

SMD Power Inductor CDRH12D78R



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.4 × 12.4 × 8.0mm Max.
- Product weight: 4.1g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: -40°C~+105°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C
- Solder reflow temperature: 260 °C peak.

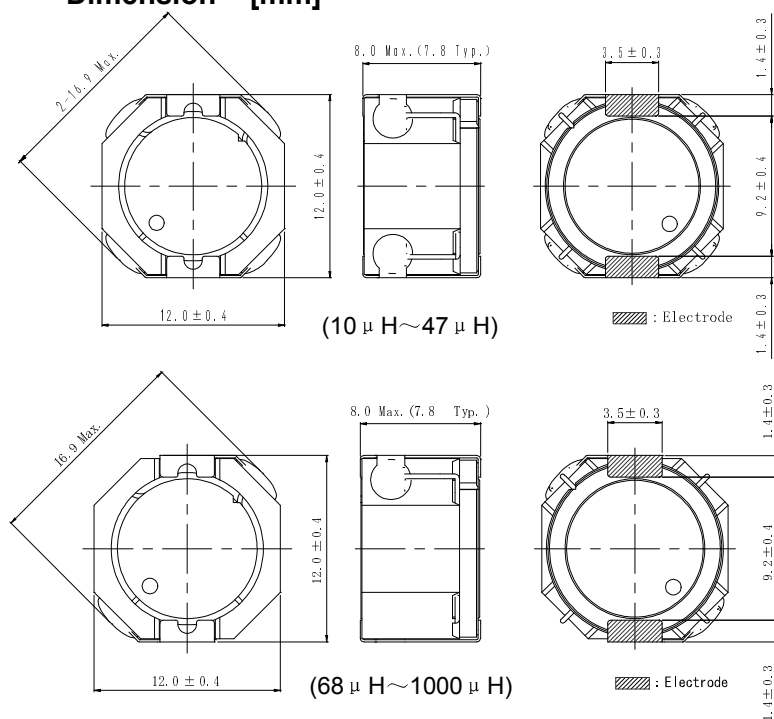
Packaging

- Carrier tape and reel packaging.
- 12.9" diameter reel
- 500pcs per reel

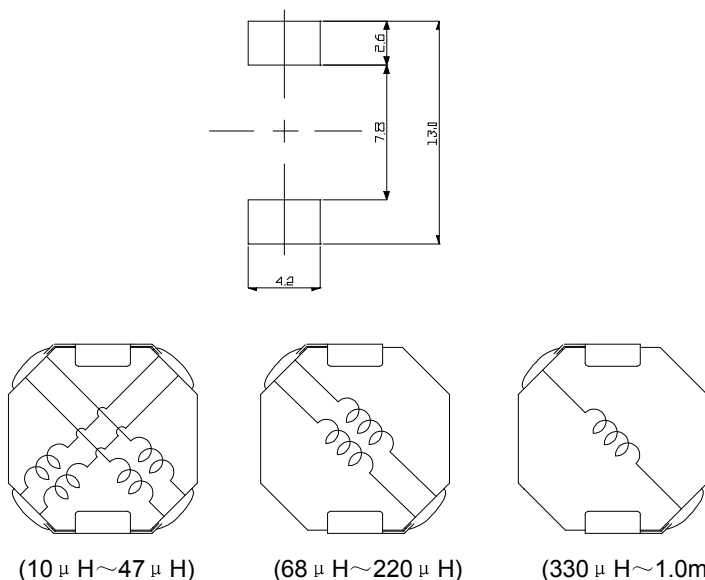
Applications

- 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 No.	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	
CDRH12D78RNP-100MC	100	10 $\pm$ 20%	18.7(15)	10.1	6.60	5.90
CDRH12D78RNP-150MC	150	15 $\pm$ 20%	23.8(19)	8.40	5.50	4.60
CDRH12D78RNP-220MC	220	22 $\pm$ 20%	35.0(28)	6.80	4.40	3.80
CDRH12D78RNP-330MC	330	33 $\pm$ 20%	50.0(40)	5.50	3.50	3.10
CDRH12D78RNP-470MC	470	47 $\pm$ 20%	70.0(56)	4.60	3.05	2.55
CDRH12D78RNP-680MC	680	68 $\pm$ 20%	93.8(75)	3.85	2.45	2.20
CDRH12D78RNP-101MC	101	100 $\pm$ 20%	141.3(113)	3.15	2.10	1.80
CDRH12D78RNP-151MC	151	150 $\pm$ 20%	218.8(175)	2.55	1.64	1.45
CDRH12D78RNP-221MC	221	220 $\pm$ 20%	325.0(260)	2.08	1.38	1.09
CDRH12D78RNP-331MC	331	330 $\pm$ 20%	470.0(376)	1.72	1.12	0.96
CDRH12D78RNP-471MC	471	470 $\pm$ 20%	652.5(522)	1.42	0.92	0.84
CDRH12D78RNP-681MC	681	680 $\pm$ 20%	928.8(743)	1.19	0.77	0.66
CDRH12D78RNP-102MC	102	1000 $\pm$ 20%	1458(1167)	0.98	0.64	0.52

※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.

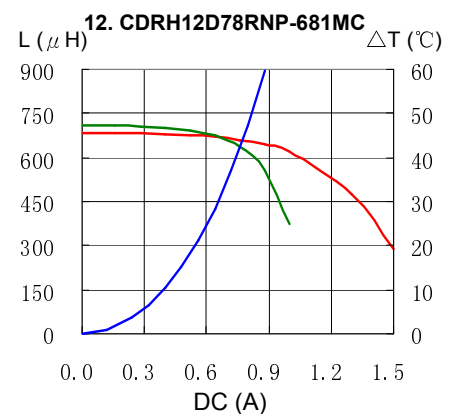
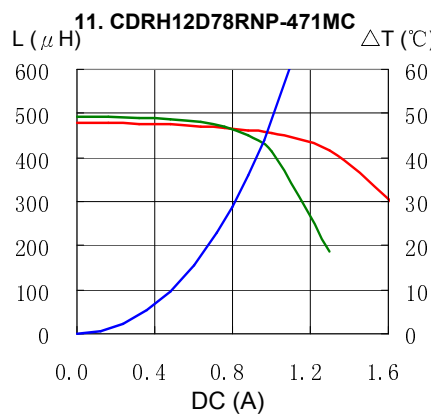
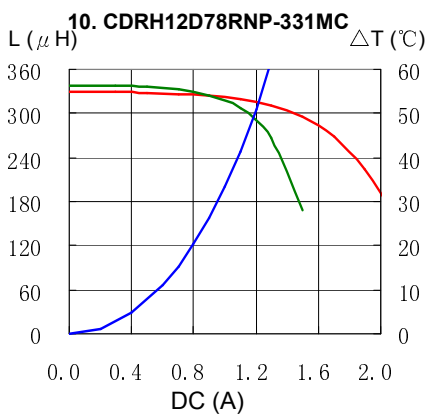
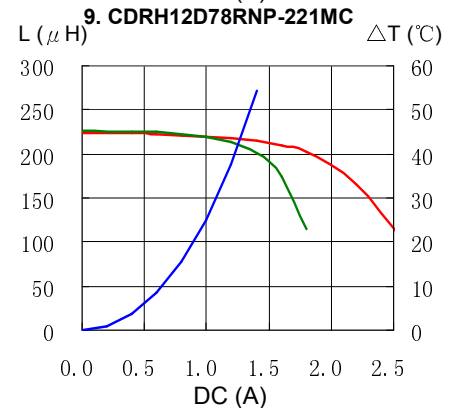
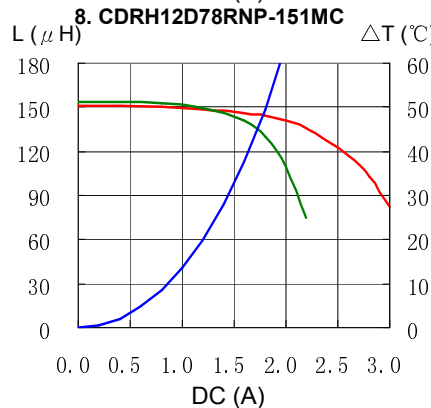
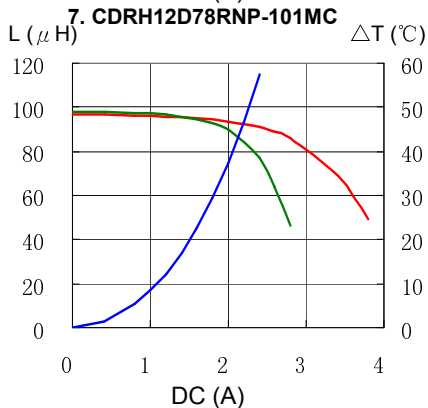
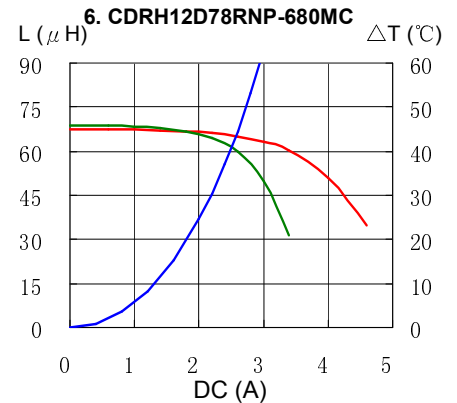
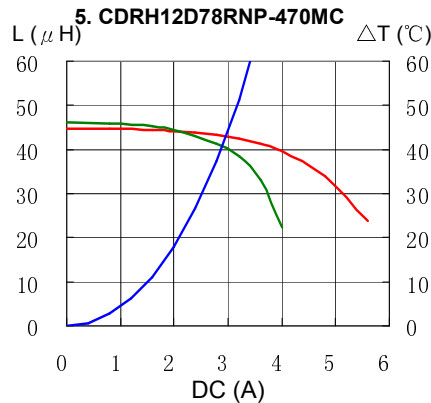
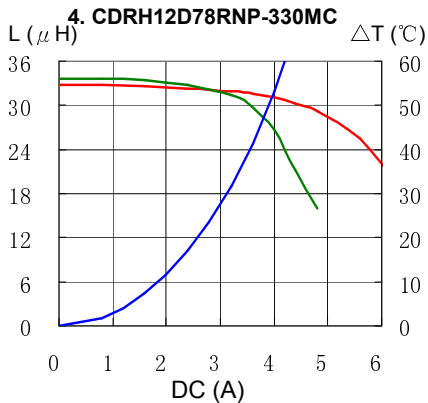
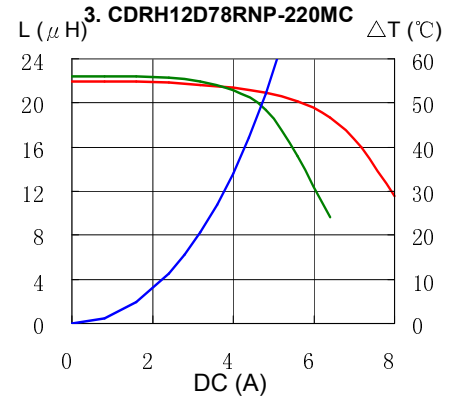
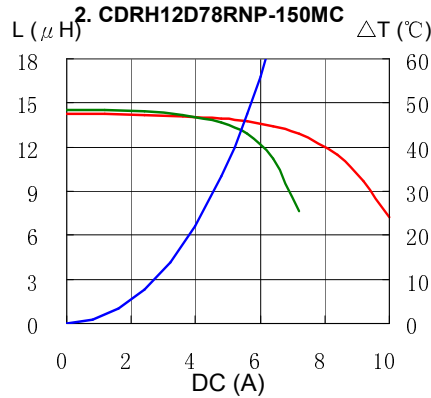
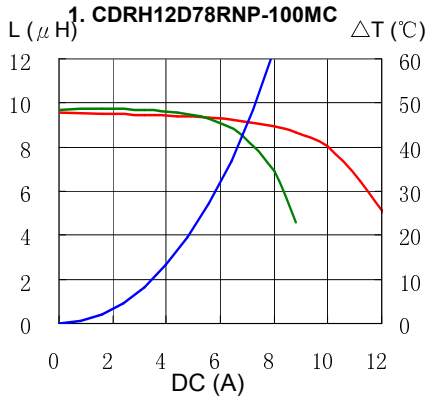
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

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Saturation Current & Temperature Rise Graph

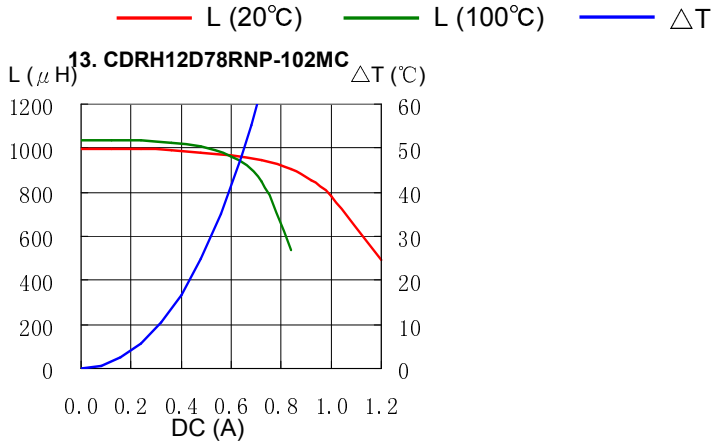
— L (20°C) — L (100°C) — ΔT



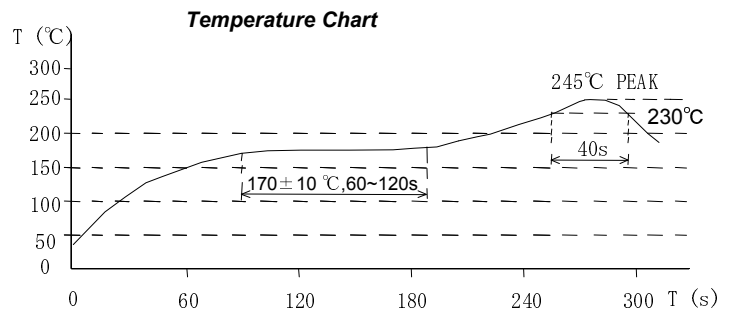
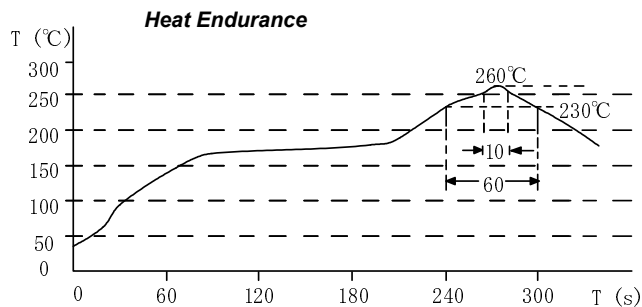
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Saturation Current & Temperature Rise Graph



Solder Reflow Condition



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

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