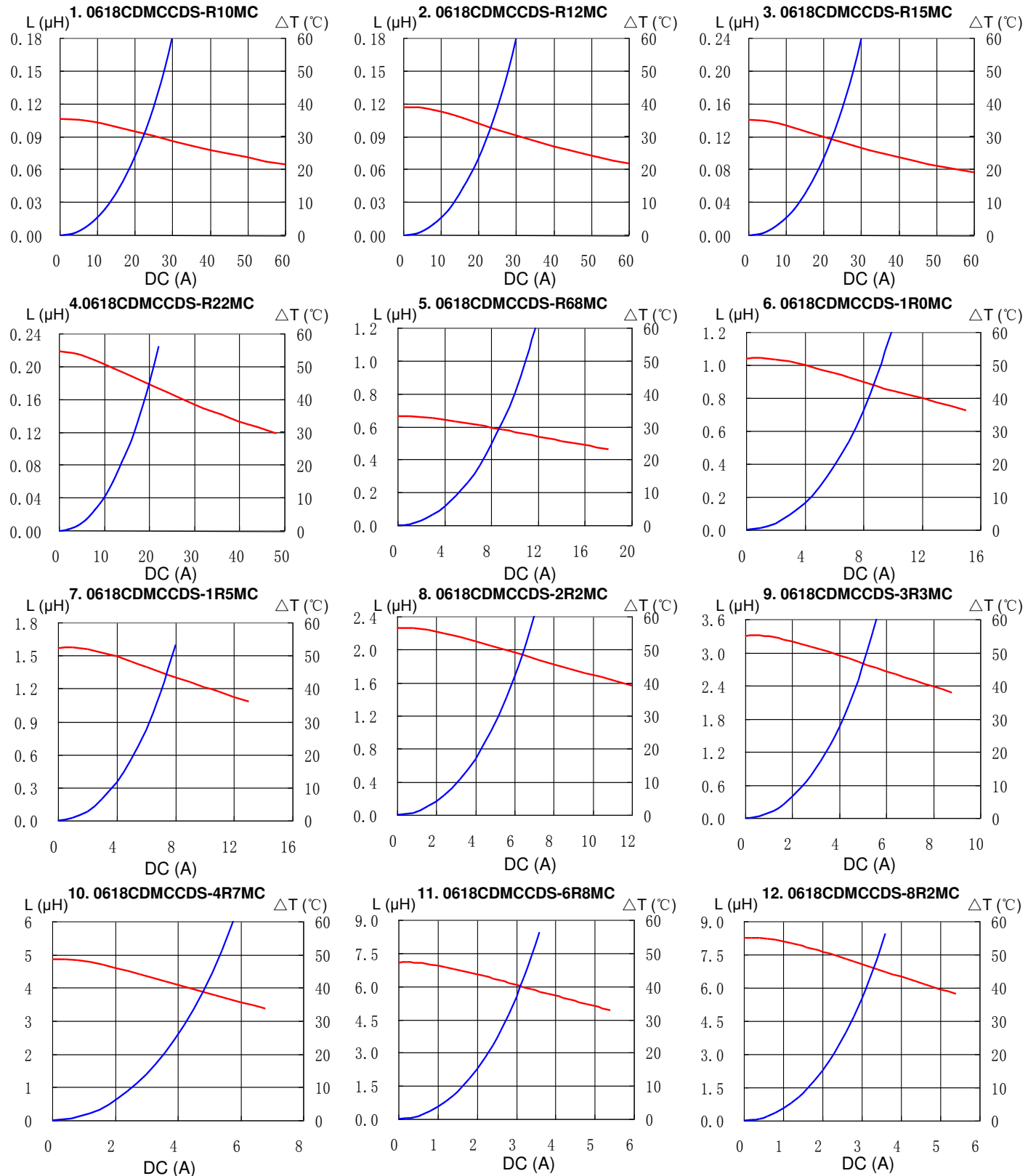
$\Delta T=40^\circ\text{C}$ ($T_a=25^\circ\text{C}$) Board conditions: FR4, Copper=70 μm , four-layer PWB, t=1.6mm.

SMD Power Inductor 0618CDMCC/DS



Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

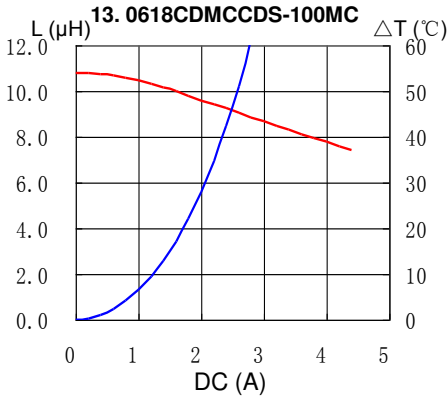


SMD Power Inductor 0618CDMCC/DS



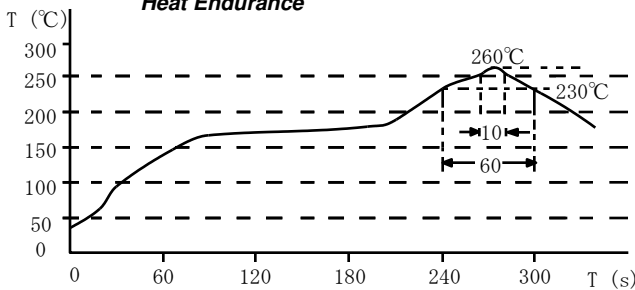
Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

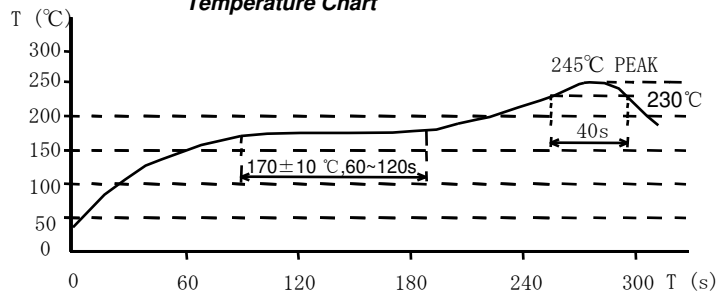


Solder Reflow Condition

Heat Endurance



Temperature Chart



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