

SMD Power Inductor

CDRH12D58R



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.4 × 12.4 × 6.0 mm Max.
- Product weight: 2.9 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: -40℃ ~ +105℃
- Storage temperature range: -40℃ ~ +105℃
- Solder reflow temperature: 260 ℃ peak.

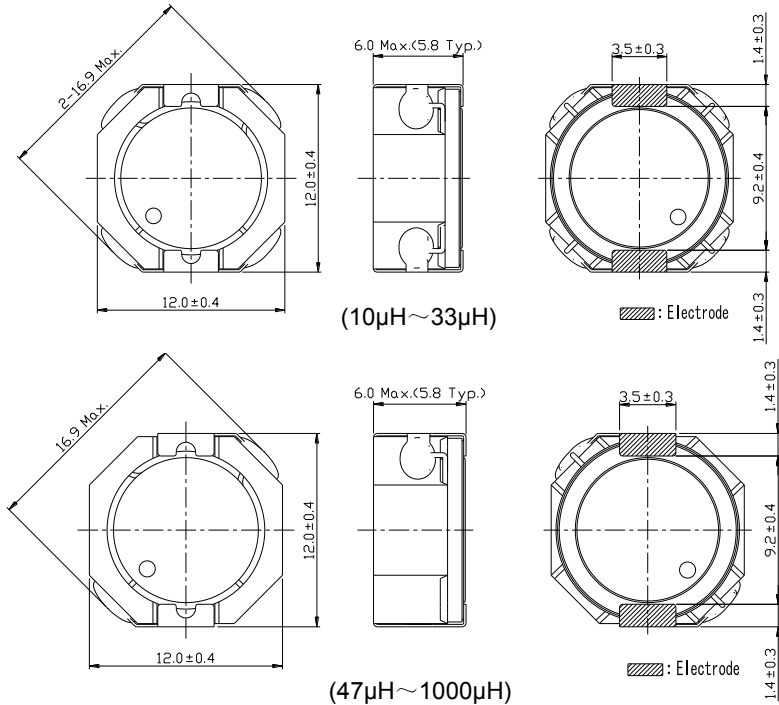
Packaging

- Carrier tape and reel packaging
- 12" diameter reel
- 500pcs per reel

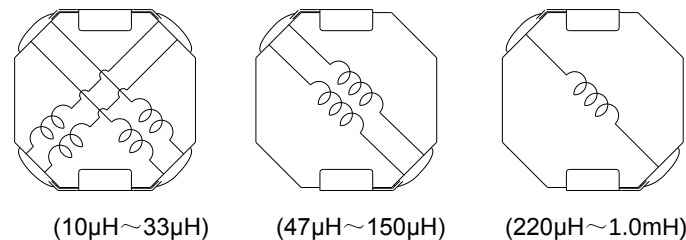
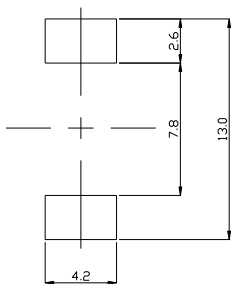
Applications

- Ideally used in Game machine, Notebook PC, LCD TV, DVD, STB, Projector etc as DC-DC converter inductors.

Dimension - [mm]

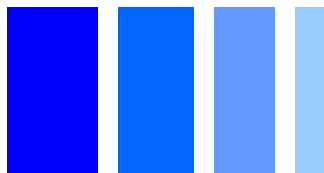


Land pattern and Schematics - [mm]



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Electrical Characteristics

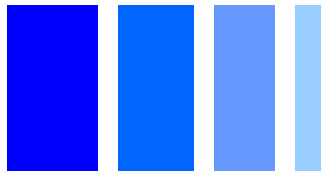
Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R. (m Ω) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 105°C	
CDRH12D58RNP-100MC	100	10 $\pm$ 20%	22.5(18)	7.20	4.70	4.70
CDRH12D58RNP-150MC	150	15 $\pm$ 20%	28.8(23)	5.50	3.60	4.60
CDRH12D58RNP-220MC	220	22 $\pm$ 20%	42.5(34)	4.70	3.10	3.30
CDRH12D58RNP-330MC	330	33 $\pm$ 20%	53.8(43)	3.70	2.40	2.95
CDRH12D58RNP-470MC	470	47 $\pm$ 20%	86.5(69)	3.15	2.10	2.10
CDRH12D58RNP-680MC	680	68 $\pm$ 20%	121(97)	2.65	1.75	1.86
CDRH12D58RNP-101MC	101	100 $\pm$ 20%	176(141)	2.25	1.5	1.56
CDRH12D58RNP-151MC	151	150 $\pm$ 20%	251(201)	1.80	1.20	1.28
CDRH12D58RNP-221MC	221	220 $\pm$ 20%	391(313)	1.45	1.00	1.03
CDRH12D58RNP-331MC	331	330 $\pm$ 20%	544(435)	1.22	0.80	0.90
CDRH12D58RNP-471MC	471	470 $\pm$ 20%	764(611)	1.01	0.66	0.68
CDRH12D58RNP-681MC	681	680 $\pm$ 20%	1078(863)	0.86	0.56	0.61
CDRH12D58RNP-102MC	102	1000 $\pm$ 20%	1625(1300)	0.69	0.46	0.48

※1. Inductance measuring condition :at 100kHz

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

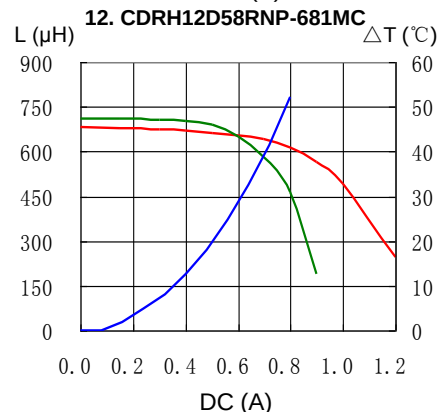
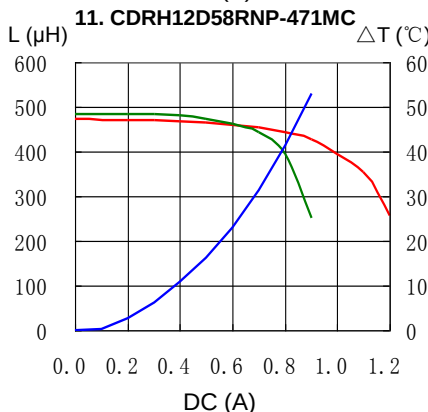
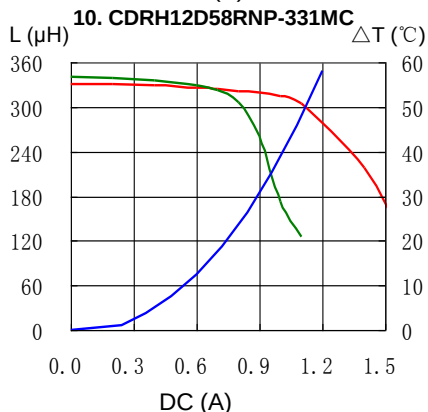
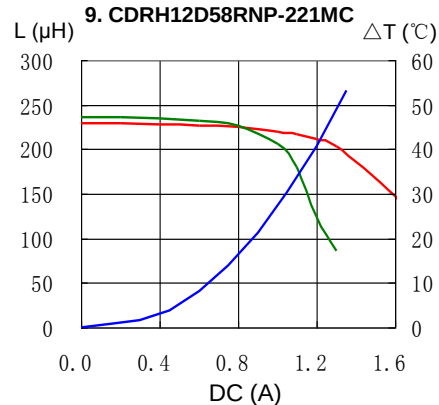
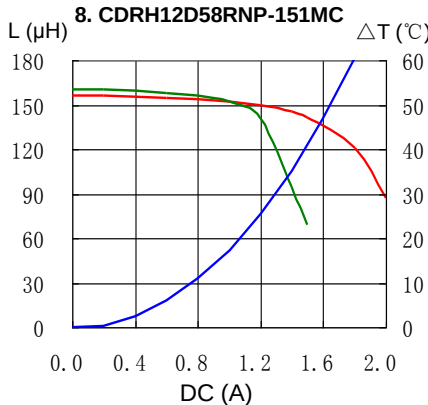
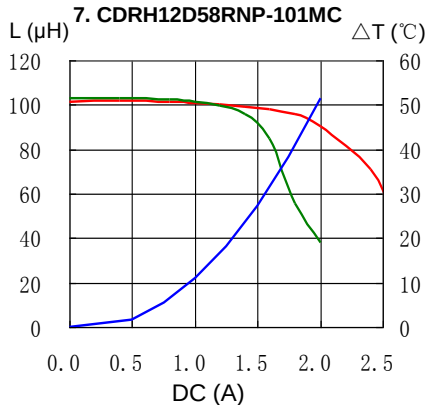
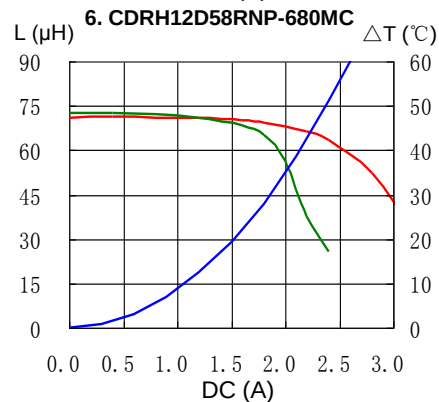
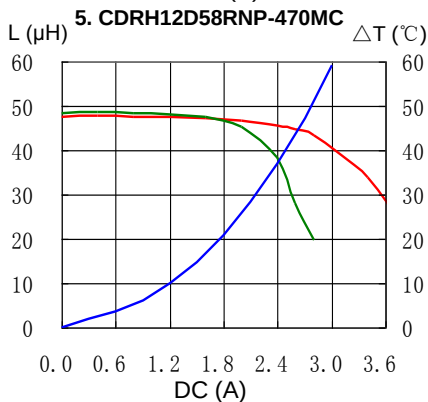
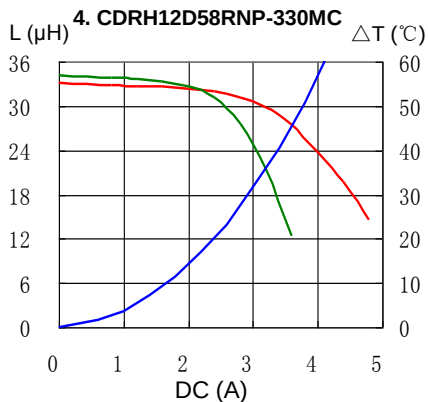
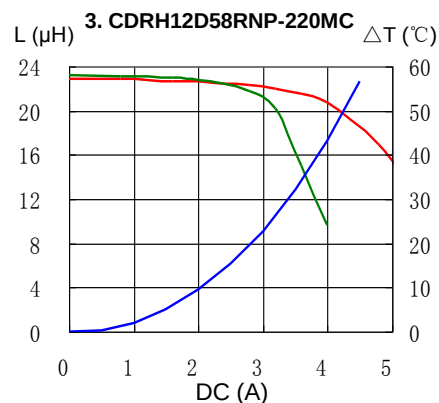
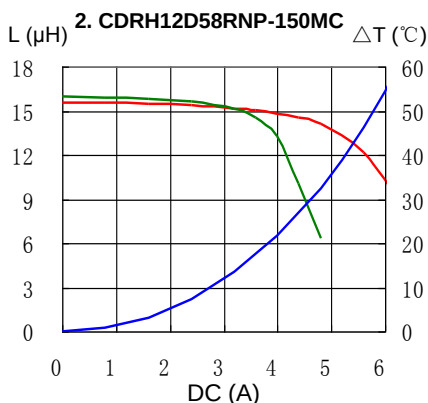
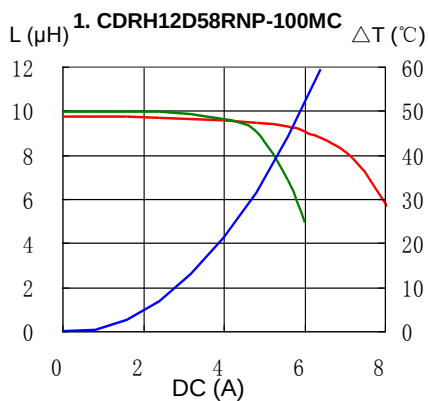
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

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Saturation Current & Temperature Rise Graph

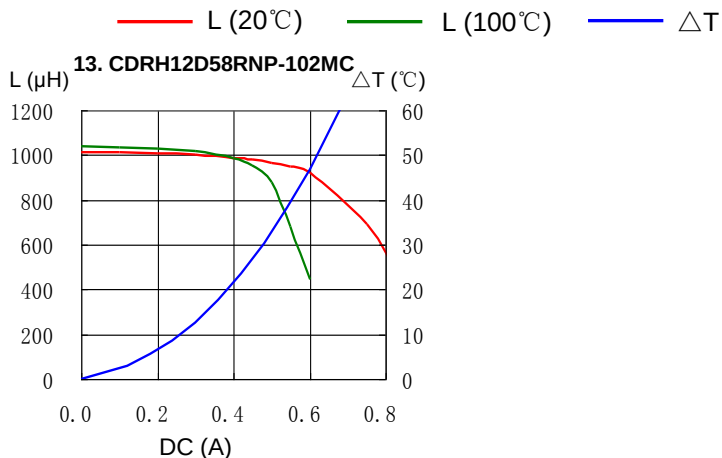
— L (20°C) — L (100°C) — ΔT



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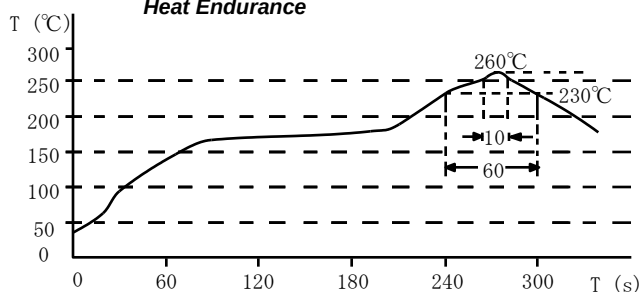


Saturation Current & Temperature Rise Graph

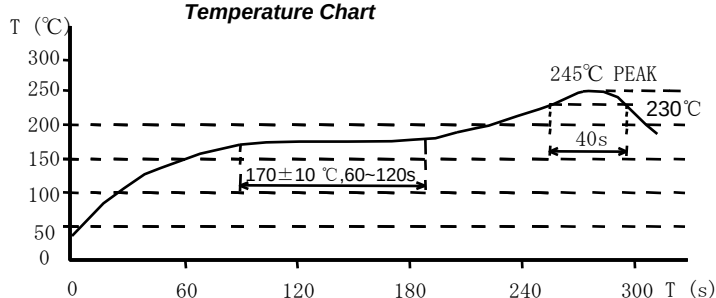


Solder Reflow Condition

Heat Endurance



Temperature Chart



Please refer to the sales offices on our website - <http://www.sumida.com>

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