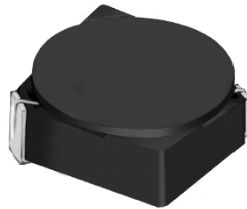


# SMD Power Inductor CDRH3D16/LD



Halogen Free



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 4.0 × 4.0 × 1.8 mm Max.
- Product weight: 80mg (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## 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.

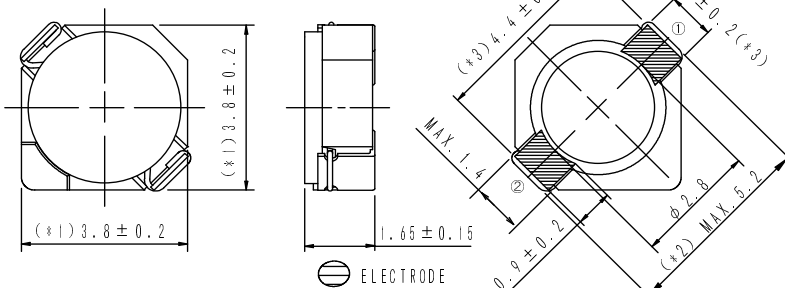
## Packaging

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

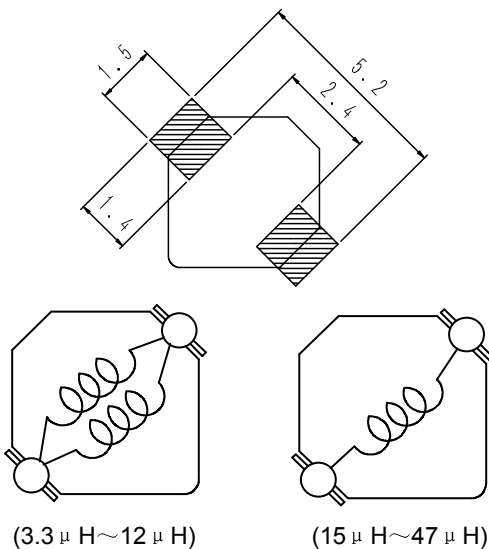
## Applications

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

## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor CDRH3D16/LD



## Electrical Characteristics

Part Name	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 100°C	
CDRH3D16/LDNP-3R3NC	A	3.3 $\pm$ 30%	66(53)	0.80	0.52	2.00
CDRH3D16/LDNP-3R9NC	B	3.9 $\pm$ 30%	81(65)	0.75	0.44	1.75
CDRH3D16/LDNP-4R7NC	C	4.7 $\pm$ 30%	91(73)	0.68	0.43	1.72
CDRH3D16/LDNP-5R6NC	D	5.6 $\pm$ 30%	102(82)	0.62	0.38	1.64
CDRH3D16/LDNP-6R8NC	E	6.8 $\pm$ 30%	130(104)	0.58	0.34	1.30
CDRH3D16/LDNP-8R2NC	F	8.2 $\pm$ 30%	140(112)	0.51	0.32	1.28
CDRH3D16/LDNP-100NC	G	10 $\pm$ 30%	190(152)	0.46	0.27	1.07
CDRH3D16/LDNP-120NC	H	12 $\pm$ 30%	205(164)	0.42	0.26	0.98
CDRH3D16/LDNP-150NC	J	15 $\pm$ 30%	272(218)	0.38	0.23	0.87
CDRH3D16/LDNP-180NC	K	18 $\pm$ 30%	327(262)	0.34	0.21	0.76
CDRH3D16/LDNP-220NC	L	22 $\pm$ 30%	356(285)	0.31	0.18	0.66
CDRH3D16/LDNP-270NC	M	27 $\pm$ 30%	470(377)	0.28	0.17	0.60
CDRH3D16/LDNP-330NC	N	33 $\pm$ 30%	560(446)	0.26	0.16	0.55
CDRH3D16/LDNP-390NC	P	39 $\pm$ 30%	700(558)	0.24	0.15	0.47
CDRH3D16/LDNP-470NC	Q	47 $\pm$ 30%	775(630)	0.21	0.13	0.45

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The DC current at which the inductance decreases to 65% of its nominal value.

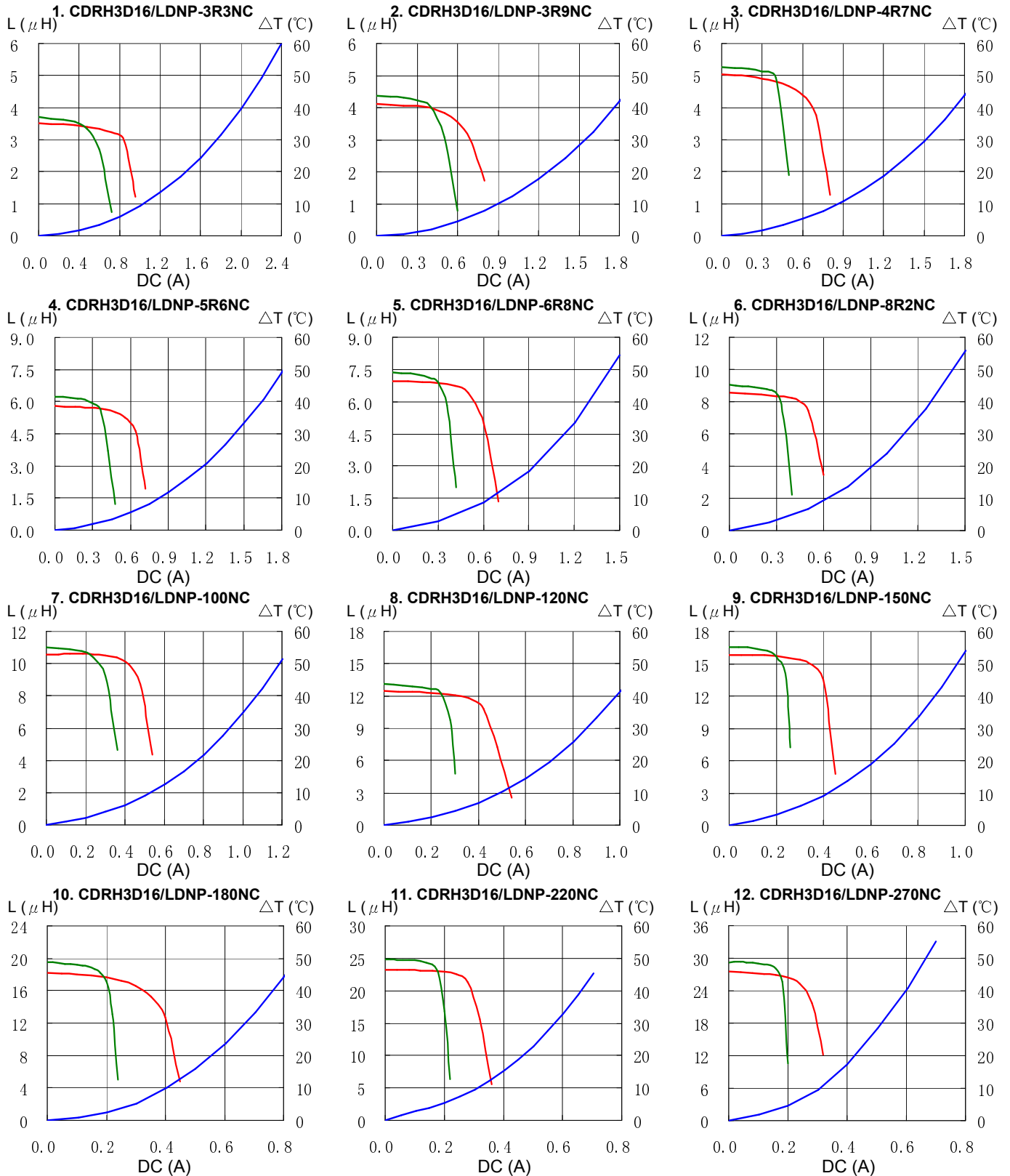
※3. Temperature rise current: The DC current at which the temperature rise is  $\Delta t=40^{\circ}\text{C}$ . ( $T_a=20^{\circ}\text{C}$ )

# SMD Power Inductor CDRH3D16/LD



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

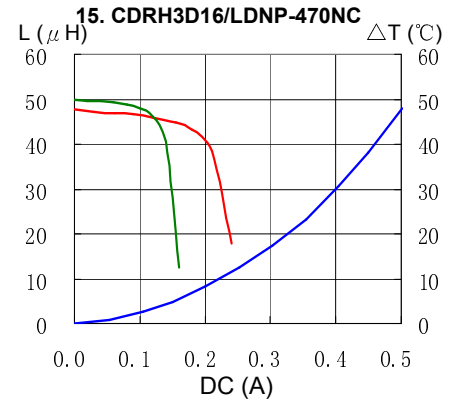
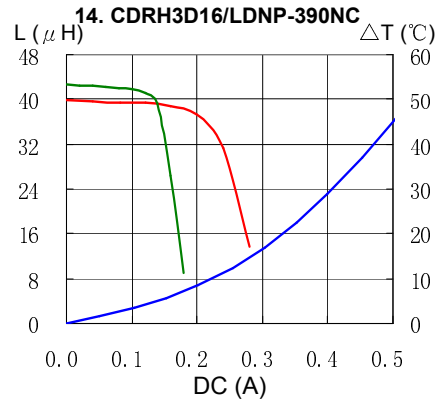
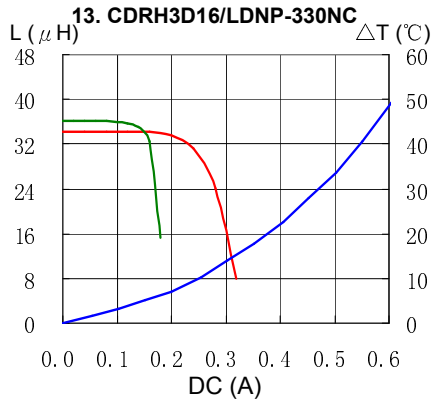


# SMD Power Inductor CDRH3D16/LD

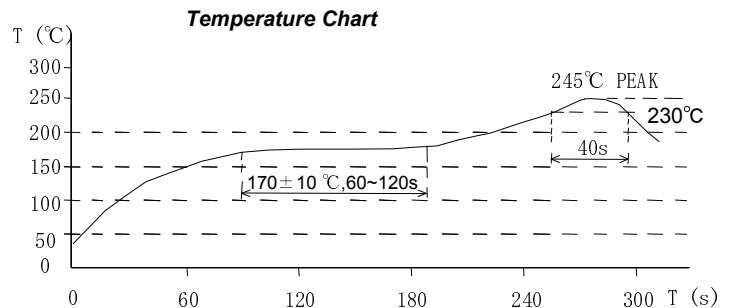
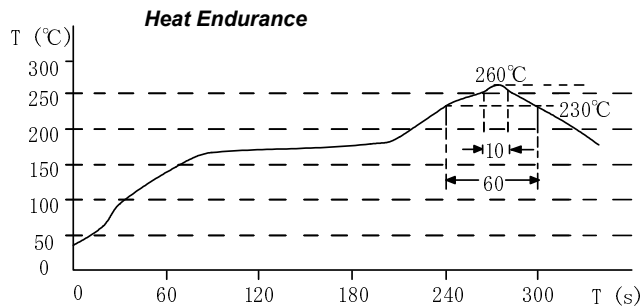


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°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)