

# SMD Power Inductor CDRH2D09



Halogen Free



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 3.2 × 3.2 × 1.0 mm Max.
- Product weight: 28mg(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.

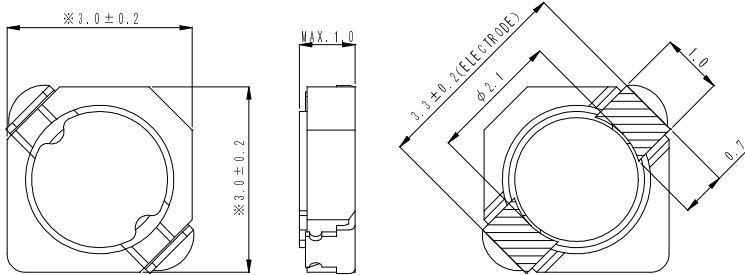
## Packaging

- Carrier tape and reel packaging
- 7.0" diameter reel
- 1500pcs per reel

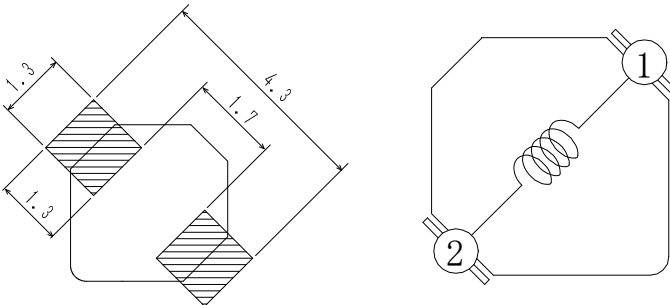
## Applications

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

## Dimension - [mm]



## Land pattern and Schematics - [mm]



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## Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [ within ] ※1	D.C.R. (m $\Omega$ ) [ within ] (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 100°C	
CDRH2D09NP-1R2MC	A	1.2 $\pm$ 25%	70 $\pm$ 25%	0.80	0.59	1.24
CDRH2D09NP-1R5MC	B	1.5 $\pm$ 25%	78 $\pm$ 25%	0.73	0.52	1.15
CDRH2D09NP-1R8MC	C	1.8 $\pm$ 25%	98 $\pm$ 25%	0.65	0.48	1.06
CDRH2D09NP-2R2MC	D	2.2 $\pm$ 25%	120 $\pm$ 25%	0.60	0.44	1.05
CDRH2D09NP-2R5MC	E	2.5 $\pm$ 25%	135 $\pm$ 25%	0.53	0.40	0.98
CDRH2D09NP-3R0MC	F	3.0 $\pm$ 25%	150 $\pm$ 25%	0.47	0.36	0.84
CDRH2D09NP-3R9MC	G	3.9 $\pm$ 25%	205 $\pm$ 25%	0.45	0.33	0.72
CDRH2D09NP-4R7MC	H	4.7 $\pm$ 25%	220 $\pm$ 25%	0.41	0.30	0.64
CDRH2D09NP-5R6MC	J	5.6 $\pm$ 25%	320 $\pm$ 25%	0.37	0.27	0.59
CDRH2D09NP-6R8MC	K	6.8 $\pm$ 25%	340 $\pm$ 25%	0.33	0.24	0.53
CDRH2D09NP-8R2MC	L	8.2 $\pm$ 25%	390 $\pm$ 25%	0.30	0.22	0.46
CDRH2D09NP-100MC	M	10 $\pm$ 25%	450 $\pm$ 25%	0.28	0.20	0.42

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of its nominal value.

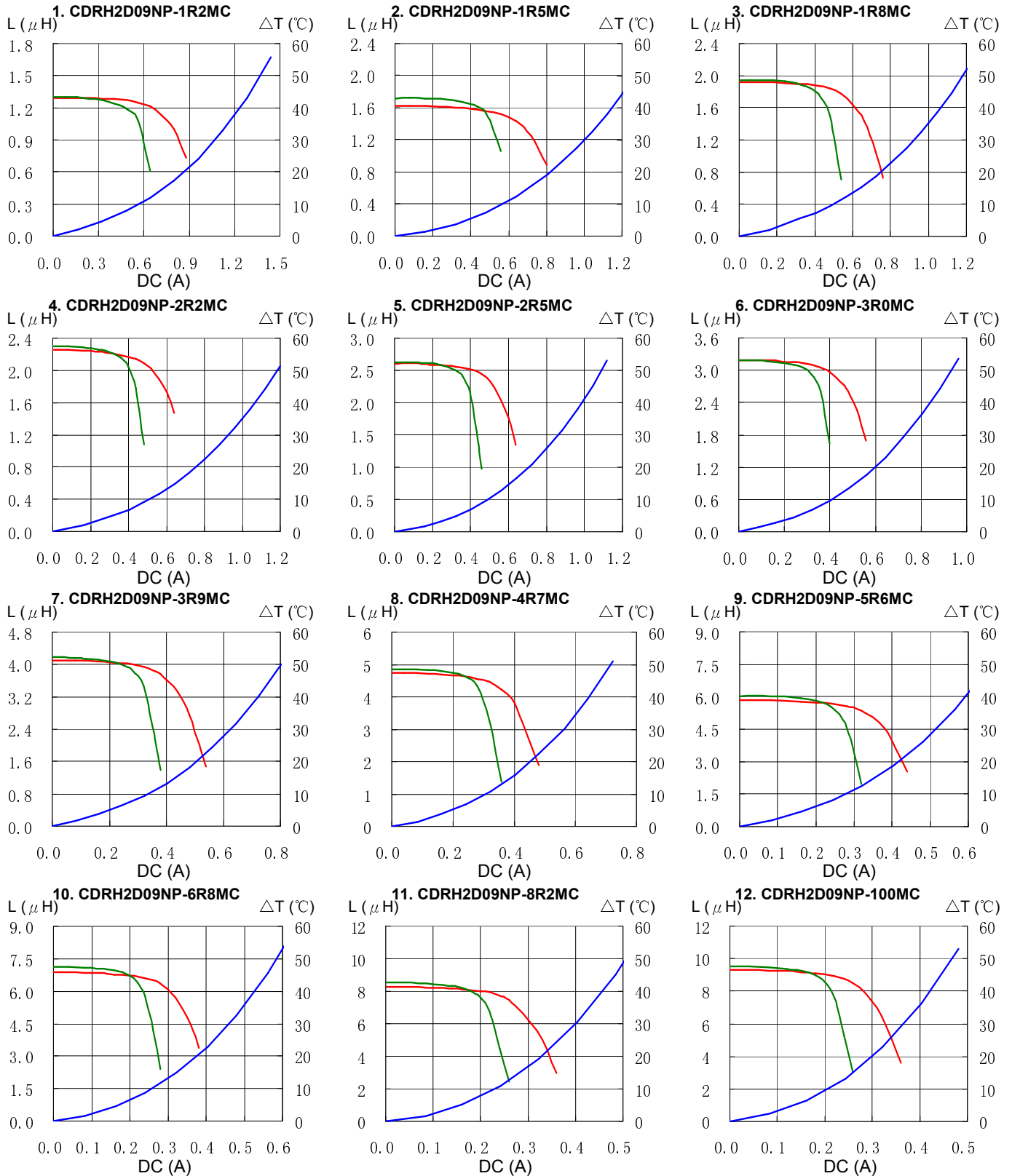
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

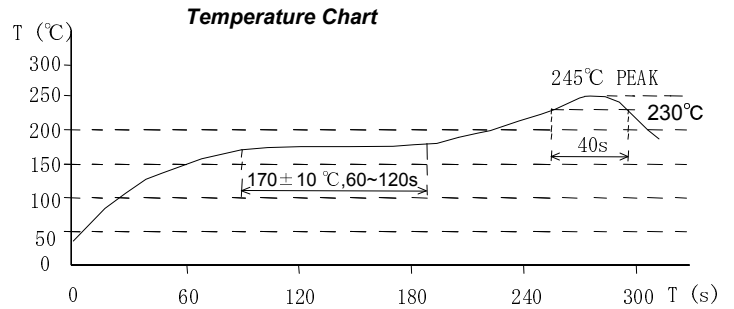
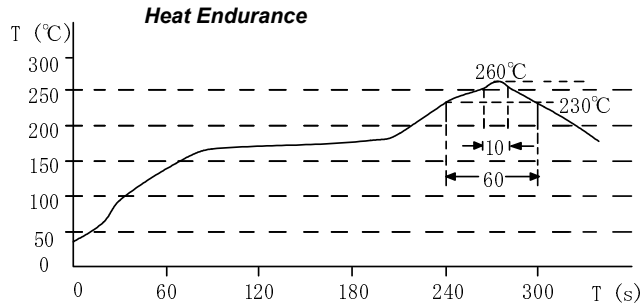
— L (20°C) — L (105°C) —  $\Delta T$



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## Solder Reflow Condition



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

### Hong Kong

Tel.+852-2880-6688  
FAX.+852-2565-9600  
[sales@hk.sumida.com](mailto:sales@hk.sumida.com)

### Tokyo

Tel.+81-3-5202-7112  
FAX.+81-3-5202-7105  
[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.+86-021-5836-3299  
FAX.+86-021-5836-3266  
[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@sumida-eu.com](mailto:contact@sumida-eu.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.+65-6296-3390  
[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)