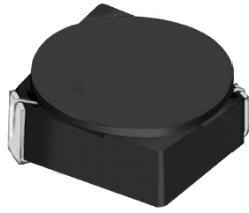




**THE DATASHEET OF  
CDRH3D16NP-1R1NC**



# SMD Power Inductor CDRH3D16



## 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.

## Environmental Data

- Operating temperature range: -40°C ~ +100°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +100°C
- Solder reflow temperature: 260 °C peak.

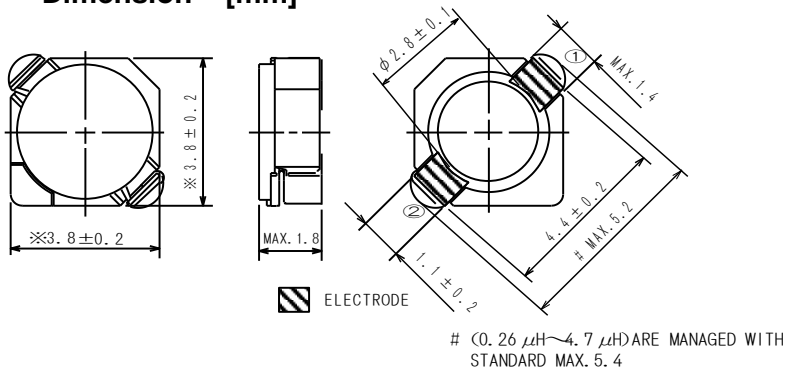
## Packaging

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

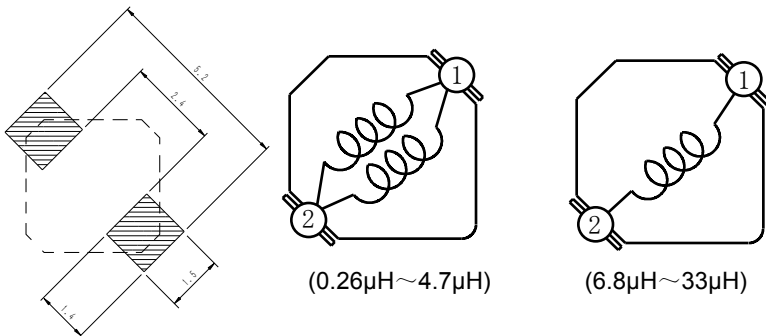
## Applications

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

## Dimension - [mm]



## Land pattern and Schematics - [mm]





### Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [ within ] ※1	D.C.R. ( $\text{m}\Omega$ ) Max. (Typ.) (at 20°C)	Rated Current (A) ※2
CDRH3D16NP-R26NC	R	$0.26 \pm 35\%$	27.5(21)	3.60
CDRH3D16NP-R47NC	S	$0.47 \pm 35\%$	35( 27)	2.75
CDRH3D16NP-0R7NC	T	$0.7 \pm 35\%$	43( 33)	2.25
CDRH3D16NP-1R1NC	U	$1.1 \pm 35\%$	50( 38)	1.90
CDRH3D16NP-1R5NC	A	$1.5 \pm 30\%$	52( 40)	1.55
CDRH3D16NP-2R2NC	C	$2.2 \pm 30\%$	72( 55)	1.20
CDRH3D16NP-3R3NC	E	$3.3 \pm 30\%$	85( 65)	1.10
CDRH3D16NP-4R7NC	G	$4.7 \pm 30\%$	105( 80)	0.90
CDRH3D16NP-6R8NC	I	$6.8 \pm 30\%$	170(130)	0.73
CDRH3D16NP-100NC	K	$10 \pm 30\%$	210(160)	0.55
CDRH3D16NP-150NC	M	$15 \pm 30\%$	295(225)	0.45
CDRH3D16NP-220NC	O	$22 \pm 30\%$	430(330)	0.40
CDRH3D16NP-330NC	Q	$33 \pm 30\%$	675(520)	0.32

※1. Inductance measuring condition: at 100kHz.

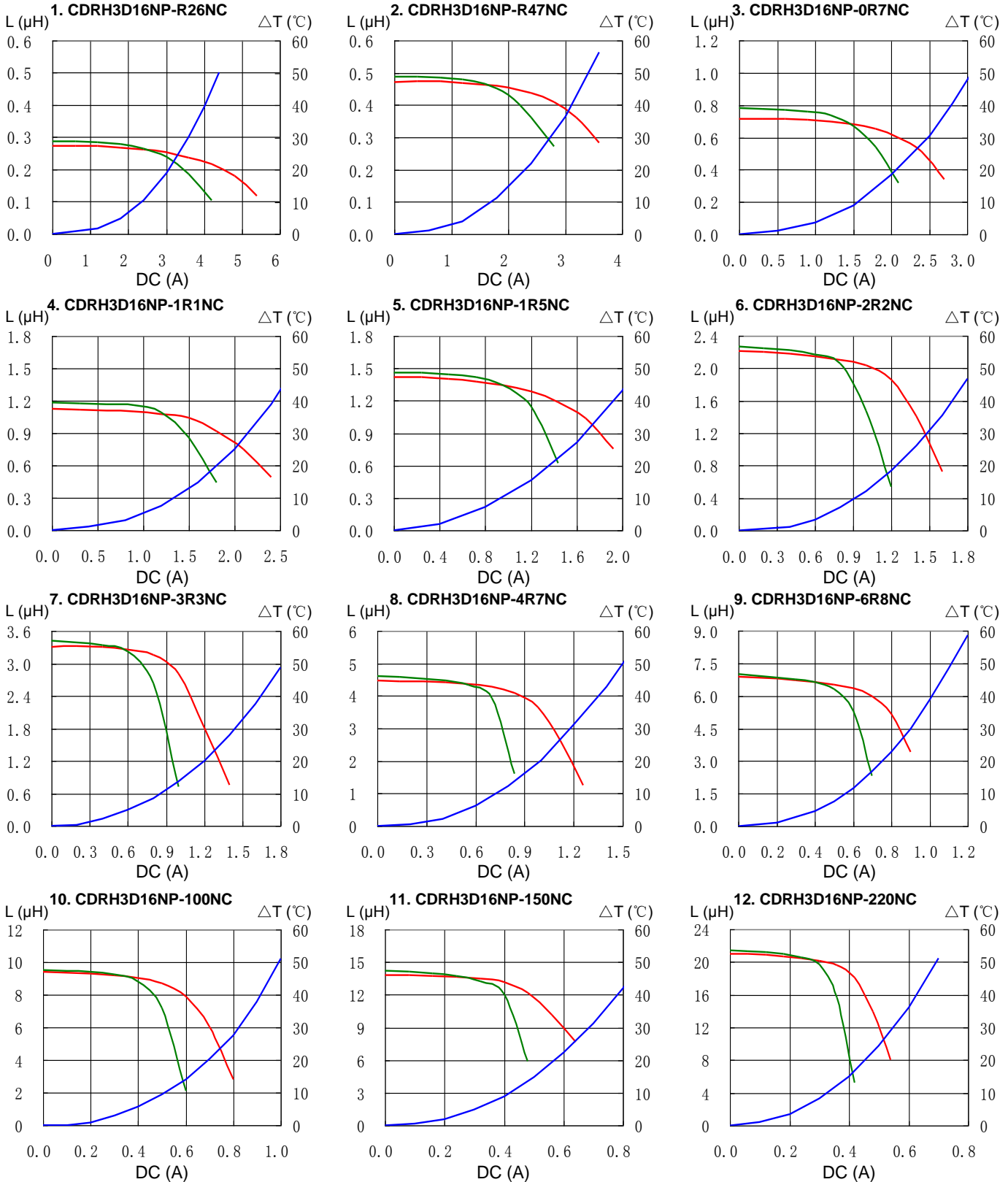
※2. Rated current: The DC current at which the inductance decreases to 65% of its nominal value or when  $\Delta t=30^\circ\text{C}$ , whichever is lower ( $T_a=20^\circ\text{C}$ ).

# SMD Power Inductor CDRH3D16

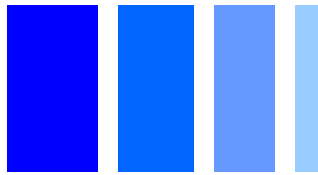


## Saturation Current & Temperature Rise Graph

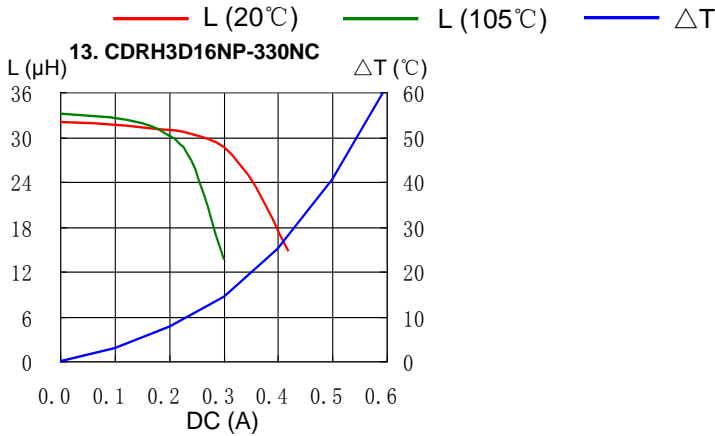
— L (20°C) — L (105°C) —  $\Delta T$



# SMD Power Inductor CDRH3D16

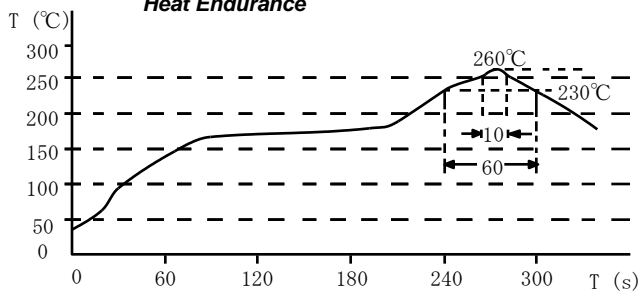


## Saturation Current & Temperature Rise Graph

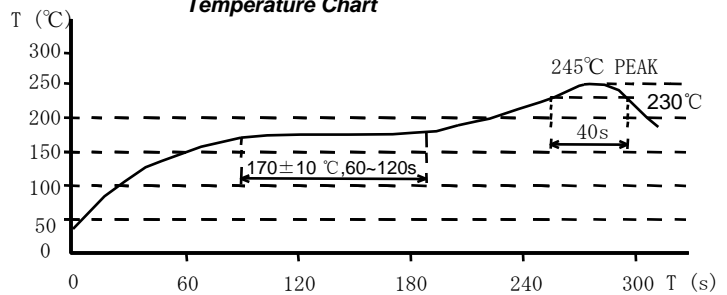


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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

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- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management