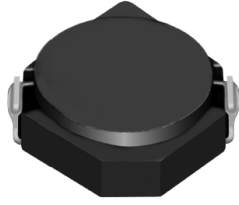


# SMD Power Inductor CDRH3D14



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 4.0 × 4.0 × 1.5 mm Max.
- Product weight: 70mg(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.

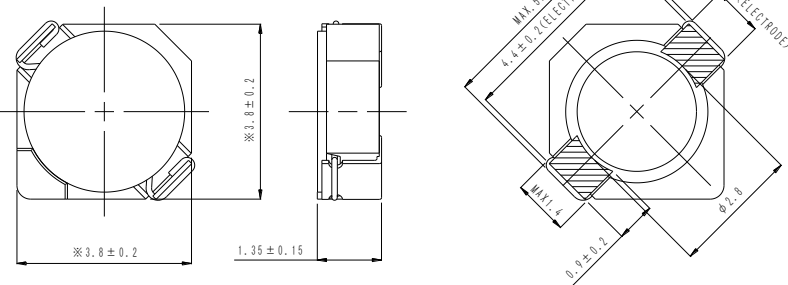
## Packaging

- Carrier tape and reel packaging
- 7.0" diameter reel
- 1000pcs per reel

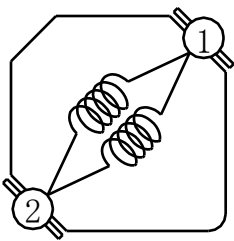
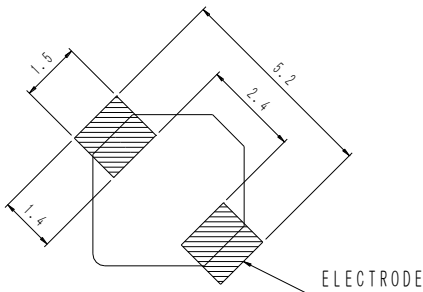
## Applications

- Ideally used in Mobile phone, PDA, MP3, DSC/DVC, Portable DVD, etc as DC-DC converter inductors.

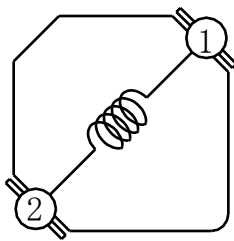
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(1.2 $\mu$ H ~ 3.3 $\mu$ H)



(3.9 $\mu$ H ~ 22 $\mu$ H)



### Electrical Characteristics

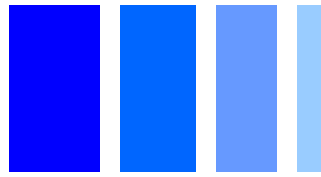
Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [ within ] ※1	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 105°C	
CDRH3D14NP-1R2NC	A	1.2 $\pm$ 25%	45(36)	2.15	1.50	2.20
CDRH3D14NP-1R7NC	B	1.7 $\pm$ 25%	63(50)	1.85	1.35	2.00
CDRH3D14NP-2R2NC	D	2.2 $\pm$ 25%	69(55)	1.60	1.25	1.75
CDRH3D14NP-2R7NC	E	2.7 $\pm$ 25%	88(70)	1.45	1.15	1.36
CDRH3D14NP-3R3NC	F	3.3 $\pm$ 25%	100(80)	1.35	0.96	1.24
CDRH3D14NP-3R9NC	G	3.9 $\pm$ 25%	135(110)	1.15	0.82	1.12
CDRH3D14NP-4R7NC	H	4.7 $\pm$ 25%	150(120)	1.10	0.76	0.96
CDRH3D14NP-8R2NC	L	8.2 $\pm$ 25%	238(190)	0.82	0.64	0.74
CDRH3D14NP-100NC	M	10 $\pm$ 25%	262(210)	0.75	0.55	0.69
CDRH3D14NP-120NC	N	12 $\pm$ 25%	350(280)	0.67	0.50	0.60
CDRH3D14NP-150NC	P	15 $\pm$ 25%	488(390)	0.60	0.48	0.58
CDRH3D14NP-220NC	R	22 $\pm$ 25%	575(460)	0.52	0.37	0.43

※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.

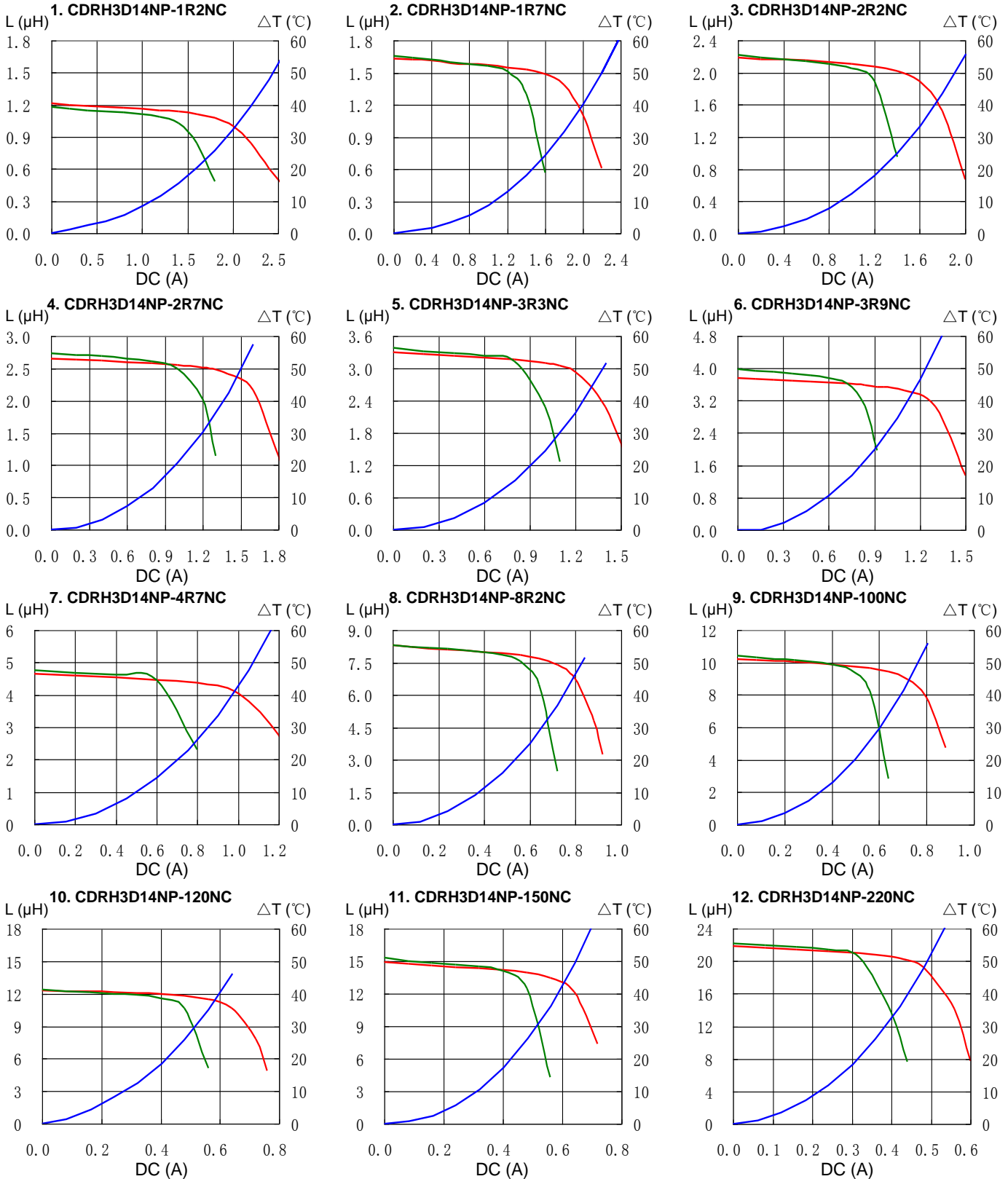
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^\circ\text{C}$  ( $T_a=20^\circ\text{C}$ ).

# SMD Power Inductor CDRH3D14

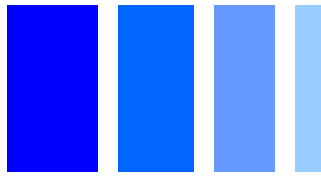


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

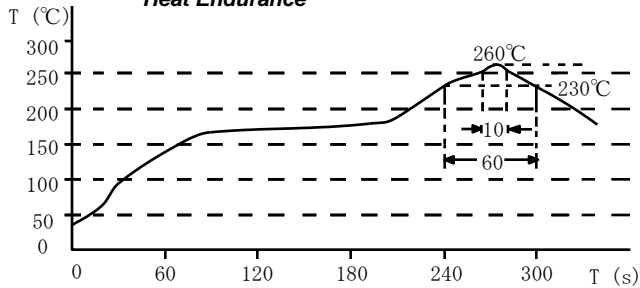


# SMD Power Inductor CDRH3D14

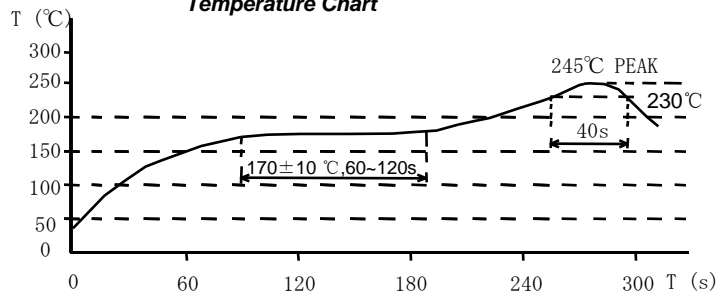


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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)

### Obernzell

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)