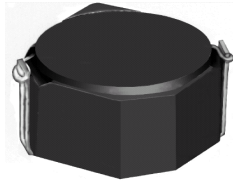




**THE DATASHEET OF  
CDRH3D28NP-6R8NC**



# SMD Power Inductor CDRH3D28



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 4.0 × 4.0 × 3.0 mm Max.
- Product weight: 130m g (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.

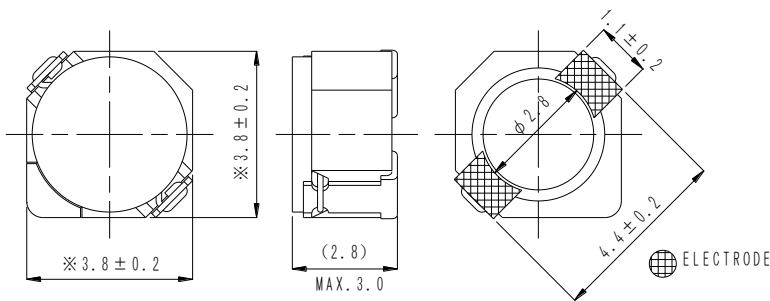
## Packaging

- Carrier tape and reel packaging
- 7.0" diameter reel
- 500pcs per reel

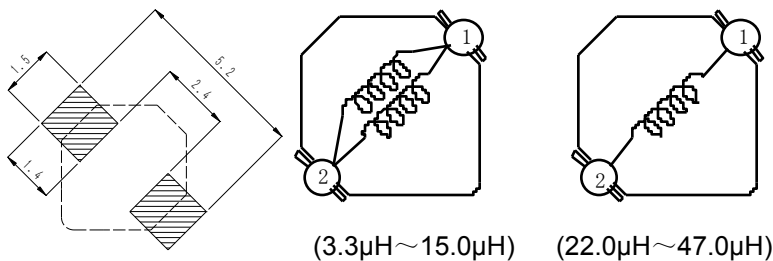
## Applications

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

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

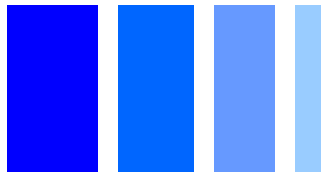
Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [within] $\times 1$	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) $\times 2$		Temperature Rise Current (A) $\times 3$
				at 20°C	at 100°C	
CDRH3D28NP-1R0NC	L	1.0 $\mu\text{H} \pm 30\%$	37.5(30.0)	3.00	2.40	2.60
CDRH3D28NP-3R3NC	A	3.3 $\pm 30\%$	72.1(57.7)	2.00	1.48	1.85
CDRH3D28NP-4R7NC	B	4.7 $\pm 30\%$	88.3(70.6)	1.65	1.28	1.62
CDRH3D28NP-6R8NC	C	6.8 $\pm 30\%$	119(95.0)	1.24	0.94	1.32
CDRH3D28NP-100NC	D	10 $\pm 30\%$	145(116)	1.05	0.80	1.18
CDRH3D28NP-150NC	E	15 $\pm 30\%$	213(170)	0.90	0.64	1.02
CDRH3D28NP-220NC	F	22 $\pm 30\%$	335(268)	0.76	0.55	0.74
CDRH3D28NP-330NC	G	33 $\pm 30\%$	481(385)	0.58	0.44	0.63
CDRH3D28NP-470NC	H	47 $\pm 30\%$	599(479)	0.48	0.36	0.56

$\times 1$ . Inductance measuring condition: at 100kHz.

$\times 2$ . Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

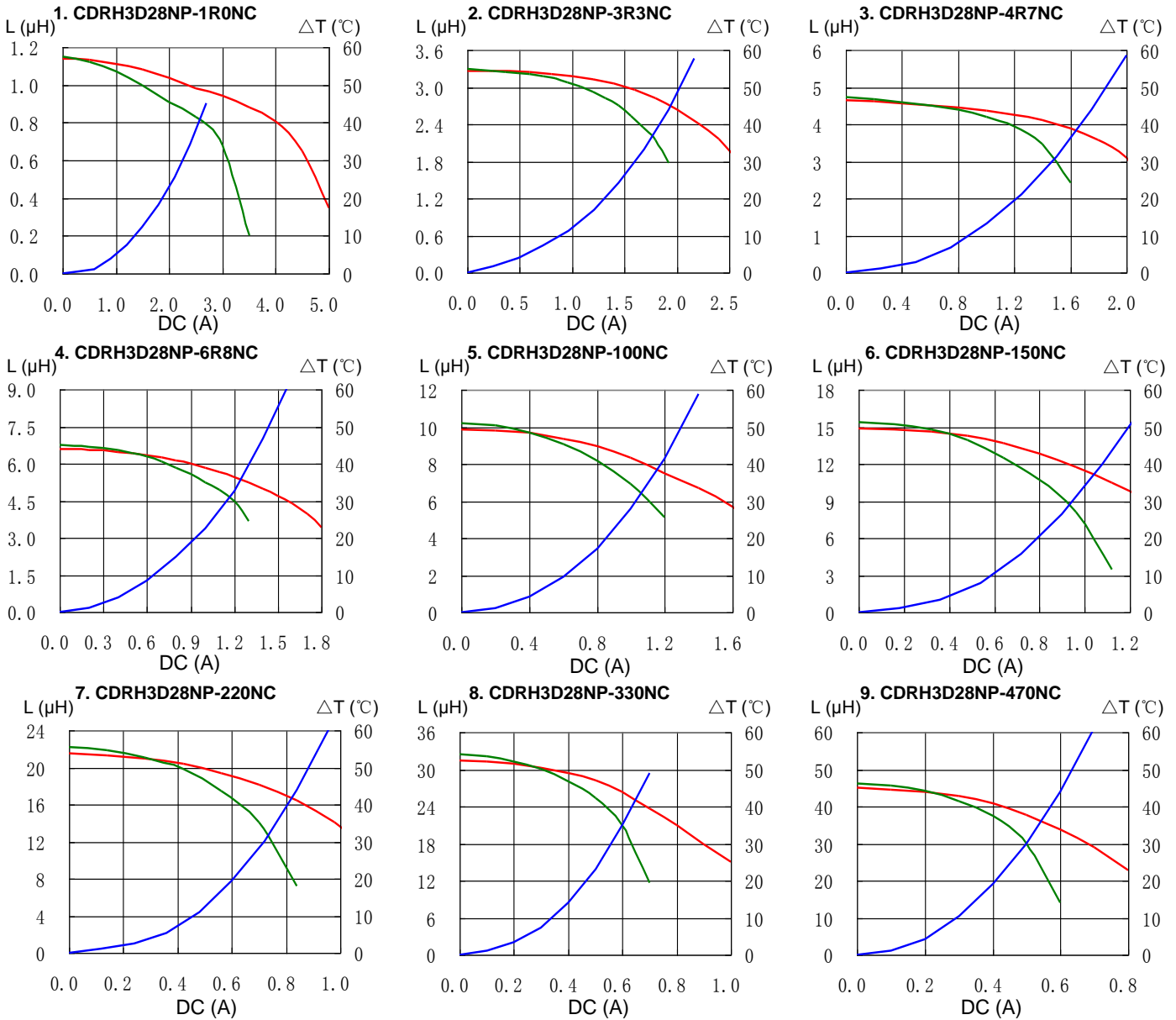
$\times 3$ . Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

# SMD Power Inductor CDRH3D28



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

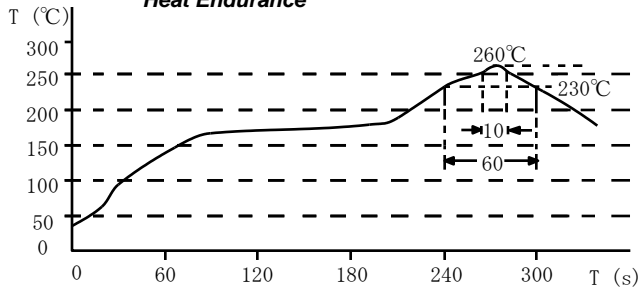


# SMD Power Inductor CDRH3D28

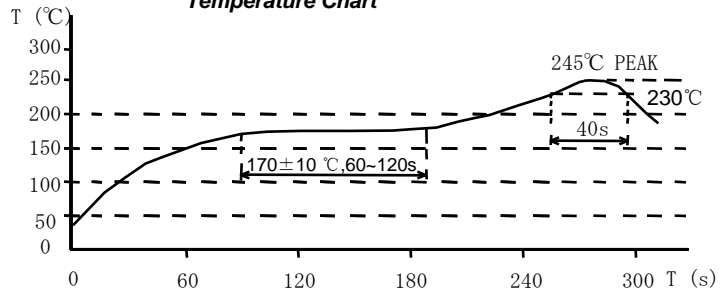


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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