

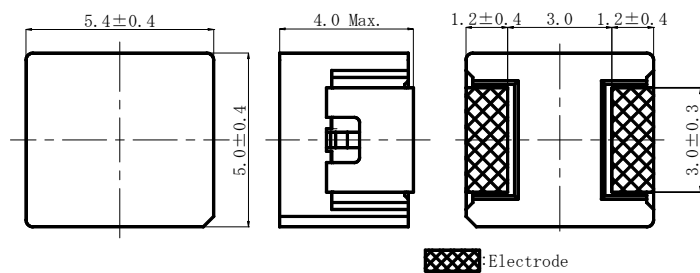
Features

- Metal compound molding type construction.
- Magnetically shielded.
- Qualified AEC-Q200
- Suitable for Large Current
- Operating temperature range: - 40deg C~+150deg C (including coil's self temperature rise)

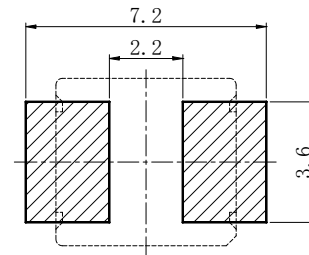
Applications

- LED Head light for Automobile
- ECU for Airbag, Water and Oil pump etc
- DC/DC converter

Dimension - [mm]



Reference Land pattern- [mm]



Electrical Characteristics

Part No.	Inductance (μH) (±20%) * 1	D.C.R. (mΩ) at 20degC (±10%)	Saturation Current (A) * 2			Temperature Rise current (A) * 3
			at 20degC	at 110degC	at 150degC	
CDMC50D38T150NP -1R0MC	1.05	16.5	11.5	10.0	10.0	6.5
CDMC50D38T150NP -1R5MC	1.50	20.0	9.8	9.0	8.9	5.9
CDMC50D38T150NP -2R5MC	2.50	27.3	8.0	7.5	7.4	5.1
CDMC50D38T150NP -3R0MC	3.00	30.5	7.5	6.9	6.8	4.8
CDMC50D38T150NP -4R7MC	4.70	41.0	6.3	5.8	5.7	4.1
CDMC50D38T150NP -6R8MC	6.80	51.3	5.4	4.9	4.8	3.6
CDMC50D38T150NP -100MC	10.0	76.6	4.4	4.1	4.0	2.9
CDMC50D38T150NP -150MC	15.0	120.8	3.6	3.3	3.2	2.3
CDMC50D38T150NP -220MC	22.0	180.8	3.0	2.7	2.7	1.8

* 1 Inductance Measuring frequency: 100kHz, 0.1V

* 2 Saturation current: DC current which becomes inductance value drop down to 30% from the initial value.

* 3 Temperature rise current : DC current which becomes $\Delta T=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$) in component body temperature.
Board conditions: FR4, Copper=70μm, four-layer PWB, t=1.6mm

* In order to select the proper inductor for your circuit design, it should be checked the inductor rated current for heat generation in the worst case. Under normal operational condition, it shall not exceed the maximum operating temperature (150 deg C.)

* Allowable current of inductor is either saturation current or temperature rise current, whichever is lower.

* Absolute maximum voltage 40V DC.

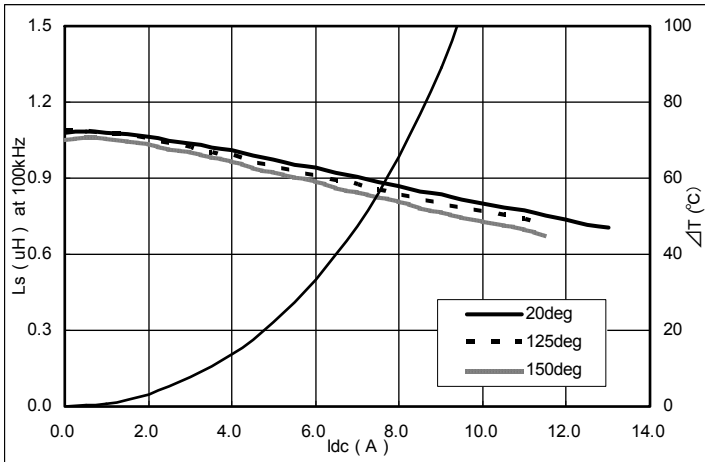
* Take the static electricity measures to prevent deterioration of electric characteristics.

Note: This datasheet might be slightly modified without notice in order to improve the quality and reliability of the product. Please contact an appropriate our sales in your regions for checking final spec before you place an order.

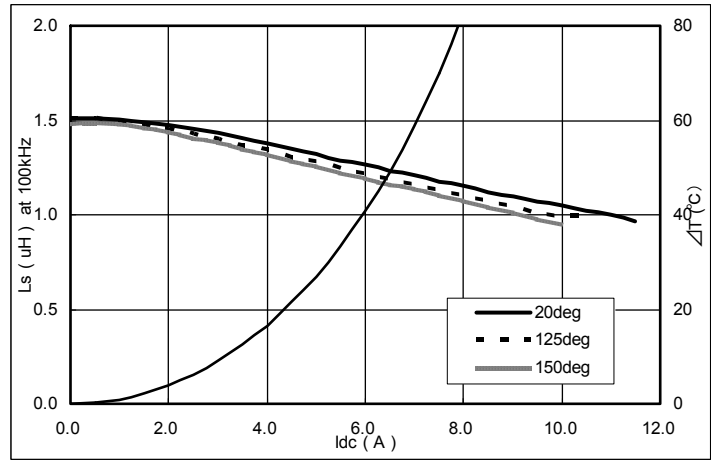
CDMC50D38/T150



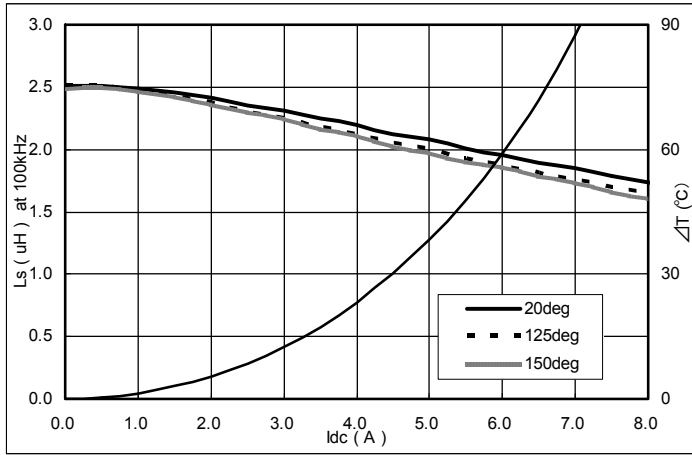
CDMC50D38T150NP-1R0MC



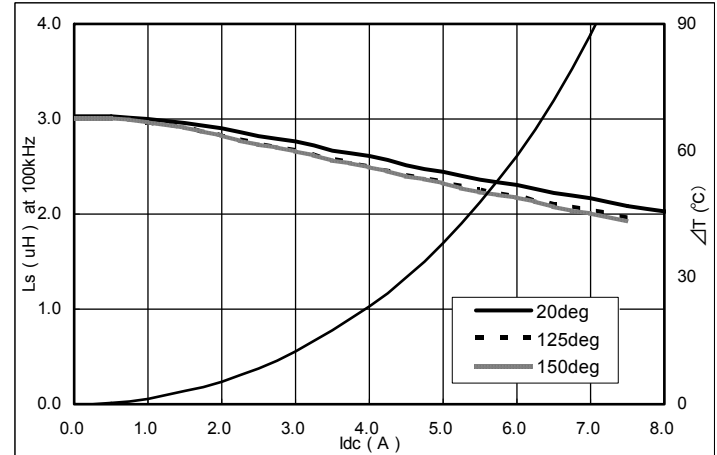
CDMC50D38T150NP-1R5MC



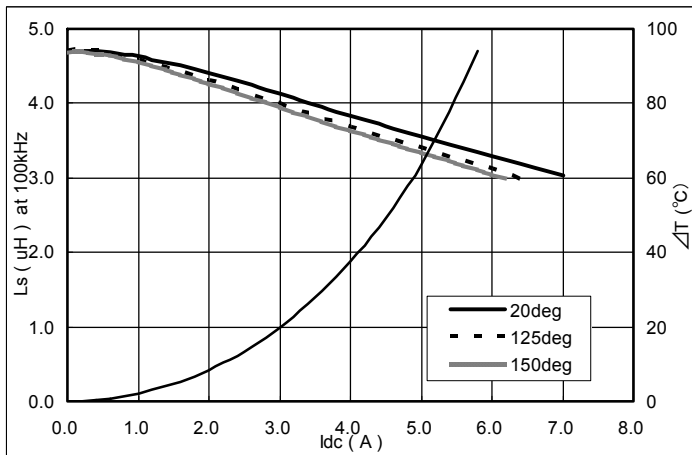
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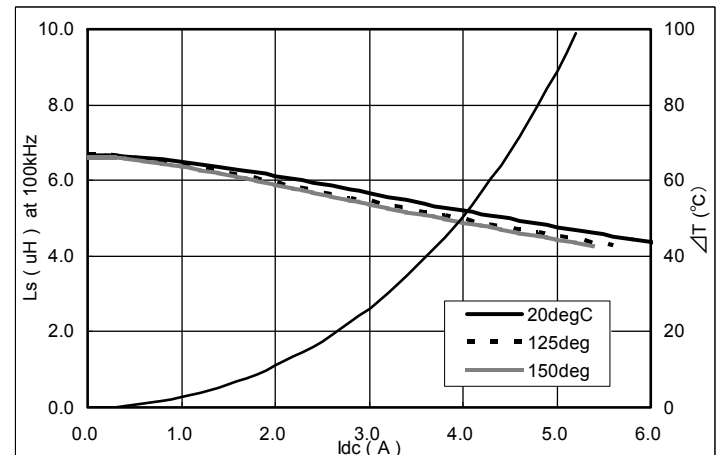
CDMC50D38T150NP-3R0MC



CDMC50D38T150NP-4R7MC



CDMC50D38T150NP-6R8MC

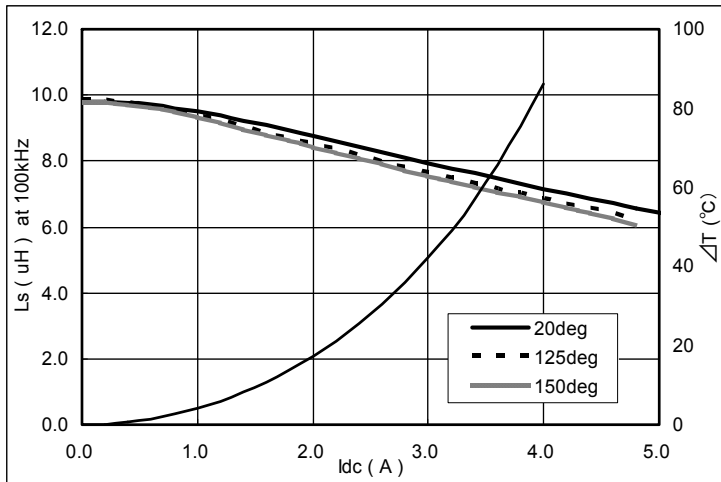


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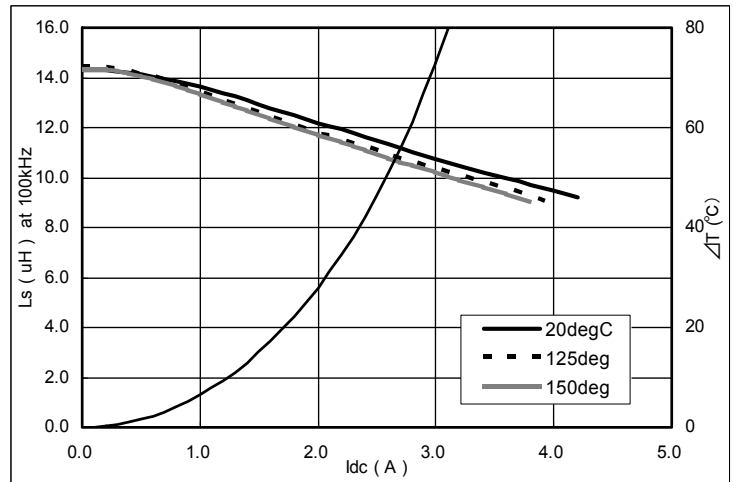
CDMC50D38/T150



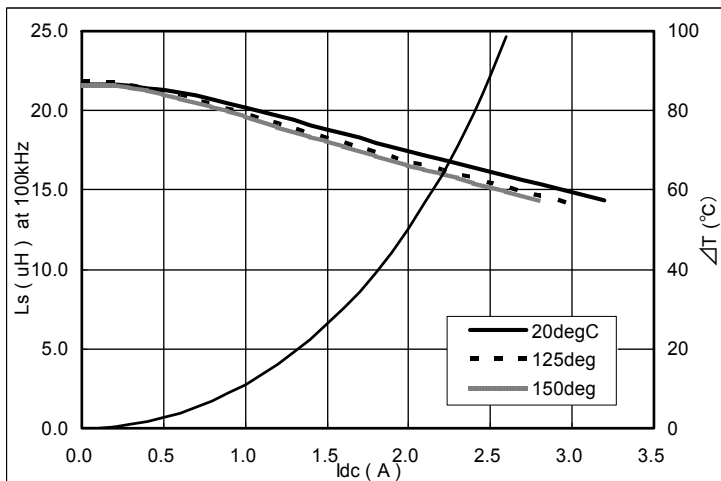
CDMC50D38T150NP-100MC



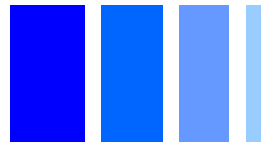
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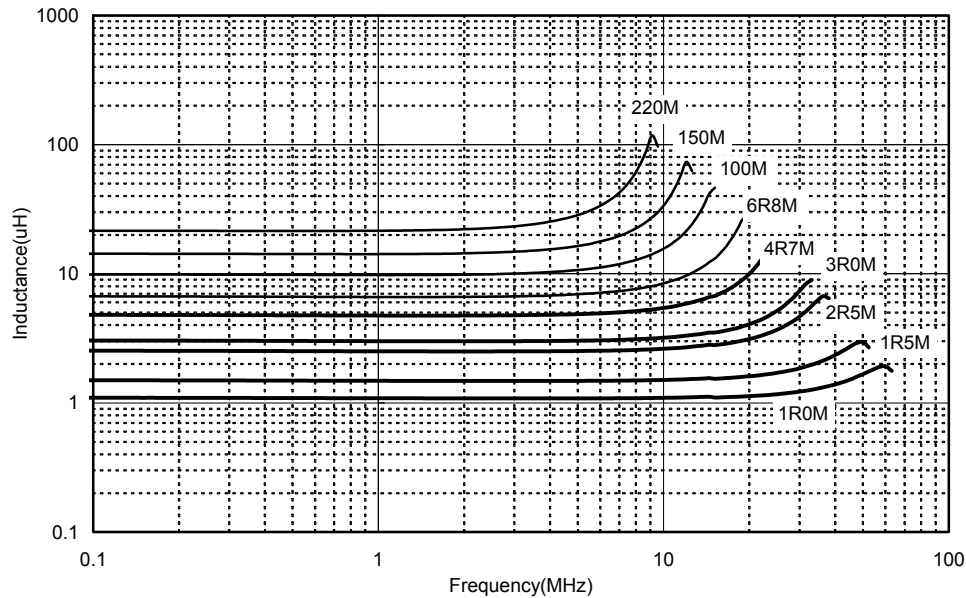
CDMC50D38T150NP-220MC



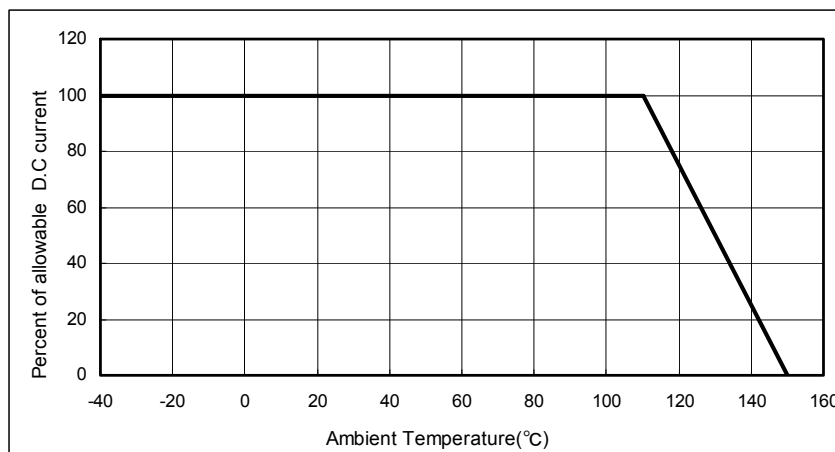
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Inductance vs Frequency Graph



Derating Curve



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Hong Kong
 Tel.+852-2880-6781
 FAX.+852-2565-9600
sales@hk.sumida.com
Saitama (Japan)
 Tel.+81-48-691-7303
 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.+86-021-5836-3299
 FAX.+86-021-5836-3266
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@sumida-eu.com

Shenzhen
 Tel.+86-755-8291-0228
 FAX.+86-755-8291-0338
shenzhen.sales@cn.sumida.com
Singapore
 Tel.+65-6296-3388
 FAX.+65-6296-3390
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.+1-408-3219660
 FAX.+1-408-321-9308
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