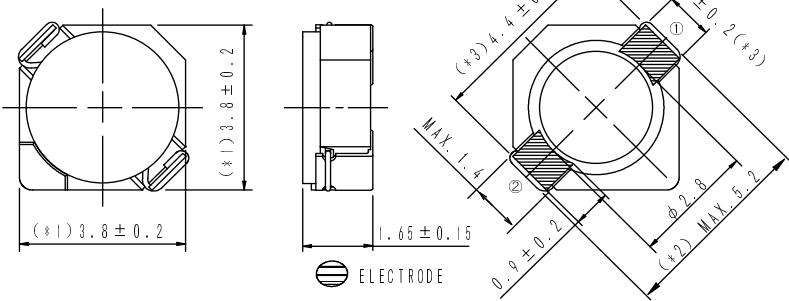


# SMD Power Inductor

## CDRH3D16/LD

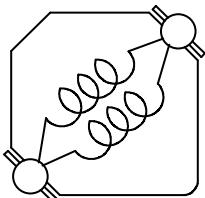
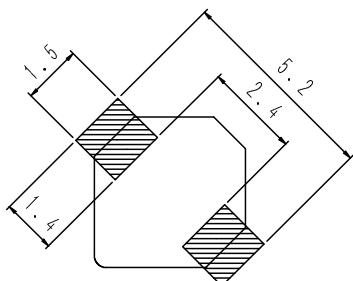


Dimension - [mm]

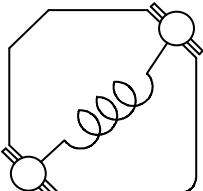


(\*2) MAX.5.4 SHOULD BE USED FOR DOUBLE WIRE WINDING.

Land pattern and Schematics - [mm]



(3.3  $\mu$  H ~ 12  $\mu$  H)



(15  $\mu$  H ~ 47  $\mu$  H)

### 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

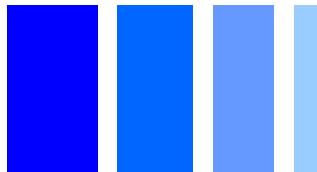
- Carrier tape and reel packaging
- 7.0" diameter reel
- 1000pcs per reel

### Applications

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

# SMD Power Inductor

## CDRH3D16/LD



### Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [ within ] $\ddot{\times} 1$	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) $\ddot{\times} 2$		Temperature Rise Current (A) $\ddot{\times} 3$
				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

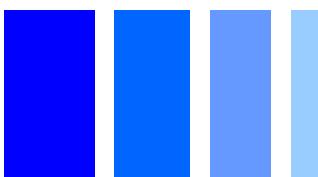
$\ddot{\times} 1$ . Inductance measuring condition: at 100kHz.

$\ddot{\times} 2$ . Saturation current: The DC current at which the inductance decreases to 65% of its nominal value.

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

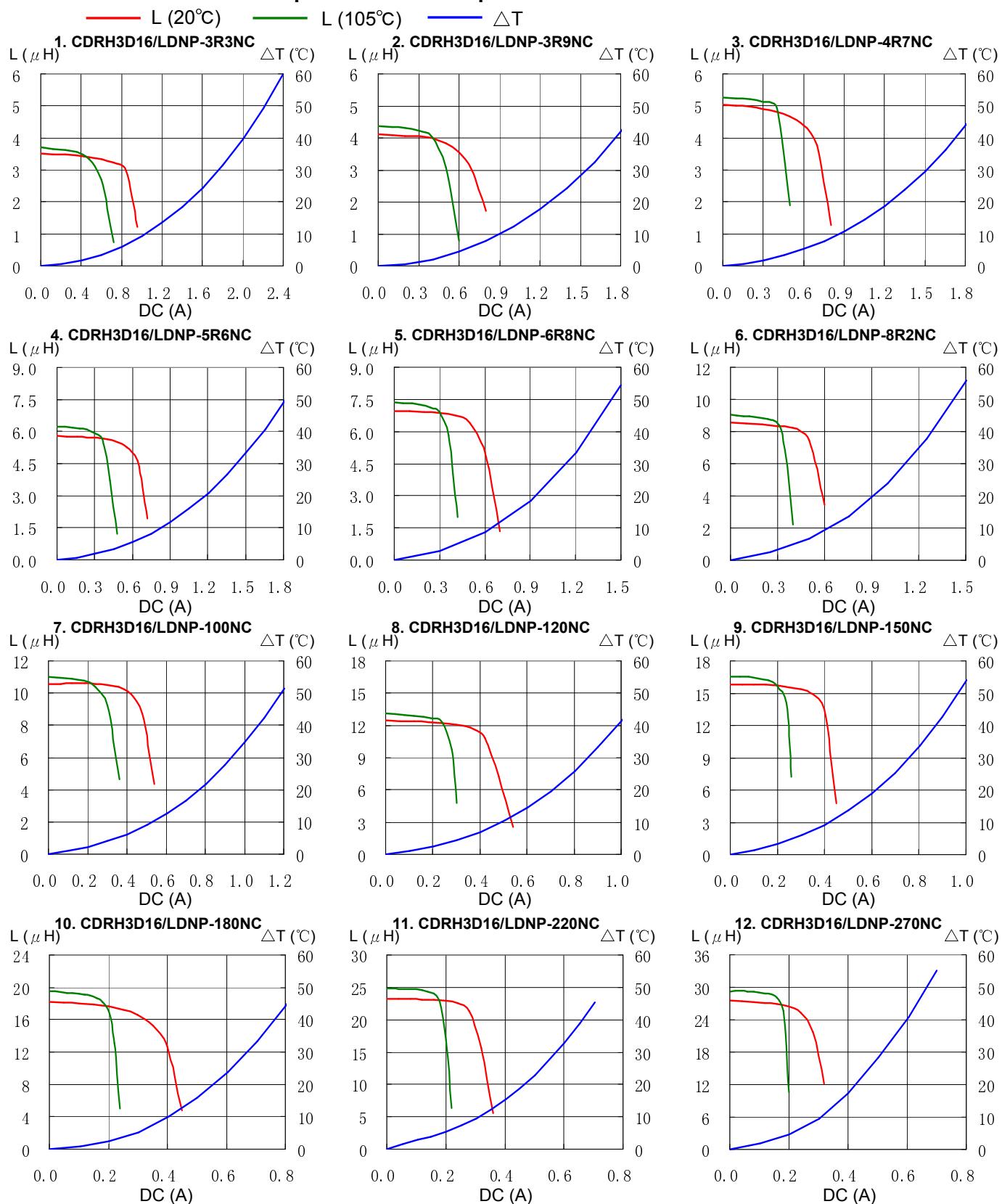
# SMD Power Inductor

## CDRH3D16/LD



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### Saturation Current & Temperature Rise Graph

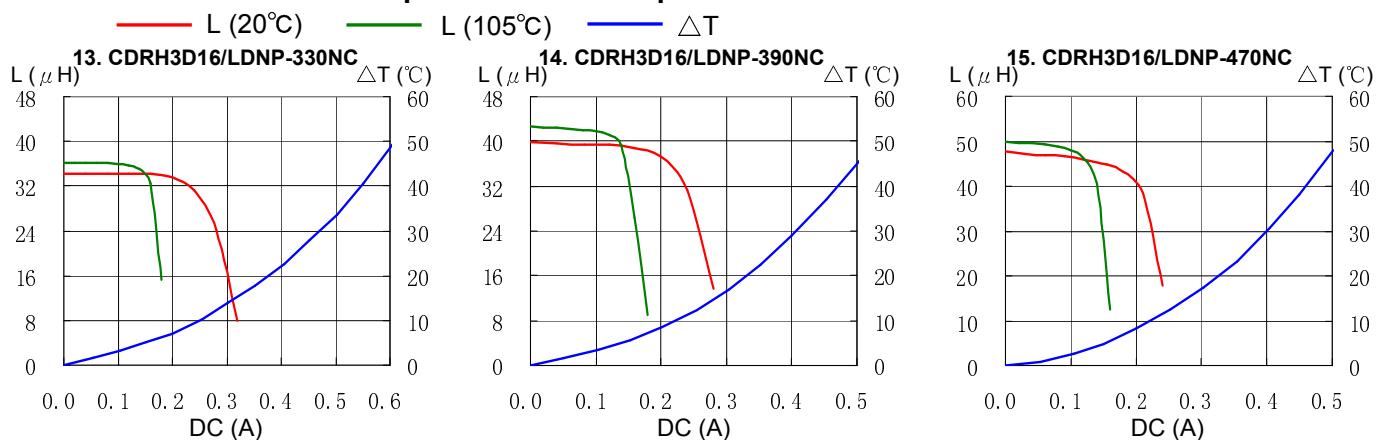


# SMD Power Inductor

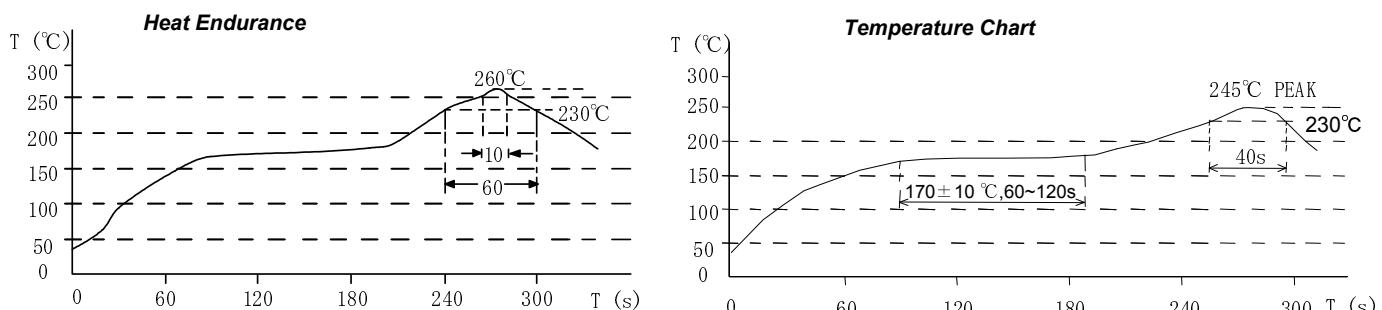
## CDRH3D16/LD



### Saturation Current & Temperature Rise Graph



### Solder Reflow Condition



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