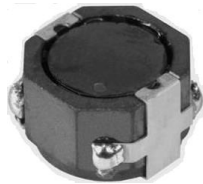


# SMD Power Inductor CDRH12D78R



## 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.

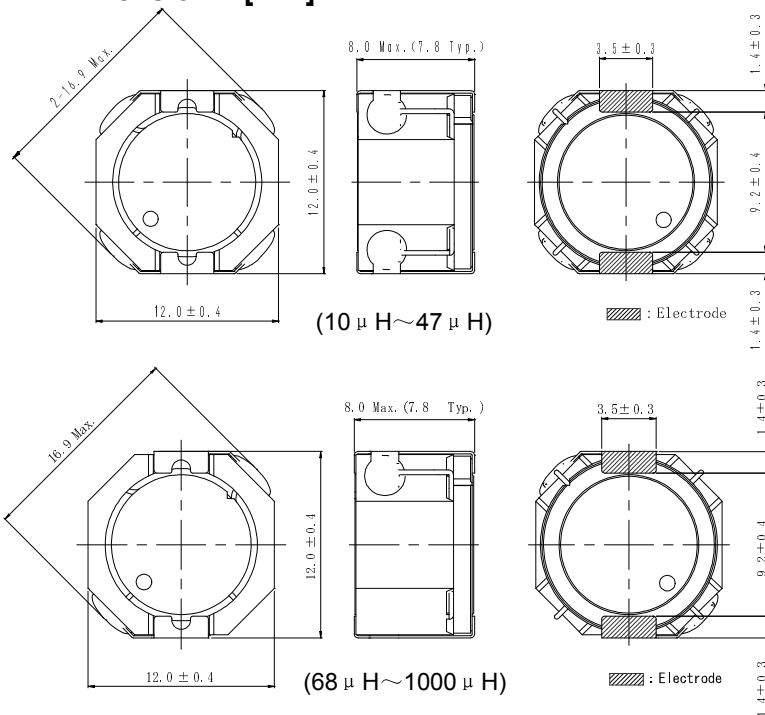
## Packaging

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

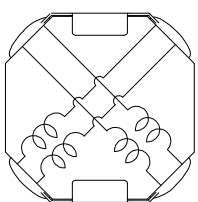
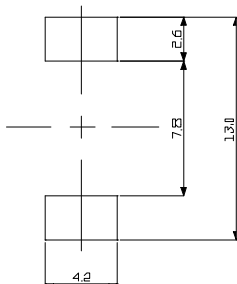
## Applications

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

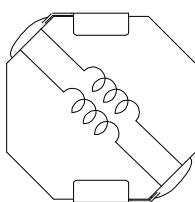
## Dimension - [mm]



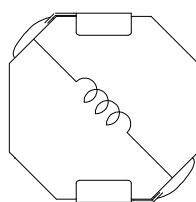
## Land pattern and Schematics - [mm]



(10 μH ~ 47 μH)



(68 μH ~ 220 μH)



(330 μH ~ 1.0mH)

# SMD Power Inductor CDRH12D78R



## Electrical Characteristics

Part No.	Stamp	Inductance ( $\mu$ H) [ within ] ※1	D.C.R. (m $\Omega$ ) [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 its nominal value.

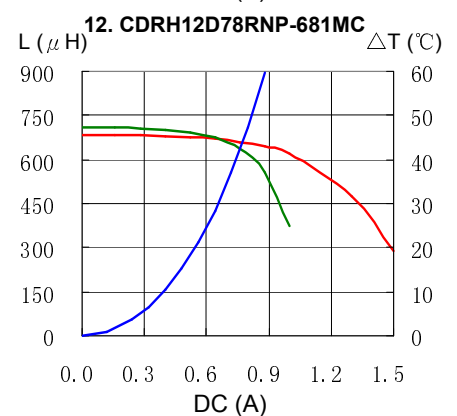
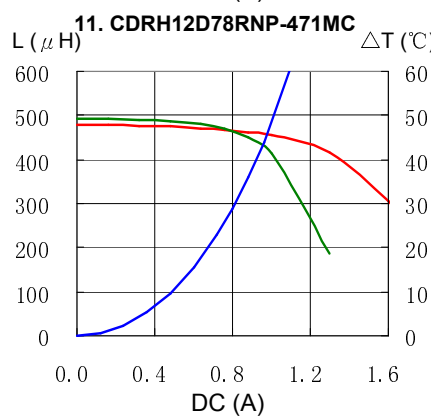
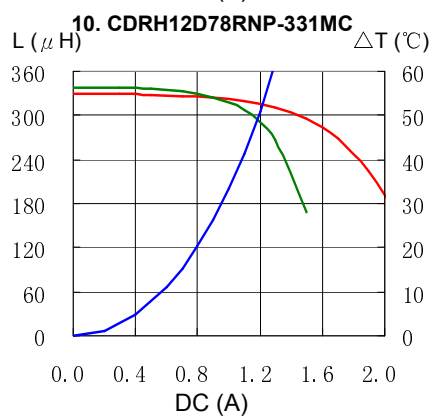
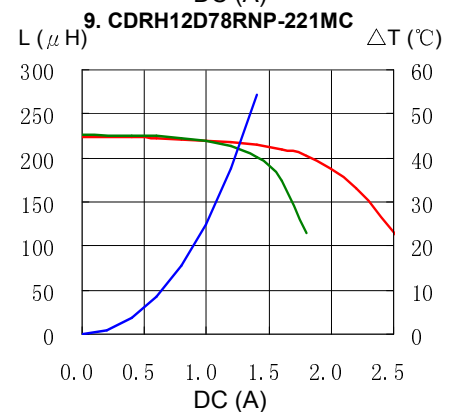
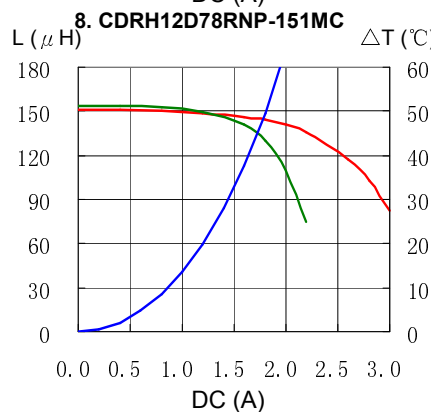
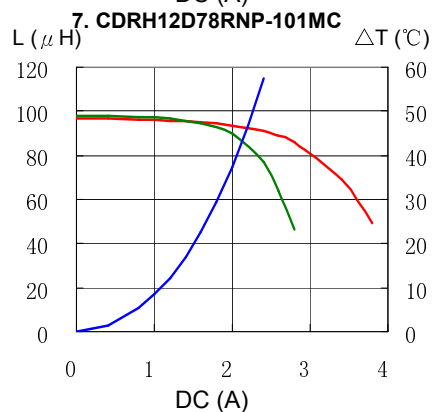
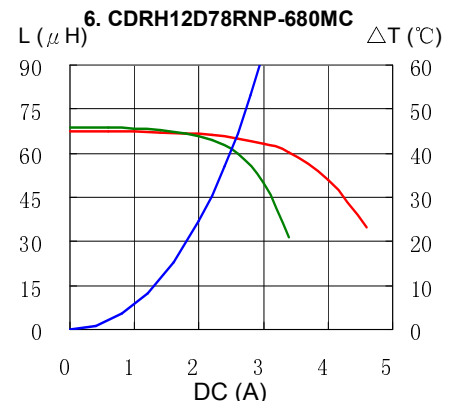
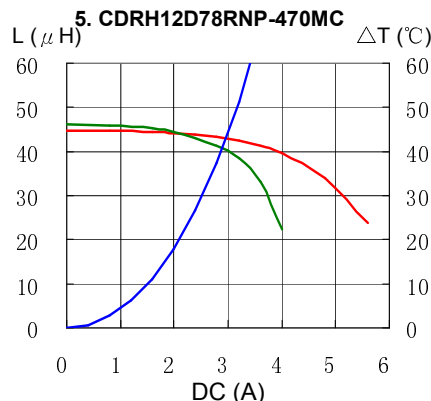
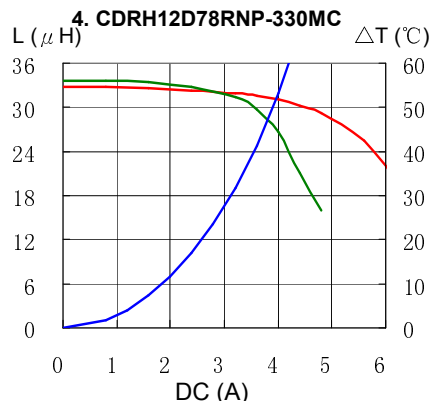
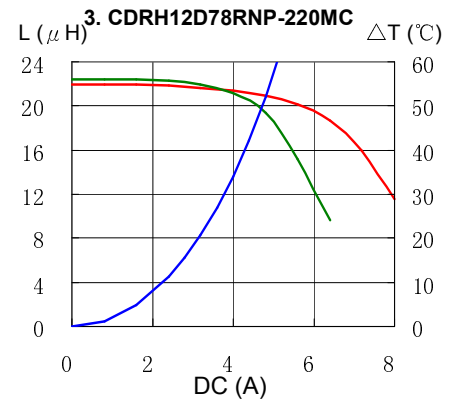
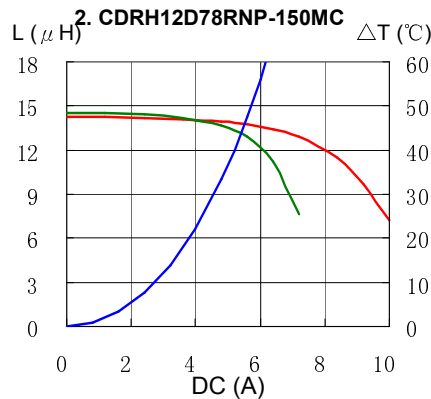
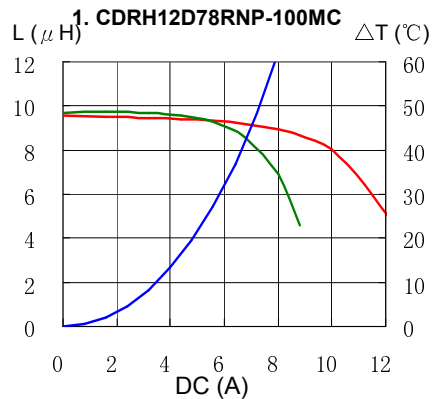
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

# SMD Power Inductor CDRH12D78R



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

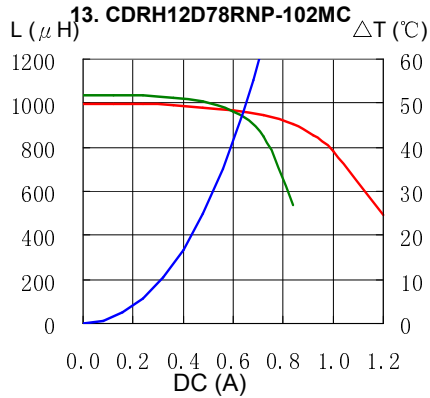


# SMD Power Inductor CDRH12D78R

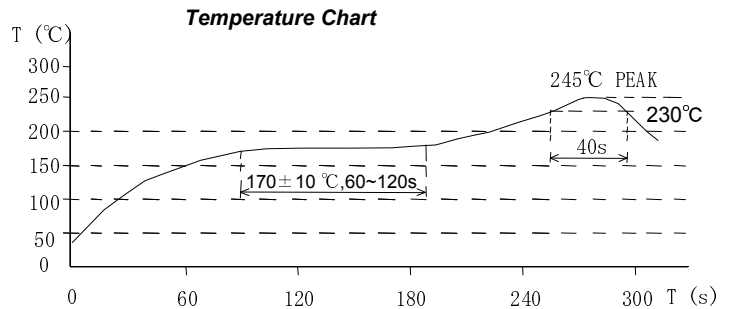
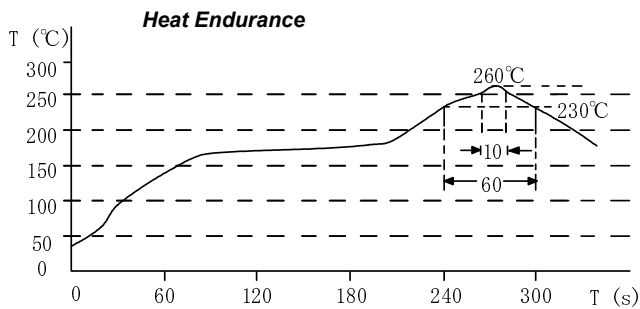


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



## Solder Reflow Condition



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

**Hong Kong**  
Tel.+852-2880-6781  
FAX.+852-2565-9600  
[sales@hk.sumida.com](mailto:sales@hk.sumida.com)

**Saitama(Japan)**  
Tel.+81-48-691-7300  
FAX.+81-48-691-7340  
[sales@jp.sumida.com](mailto:sales@jp.sumida.com)

**Chicago**  
Tel.+1-847-545-6700  
FAX. +1-847-545-6720  
[sales@us.sumida.com](mailto:sales@us.sumida.com)

**Shanghai**  
Tel.+86-21-5836-3299  
FAX.+86-21-5836-3266  
[shanghai.sales@cn.sumida.com](mailto:shanghai.sales@cn.sumida.com)

**Seoul**  
Tel.+82-2-6237-0777  
FAX.+82-2-6237-0778  
[sales@kr.sumida.com](mailto:sales@kr.sumida.com)

**Oberzell**  
Tel.+49-8591-937-0  
FAX. +49-8591-937-103  
[contact@eu.sumida.com](mailto:contact@eu.sumida.com)

**Shenzhen**  
Tel.+86-755-8291-0228  
FAX.+86-755-8291-0338  
[shenzhen.sales@cn.sumida.com](mailto:shenzhen.sales@cn.sumida.com)

**Singapore**  
Tel.+65-6296-3388  
FAX.+65-6841-4426  
[sales@sg.sumida.com](mailto:sales@sg.sumida.com)

**Neumarkt**  
Tel.+49-9181-4509-110  
FAX. +49-9181-4509-310  
[infocomp@eu.sumida.com](mailto:infocomp@eu.sumida.com)

**Taipei**  
Tel.+886-2-8751-2737  
FAX.+886-2-8751-2738  
[sales@tw.sumida.com](mailto:sales@tw.sumida.com)

**San Jose**  
Tel.+1-408-321-9660  
FAX.+1-408-321-9308  
[sales@us.sumida.com](mailto:sales@us.sumida.com)