

SMD Power Inductor CDRH10D48MN



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.5 × 5.0 mm Max.
- Product weight: 1.7g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: -40°C~+105°C (excluding coil's self temperature rise)
- Storage temperature range: -40°C~+105°C
- Solder reflow temperature: 260 °C peak.

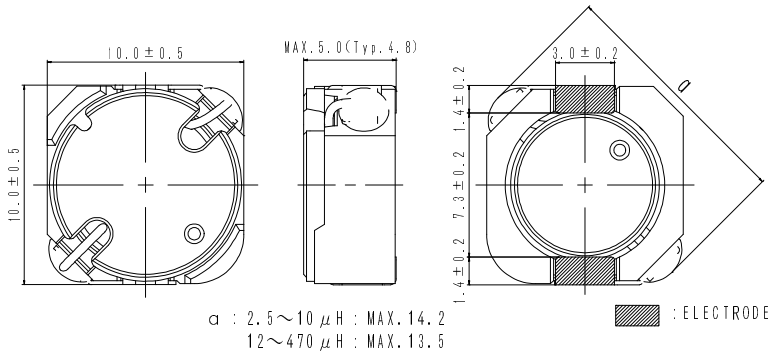
Packaging

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

Applications

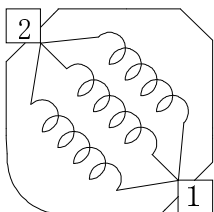
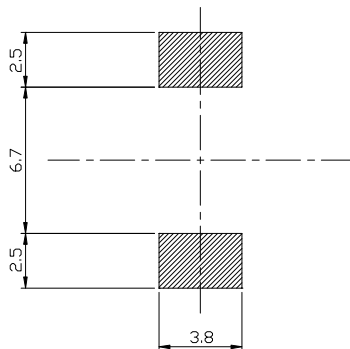
- Ideally used in LCD driver, DSC/DVC, Notebook PC or the other portable equipment.

Dimension - [mm]

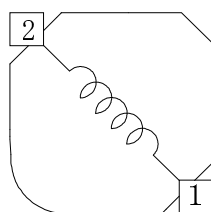


α : 2.5 ~ 10 μ H : MAX. 14.2
 12 ~ 470 μ H : MAX. 13.5

Land pattern and Schematics - [mm]



(2.5 μ H ~ 10 μ H)



(12 μ H ~ 470 μ H)

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Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R. (m Ω) Max. (Typ.) (20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				(20°C)	(105°C)	
CDRH10D48MNNP-2R5NC	2R5	2.5 μ H \pm 25%	8.8(7)	10.20	7.50	8.90
CDRH10D48MNNP-3R7NC	3R7	3.7 μ H \pm 25%	10.0(8)	8.40	6.30	7.00
CDRH10D48MNNP-5R1NC	5R1	5.1 μ H \pm 25%	12.5(10)	7.40	5.60	6.30
CDRH10D48MNNP-6R7NC	6R7	6.7 μ H \pm 25%	17.5(14)	6.60	5.10	5.50
CDRH10D48MNNP-8R6NC	8R6	8.6 μ H \pm 25%	19(15)	5.80	4.40	4.80
CDRH10D48MNNP-100NC	100	10 μ H \pm 25%	24(19)	5.10	3.90	4.20
CDRH10D48MNNP-120NC	120	12 μ H \pm 25%	33(26)	4.70	3.60	3.50
CDRH10D48MNNP-150NC	150	15 μ H \pm 25%	37(29)	4.50	3.40	3.20
CDRH10D48MNNP-180NC	180	18 μ H \pm 25%	45(36)	4.10	3.10	2.80
CDRH10D48MNNP-220NC	220	22 μ H \pm 25%	49(39)	3.70	2.90	2.60
CDRH10D48MNNP-270NC	270	27 μ H \pm 25%	58(46)	3.30	2.60	2.40
CDRH10D48MNNP-330NC	330	33 μ H \pm 25%	68(54)	3.10	2.40	2.30
CDRH10D48MNNP-390NC	390	39 μ H \pm 25%	89(71)	2.80	2.10	1.90
CDRH10D48MNNP-470NC	470	47 μ H \pm 25%	95(76)	2.60	2.00	1.80
CDRH10D48MNNP-560NC	560	56 μ H \pm 25%	117(93)	2.40	1.80	1.60
CDRH10D48MNNP-680NC	680	68 μ H \pm 25%	130(104)	2.10	1.60	1.50
CDRH10D48MNNP-820NC	820	82 μ H \pm 25%	168(134)	1.90	1.50	1.30
CDRH10D48MNNP-101NC	101	100 μ H \pm 25%	203(162)	1.70	1.30	1.20
CDRH10D48MNNP-121NC	121	120 μ H \pm 25%	230(184)	1.60	1.20	1.10
CDRH10D48MNNP-151NC	151	150 μ H \pm 25%	284(227)	1.40	1.10	0.98
CDRH10D48MNNP-181NC	181	180 μ H \pm 25%	367(293)	1.30	0.99	0.84
CDRH10D48MNNP-221NC	221	220 μ H \pm 25%	448(358)	1.20	0.91	0.75
CDRH10D48MNNP-271NC	271	270 μ H \pm 25%	535(428)	1.10	0.83	0.66
CDRH10D48MNNP-331NC	331	330 μ H \pm 25%	655(524)	0.96	0.77	0.59
CDRH10D48MNNP-391NC	391	390 μ H \pm 25%	790(632)	0.88	0.69	0.53
CDRH10D48MNNP-471NC	471	470 μ H \pm 25%	965(772)	0.80	0.62	0.49

※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.

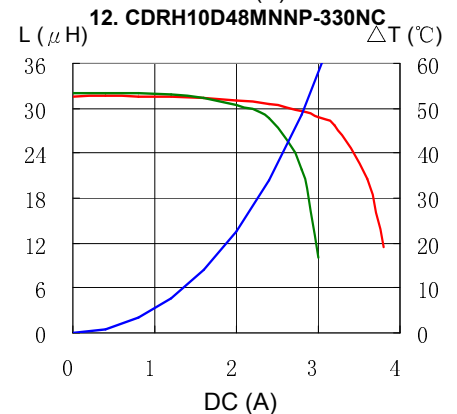
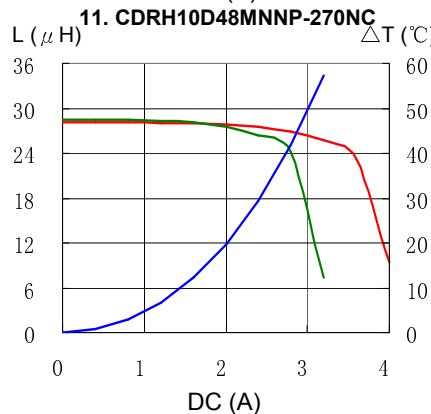
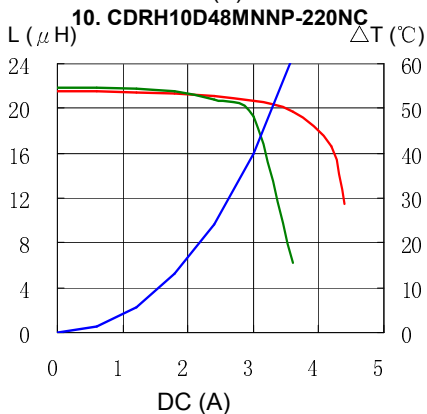
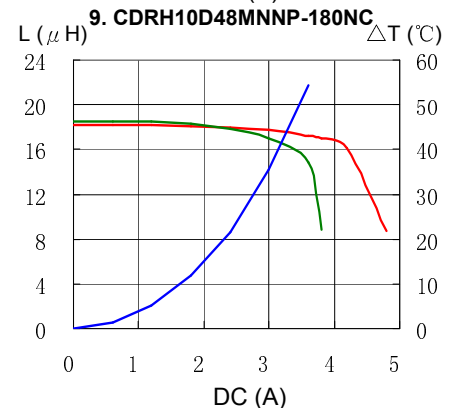
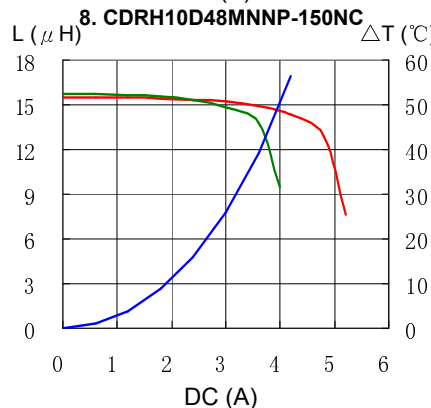
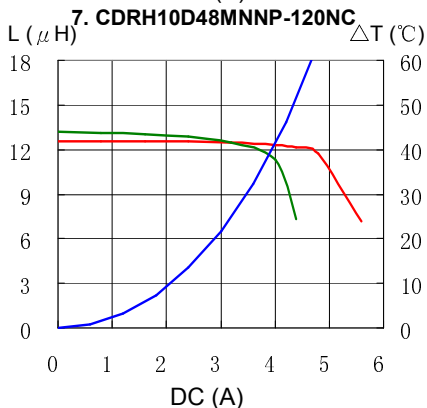
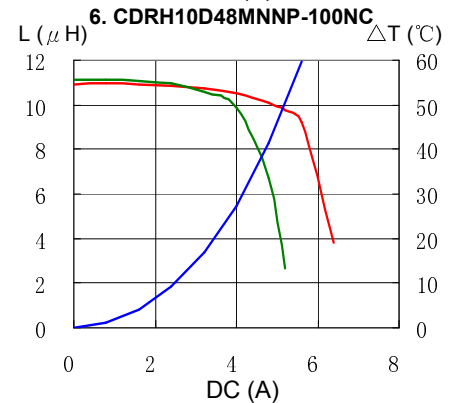
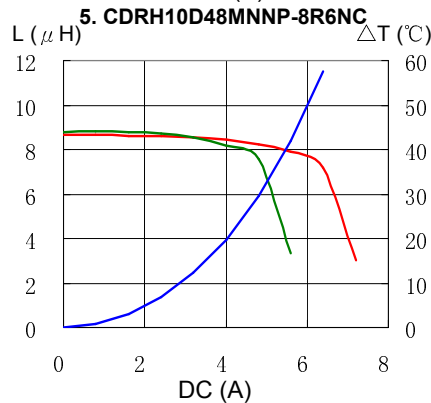
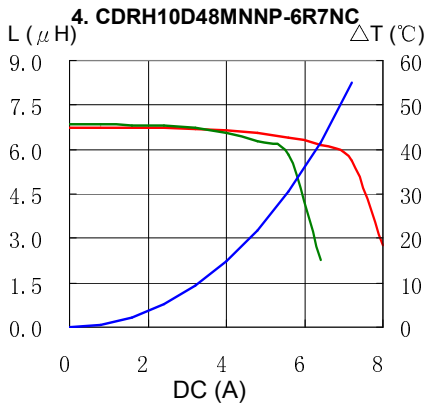
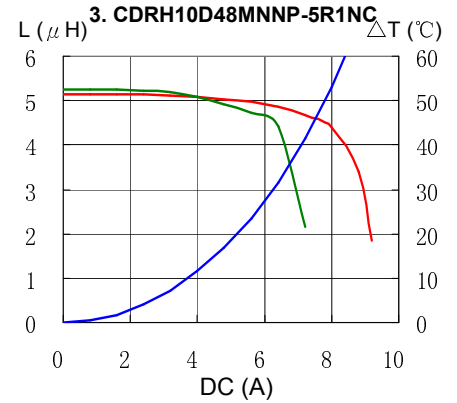
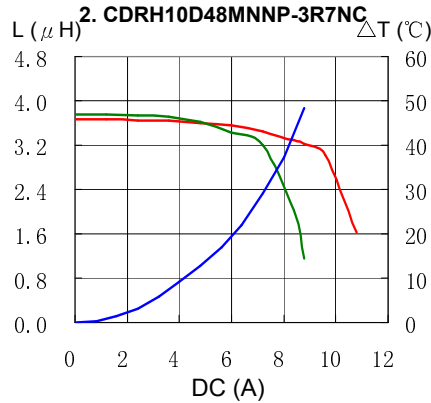
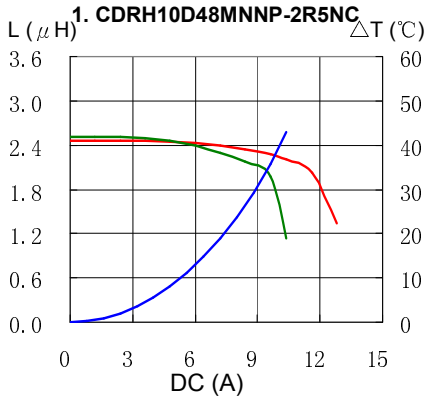
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

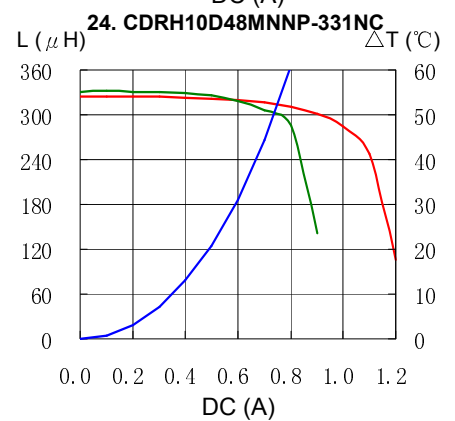
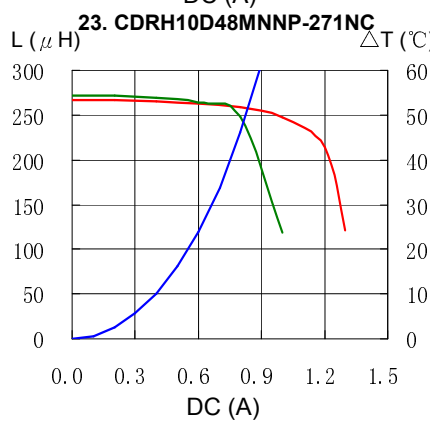
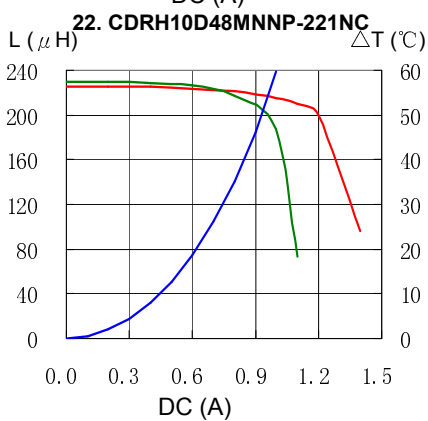
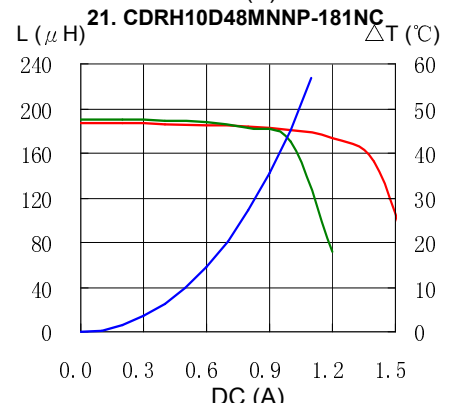
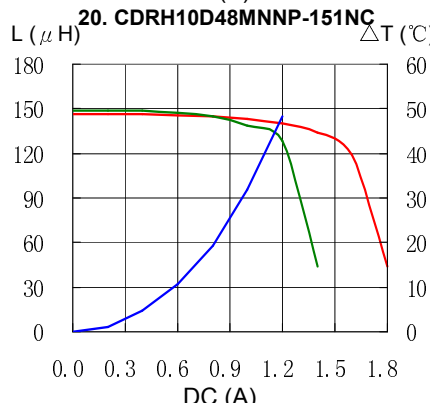
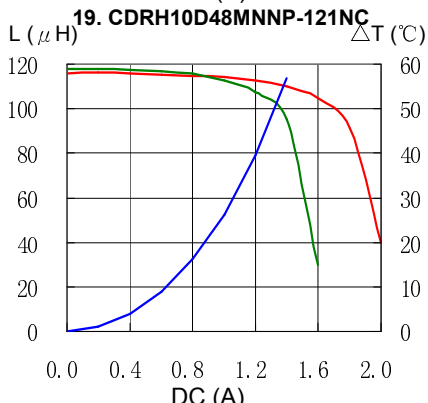
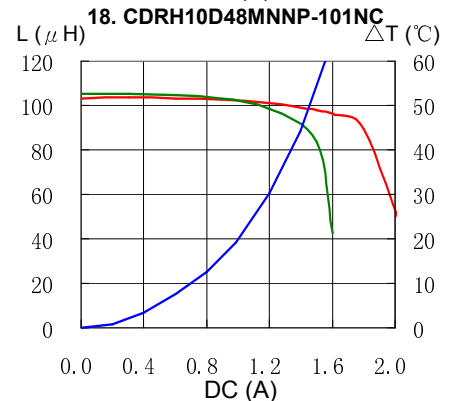
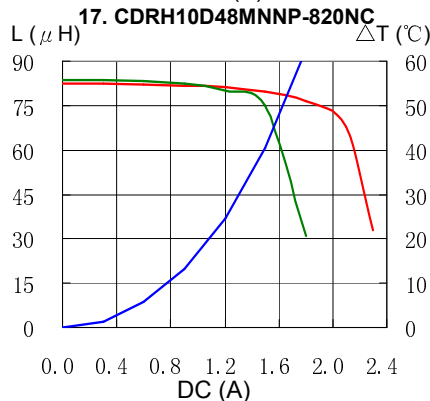
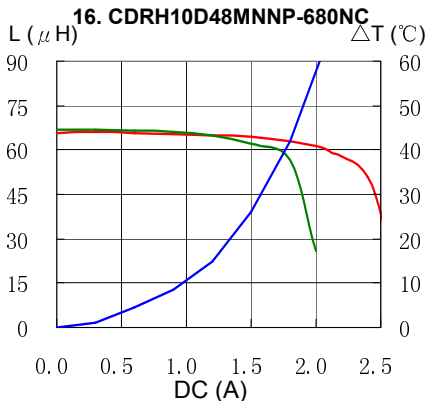
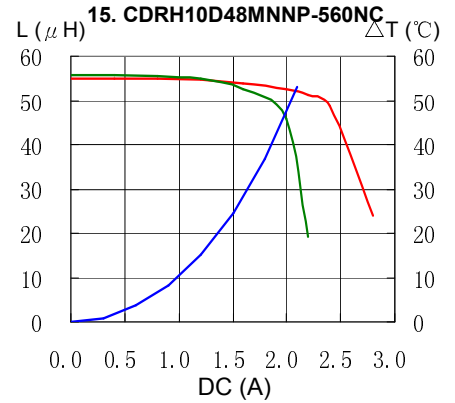
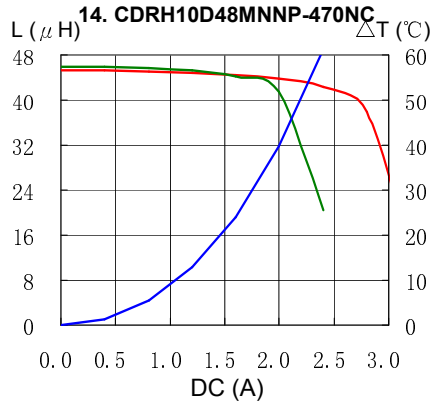
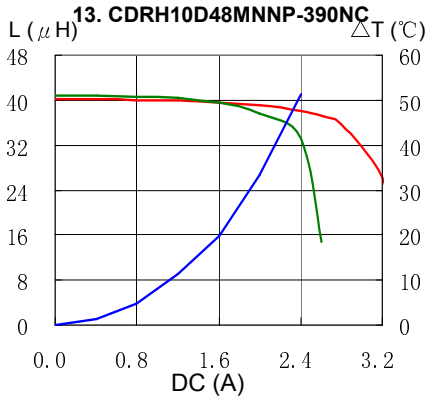


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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

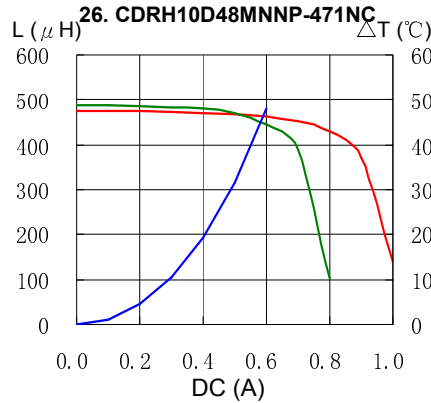
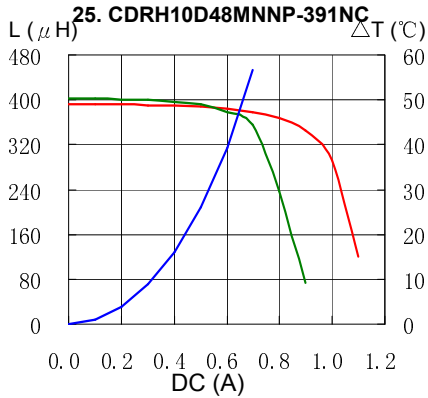


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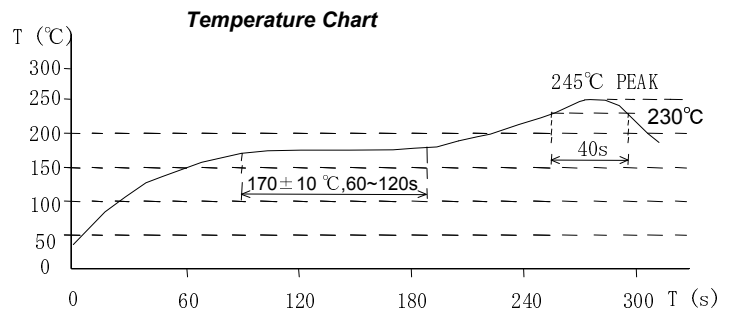
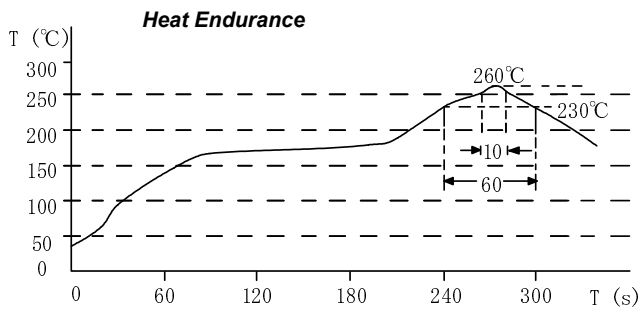


Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT



Solder Reflow Condition



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

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