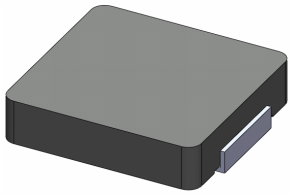
SMD Power Inductor
0412CDMCC/DS

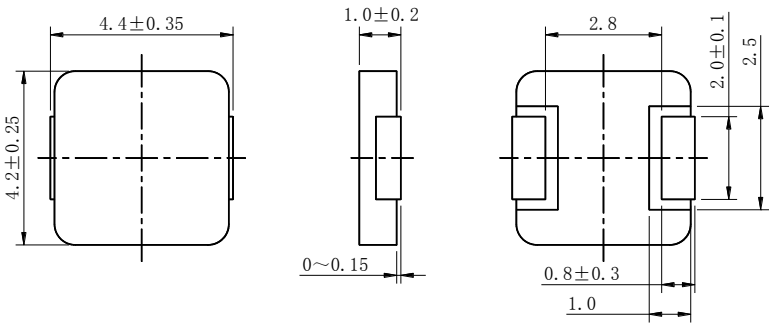
RoHS

Halogen Free

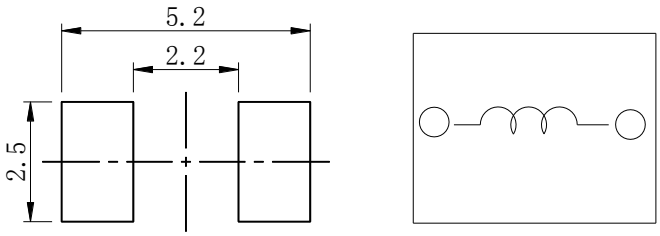


Description
- Metal compound molding type construction.
- Magnetically shielded.
- Low audible core noise.
- Suitable for large current.
- L × W × H: 4.75 × 4.45 × 1.2 mm Max.
- Product weight:0.16g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Dimension - [mm]



Land pattern and Schematics - [mm]



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

Packaging
- Carrier tape and reel packaging.
- 3000pcs/Reel.

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

Revised: 10-Jan-19

Electrical Characteristics

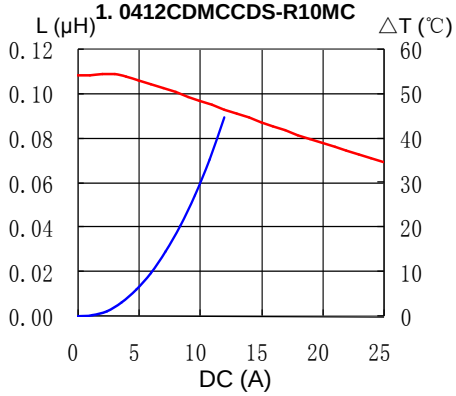
Part No.	Stamp	Inductance(μH) [Within] ※1	D.C.R(mΩ) Max.(Typ.) at 25℃	Saturation Current (A)Max.(Typ.) at 25℃ ※2	Temperature rise current(A) Typ.※3
0412CDMCCDS-R10MC	R10	0.10±20%	7.2(6.0)	16.5(19.5)	11.5
0412CDMCCDS-R12MC	R12	0.12±20%	7.8(6.5)	16.0(19.0)	11.0
0412CDMCCDS-R15MC	R15	0.15±20%	9.6(8.0)	14.5(17.0)	9.4
0412CDMCCDS-R22MC	R22	0.22±20%	11.0(9.2)	12.0(14.0)	9.0
0412CDMCCDS-R33MC	R33	0.33±20%	19(17)	9.4(11.0)	6.5
0412CDMCCDS-R47MC	R47	0.47±20%	21(19)	8.2(9.7)	6.0
0412CDMCCDS-R68MC	R68	0.68±20%	36(32)	6.9(8.0)	4.7
0412CDMCCDS-1R0MC	1R0	1.0±20%	47(43)	6.0(7.1)	4.1
0412CDMCCDS-1R5MC	1R5	1.5±20%	75(68)	3.6(4.2)	2.9
0412CDMCCDS-2R2MC	2R2	2.2±20%	84(80)	3.4(4.0)	2.7
0412CDMCCDS-3R3MC	3R3	3.3±20%	140(125)	3.2(3.8)	2.1
0412CDMCCDS-4R7MC	4R7	4.7±20%	195(175)	2.6(3.1)	1.8

※1 Measuring frequency Inductance at 100kHz 1V.
※2 Saturation current: This indicates the value of D.C. current when the inductance becomes 30% lower than its initial value.
※3 Temperature rise current: The actual value of D.C. current when the temperature of coil becomes △T=40℃ (Ta＝25℃).
(Test board condition: FR4, Copper=70μm, four-layer PWB t=1.6mm)

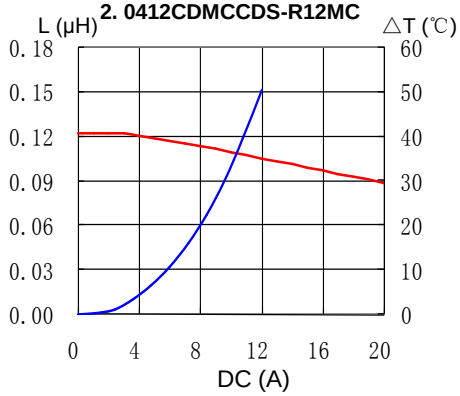
Saturation Current & Temperature Rise Graph

L (20℃) △T

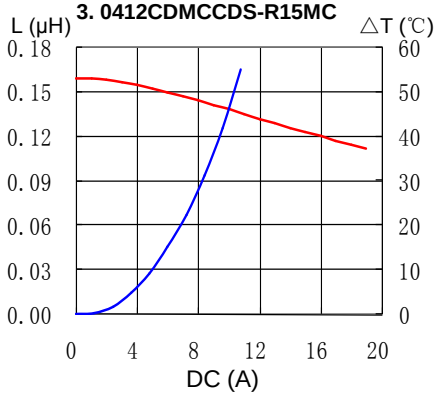
1. 0412CDMCCDS-R10MC



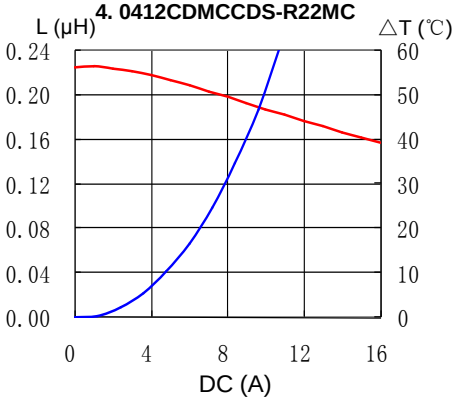
2. 0412CDMCCDS-R12MC



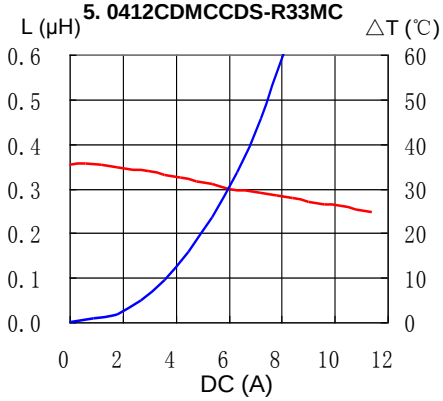
3. 0412CDMCCDS-R15MC



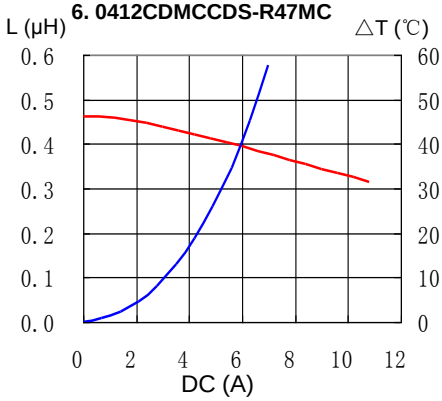
4. 0412CDMCCDS-R22MC



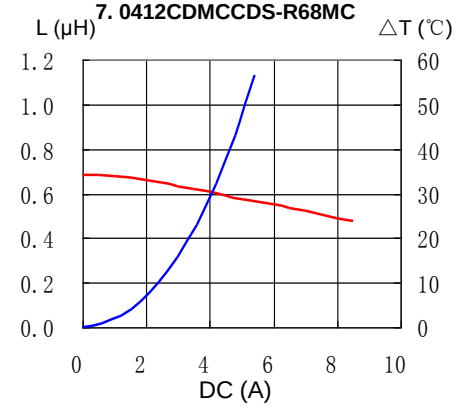
5. 0412CDMCCDS-R33MC



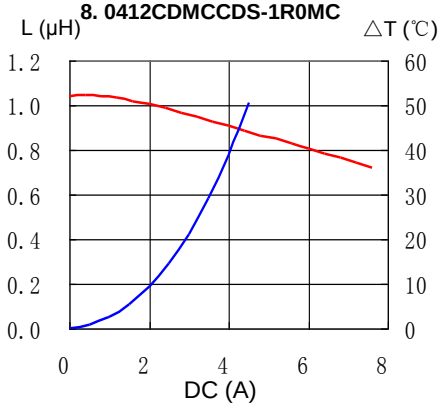
6. 0412CDMCCDS-R47MC



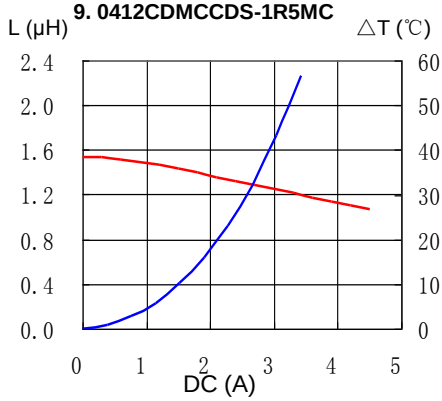
7. 0412CDMCCDS-R68MC



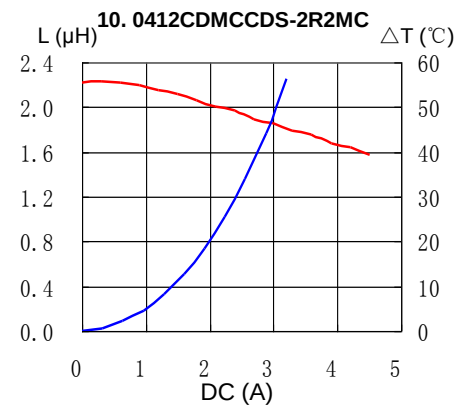
8. 0412CDMCCDS-1R0MC



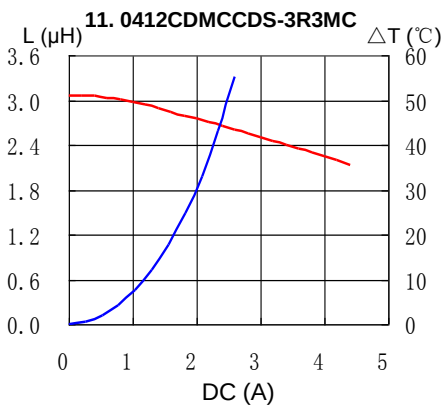
9. 0412CDMCCDS-1R5MC



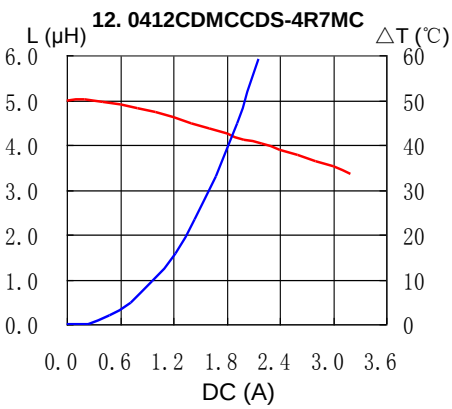
10. 0412CDMCCDS-2R2MC



11. 0412CDMCCDS-3R3MC

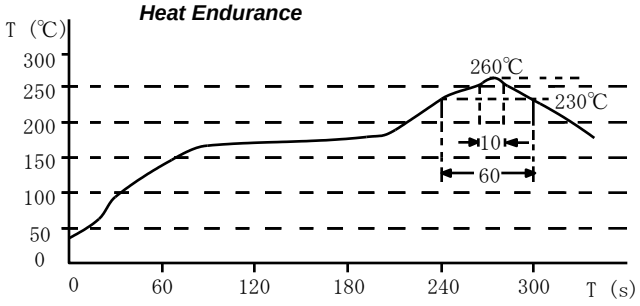


12. 0412CDMCCDS-4R7MC

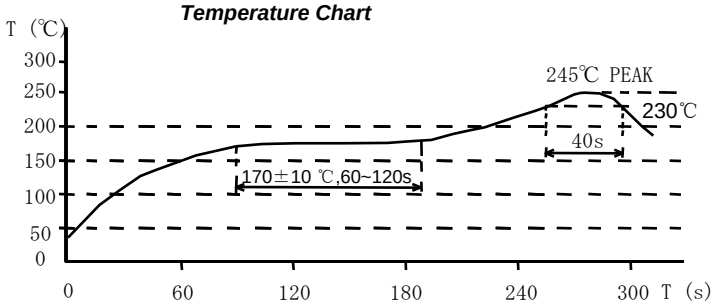


Solder Reflow Condition

Heat Endurance



Temperature Chart



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