

SMD Power Inductor CDRH105R



Description

- Ferrite drum core construction.
- Magnetically shielded.
- $L \times W \times H$: $10.5 \times 10.3 \times 5.1$ mm Max.
- Product weight: 1.8g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$
(including coil's self temperature rise)
- Storage temperature range: $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- Solder reflow temperature: 260°C peak.

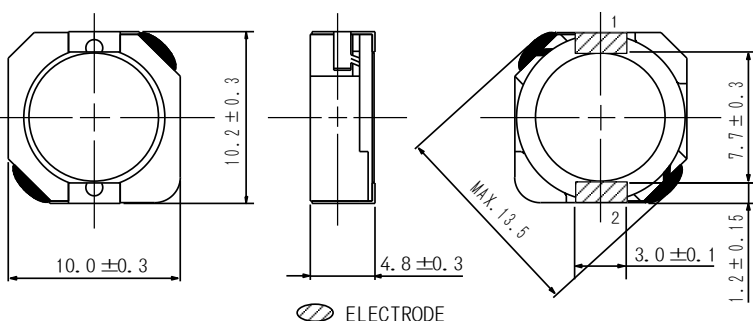
Packaging

- Carrier tape and reel packaging.
- 12.9" diameter reel.
- 500pcs per reel.

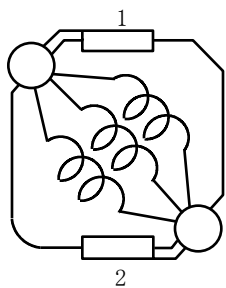
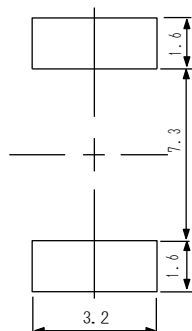
Applications

- Ideally used in Notebook PC, LCD TV,DVD, Game machine, STB ,Projector etc as DC-DC converter inductors.

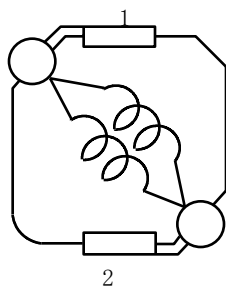
Dimension - [mm]



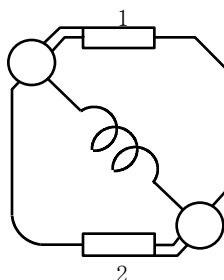
Land pattern and Schematics - [mm]



($0.8\mu\text{H} \sim 22\mu\text{H}$)



($27\mu\text{H} \sim 82\mu\text{H}$)



($100\mu\text{H} \sim 1.0\text{mH}$)

SMD Power Inductor

CDRH105R



Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R. (m Ω) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
CDRH105RNP-0R8NC	0R8	0.8 $\pm$ 30%	4.3 (3.3)	13.5	9.50
CDRH105RNP-1R5NC	1R5	1.5 $\pm$ 30%	5.8 (4.5)	10.5	8.30
CDRH105RNP-2R2NC	2R2	2.2 $\pm$ 30%	7.2 (5.6)	9.25	7.50
CDRH105RNP-3R3NC	3R3	3.3 $\pm$ 30%	10.4 (8.0)	7.80	6.50
CDRH105RNP-4R7NC	4R7	4.7 $\pm$ 30%	12.3 (9.5)	6.40	6.10
CDRH105RNP-6R8NC	6R8	6.8 $\pm$ 30%	18.0 (14.0)	5.40	5.40
CDRH105RNP-8R2NC	8R2	8.2 $\pm$ 30%	20.0 (16.0)	4.85	5.00
CDRH105RNP-100NC	100	10 $\pm$ 30%	26.0 (20.0)	4.45	4.50
CDRH105RNP-120NC	120	12 $\pm$ 30%	33.0 (25.0)	4.00	3.80
CDRH105RNP-150NC	150	15 $\pm$ 30%	41.0 (32.0)	3.60	3.40
CDRH105RNP-180NC	180	18 $\pm$ 30%	46.0 (35.0)	3.20	3.10
CDRH105RNP-220NC	220	22 $\pm$ 30%	61.0 (47.0)	2.95	2.90
CDRH105RNP-270NC	270	27 $\pm$ 30%	69.0 (53.0)	2.70	2.60
CDRH105RNP-330NC	330	33 $\pm$ 30%	84.0 (65.0)	2.40	2.50
CDRH105RNP-390NC	390	39 $\pm$ 30%	106 (82.0)	2.30	2.25
CDRH105RNP-470NC	470	47 $\pm$ 30%	130 (100)	2.00	2.00
CDRH105RNP-560NC	560	56 $\pm$ 30%	149 (115)	1.90	1.90
CDRH105RNP-680NC	680	68 $\pm$ 30%	201 (155)	1.65	1.60
CDRH105RNP-820NC	820	82 $\pm$ 30%	227 (175)	1.50	1.45
CDRH105RNP-101NC	101	100 $\pm$ 30%	253 (195)	1.35	1.35
CDRH105RNP-121NC	121	120 $\pm$ 30%	303 (233)	1.28	1.18
CDRH105RNP-151NC	151	150 $\pm$ 30%	370 (285)	1.12	1.10
CDRH105RNP-181NC	181	180 $\pm$ 30%	419 (322)	1.04	1.00
CDRH105RNP-221NC	221	220 $\pm$ 30%	500 (385)	0.94	0.94
CDRH105RNP-271NC	271	270 $\pm$ 30%	672 (512)	0.84	0.80
CDRH105RNP-331NC	331	330 $\pm$ 30%	812 (625)	0.75	0.73
CDRH105RNP-391NC	391	390 $\pm$ 30%	953 (733)	0.70	0.70
CDRH105RNP-471NC	471	470 $\pm$ 30%	1289 (992)	0.60	0.54
CDRH105RNP-561NC	561	560 $\pm$ 30%	1430 (1100)	0.54	0.52
CDRH105RNP-681NC	681	680 $\pm$ 30%	1599 (1230)	0.52	0.51
CDRH105RNP-821NC	821	820 $\pm$ 30%	1768 (1360)	0.50	0.48
CDRH105RNP-102NC	102	1000 $\pm$ 30%	1989 (1530)	0.48	0.42

※1 Inductance measuring condition: at 100kHz.

※2 The saturation current: This indicates the value of DC current when the inductance decreases to 65% of it's nominal.

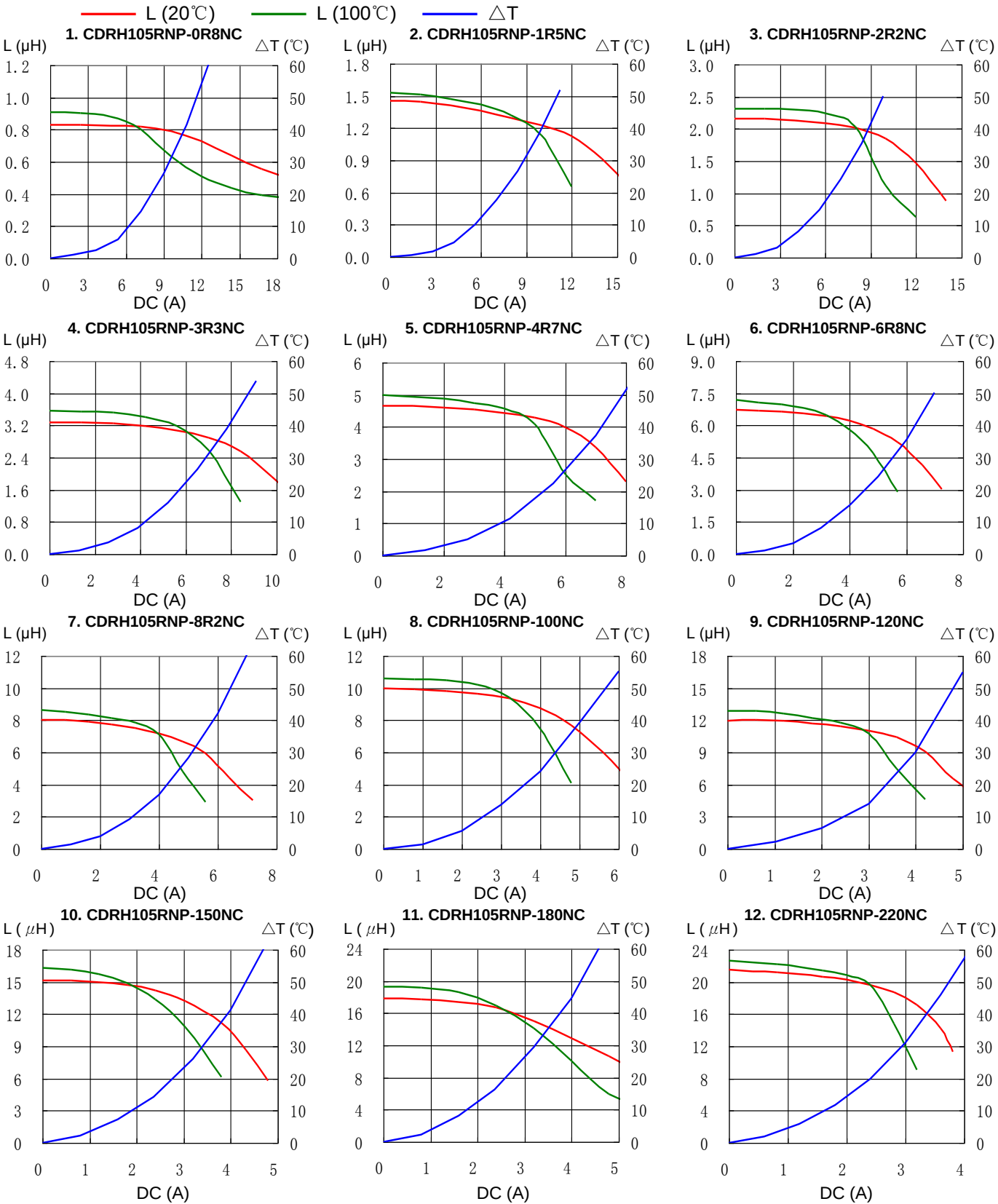
※3 The temperature rise: The value of DC current when the temperature rise is $\Delta T=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

SMD Power Inductor

CDRH105R



Saturation Current & Temperature Rise Graph

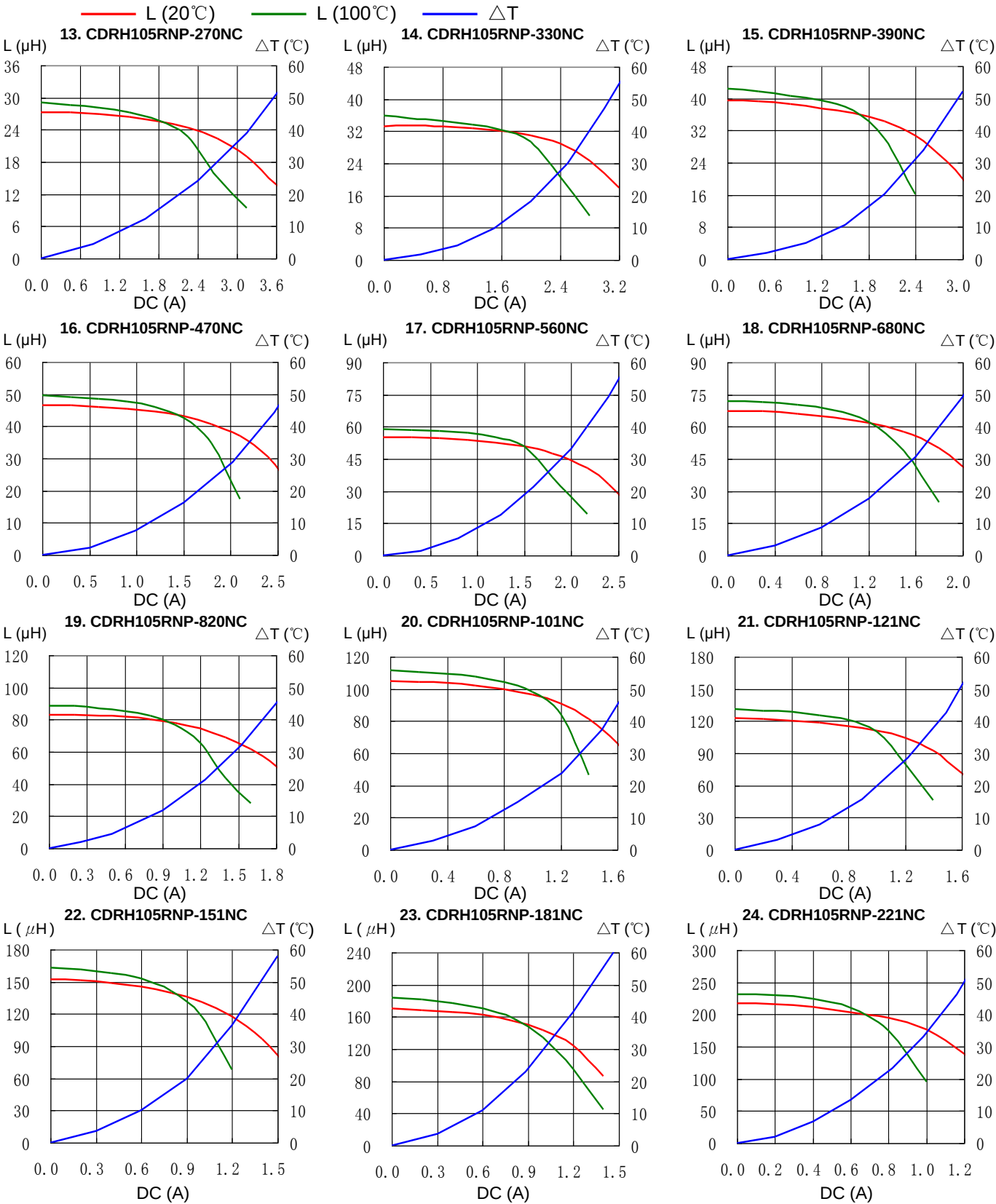


SMD Power Inductor

CDRH105R



Saturation Current & Temperature Rise Graph

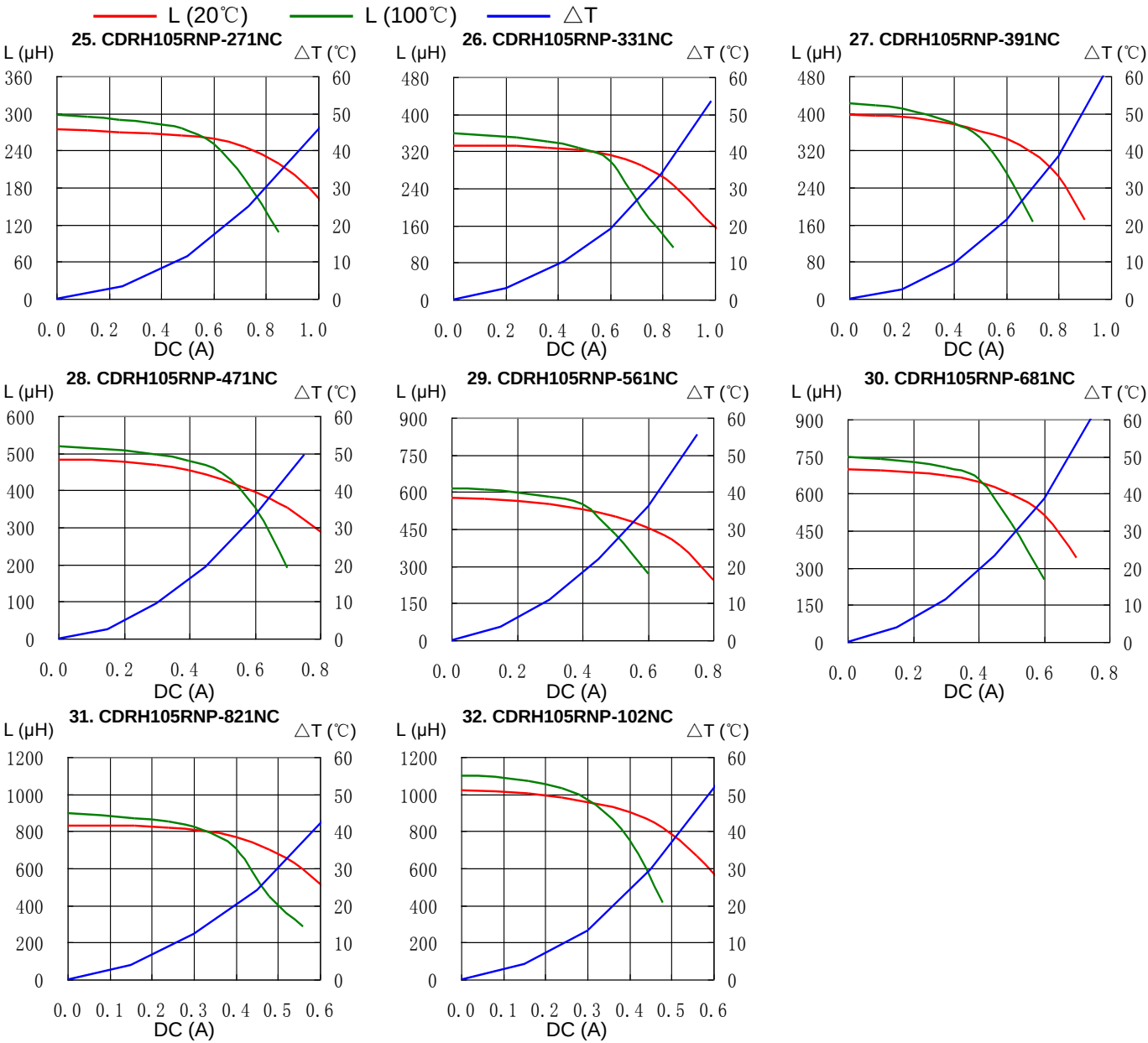


SMD Power Inductor

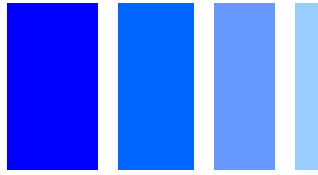
CDRH105R



Saturation Current & Temperature Rise Graph

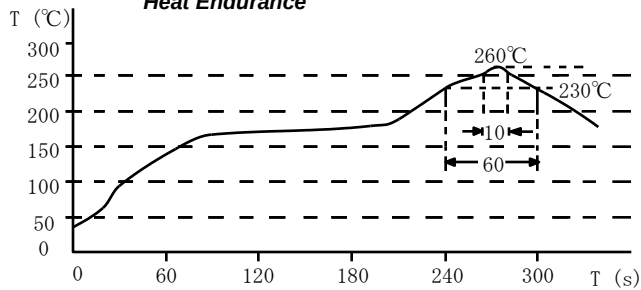


SMD Power Inductor CDRH105R

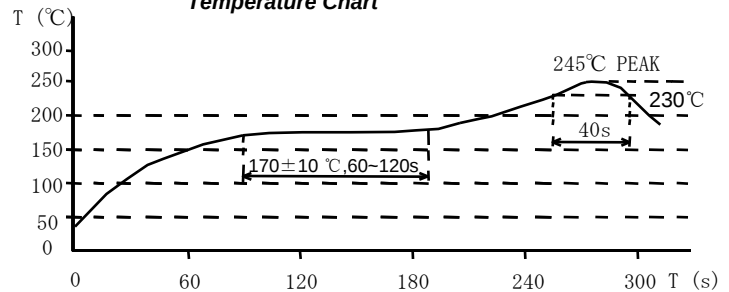


Solder Reflow Condition

Heat Endurance



Temperature Chart



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