

SMD Power Inductor

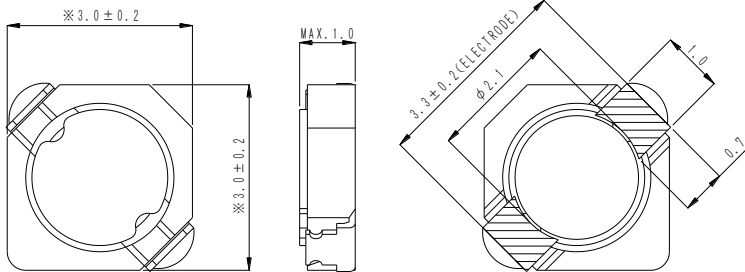
CDRH2D09



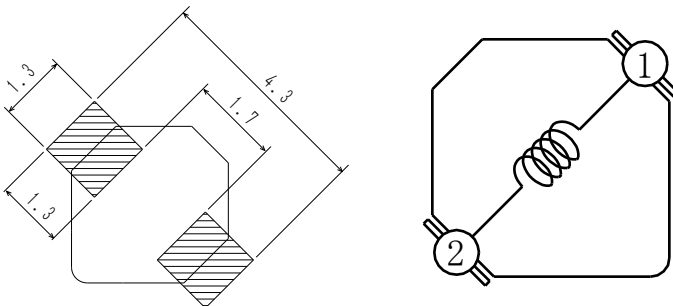
Description

- 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.

Dimension - [mm]



Land pattern and Schematics - [mm]



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

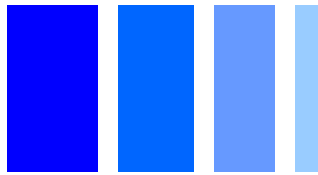
- Carrier tape and reel packaging
- 7.0" diameter reel
- 1500pcs per reel

Applications

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

SMD Power Inductor

CDRH2D09



Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R. (m Ω) [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 it's nominal value.

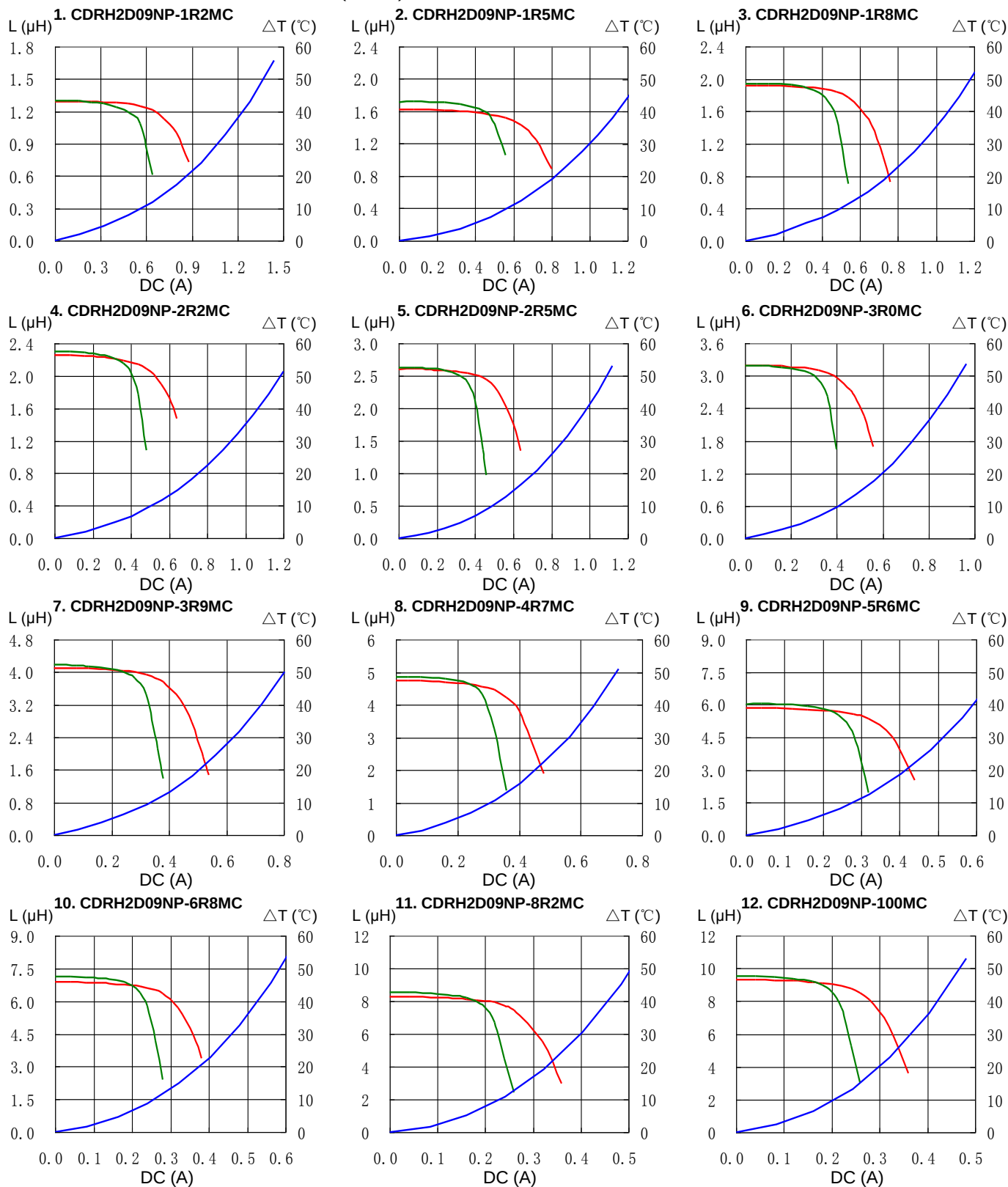
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

SMD Power Inductor CDRH2D09



Saturation Current & Temperature Rise Graph

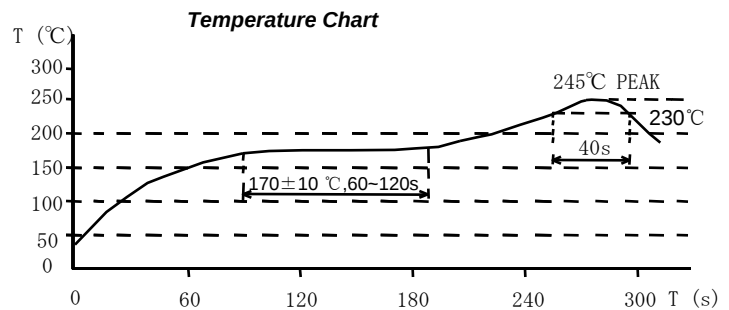
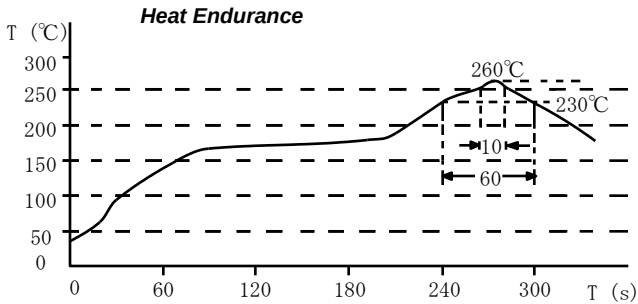
— L (20°C) — L (105°C) — ΔT



SMD Power Inductor CDRH2D09



Solder Reflow Condition



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

Hong Kong

Tel.+852-2880-6781
FAX.+852-2565-9600
sales@hk.sumida.com

Saitama(Japan)

Tel.+81-48-691-7300
FAX.+81-48-691-7340
sales@jp.sumida.com

Chicago

Tel.+1-847-545-6700
FAX. +1-847-545-6720
sales@us.sumida.com

Shanghai

Tel.+86-21-5836-3299
FAX.+86-21-5836-3266
shanghai.sales@cn.sumida.com

Seoul

Tel.+82-2-6237-0777
FAX.+82-2-6237-0778
sales@kr.sumida.com

Obernzell

Tel.+49-8591-937-0
FAX. +49-8591-937-103
contact@eu.sumida.com

Shenzhen

Tel.+86-755-8291-0228
FAX.+86-755-8291-0338
shenzhen.sales@cn.sumida.com

Singapore

Tel.+65-6296-3388
FAX.+65-6841-4426
sales@sg.sumida.com

Neumarkt

Tel.+49-9181-4509-110
FAX. +49-9181-4509-310
infocomp@eu.sumida.com

Taipei

Tel.+886-2-8751-2737
FAX.+886-2-8751-2738
sales@tw.sumida.com

San Jose

Tel.+1-408-321-9660
FAX.+1-408-321-9308
sales@us.sumida.com