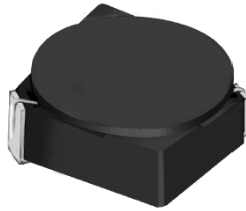




**THE DATASHEET OF  
CDRH3D16/HPNP-2R2NC**



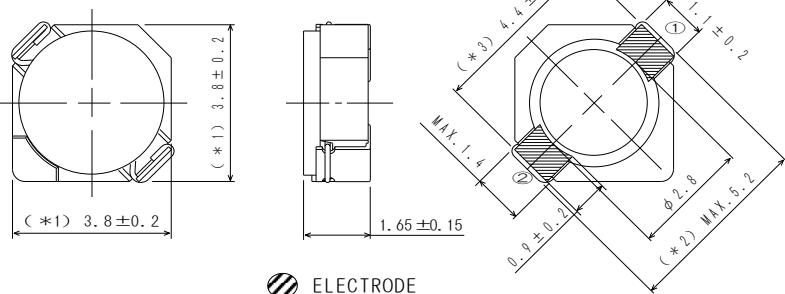
# SMD Power Inductor CDRH3D16/HP



## 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.

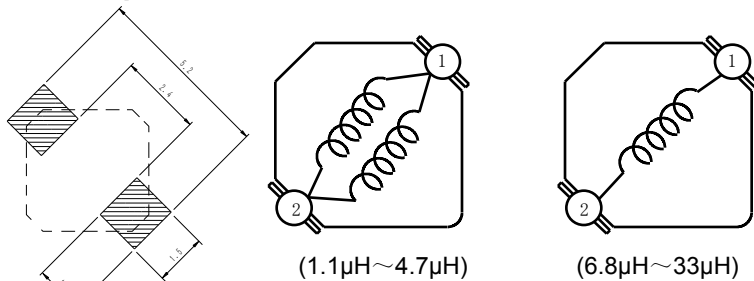
## Dimension - [mm]



ELECTRODE

(\*2) MAX. 5.4 SHOULD BE USED FOR DOUBLE WIRE WINDING (BELOW 4.7 μH).

## Land pattern and Schematics - [mm]



(1.1 μH ~ 4.7 μH)

(6.8 μH ~ 33 μH)

## 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
- 1000 pcs per reel

## Applications

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

## Electrical Characteristics

Part Name	Stamp	Inductance (μH) [ within ] ※1	D.C.R. (mΩ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 105°C	
CDRH3D16/HPNP-1R7NC	A	1.7 ± 30%	51(41)	2.00	1.50	2.40
CDRH3D16/HPNP-2R2NC	C	2.2 ± 30%	59(47)	1.75	1.30	2.30
CDRH3D16/HPNP-3R3NC	E	3.3 ± 30%	85(68)	1.40	1.10	1.80
CDRH3D16/HPNP-4R7NC	G	4.7 ± 30%	116(93)	1.20	0.90	1.50
CDRH3D16/HPNP-6R8NC	J	6.8 ± 30%	180(145)	1.00	0.72	1.10
CDRH3D16/HPNP-100MC	L	10 ± 20%	230(185)	0.84	0.62	1.00
CDRH3D16/HPNP-150MC	N	15 ± 20%	410(328)	0.65	0.52	0.75
CDRH3D16/HPNP-220MC	P	22 ± 20%	610(488)	0.55	0.43	0.52
CDRH3D16/HPNP-330MC	Q	33 ± 20%	870(695)	0.46	0.35	0.41

※1. Inductance measuring condition: at 100kHz.

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

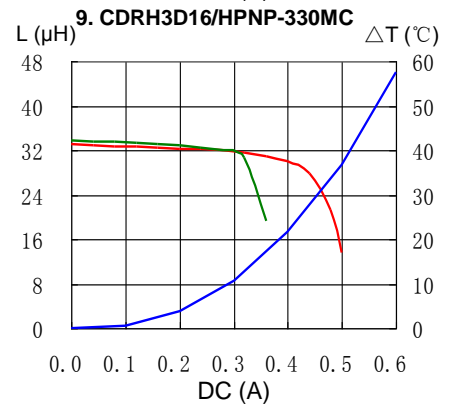
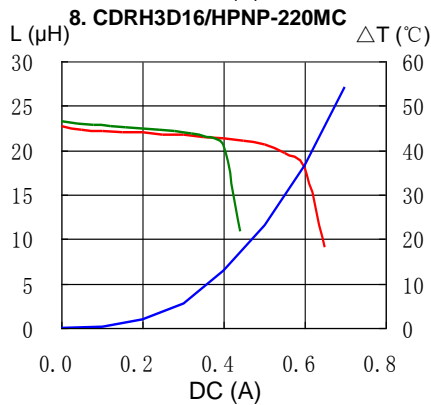
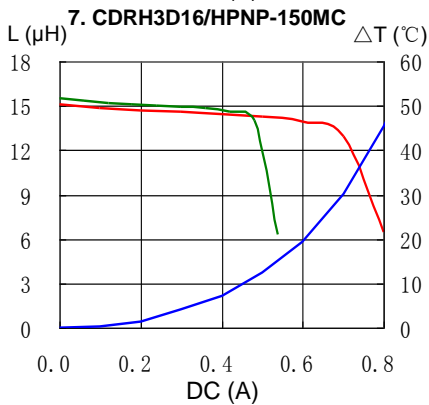
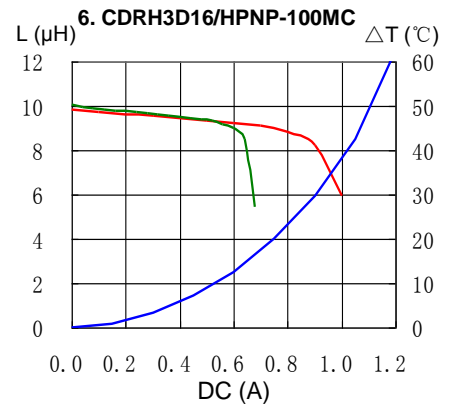
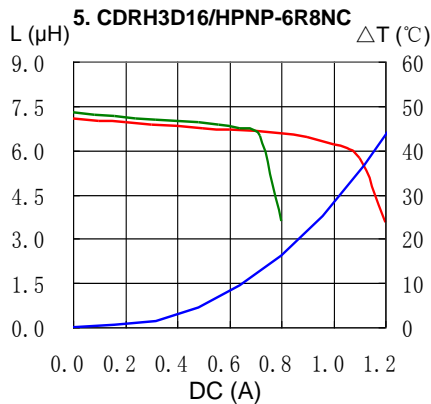
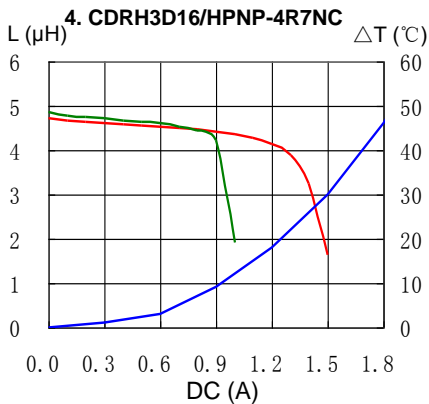
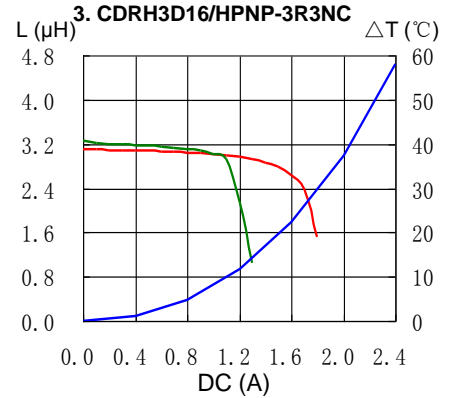
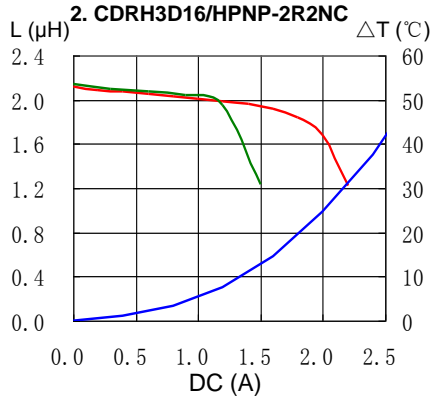
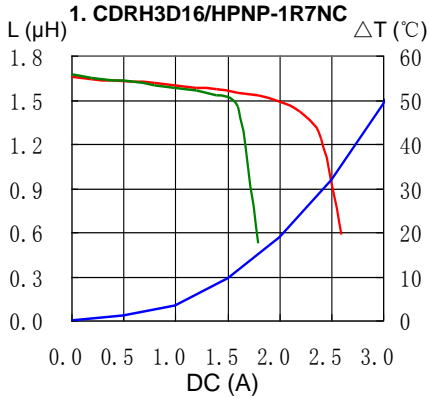
※3. Temperature rise current: The DC current at which the temperature rise is Δt=40°C. (Ta=20°C)

# SMD Power Inductor CDRH3D16/HP



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

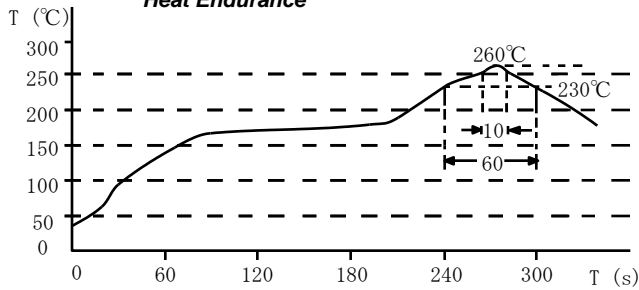


# SMD Power Inductor CDRH3D16/HP

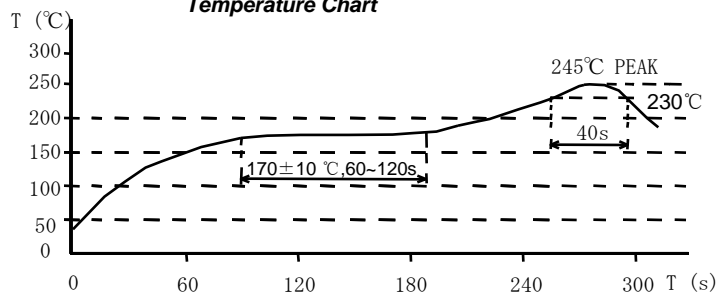


## Solder Reflow Condition

**Heat Endurance**



**Temperature Chart**



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### Hong Kong

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

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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  
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