

SMD Power Inductor CDR10D48MN



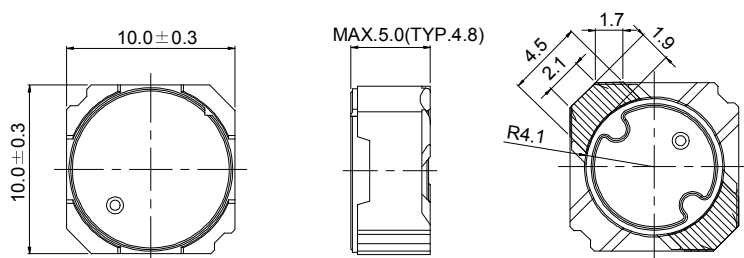
Halogen
Free



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.3 × 10.3 × 5.0 mm Max.
- Product weight: 1.8g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Dimension - [mm]



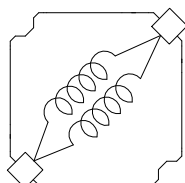
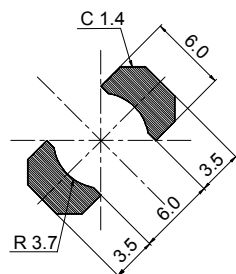
Environmental Data

- 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.

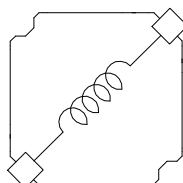
Packaging

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

Land pattern and Schematics - [mm]



(2.4 μ H ~ 10 μ H)



(12 μ H ~ 120 μ H)

Applications

- Ideally used in LCD Driver ,DSC/DVC, Notebook PC etc as DC-DC converter inductors.

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CDR10D48MN



Electrical Characteristics

PART NAME	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) MAX.. (Typ.) (at 20℃)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at20℃)	(at105℃)	
CDR10D48MNNP-2R4NC	2R4	2.4 μ H ±25%	12.5(10.0)	11.5	9.2	9.6
CDR10D48MNNP-3R6NC	3R6	3.6 μ H ±25%	15.0(12.0)	9.4	7.7	8.2
CDR10D48MNNP-5R0NC	5R0	5.0 μ H ±25%	16.9(13.5)	8.0	6.5	6.8
CDR10D48MNNP-6R6NC	6R6	6.6 μ H ±25%	22.5(18.0)	7.1	5.7	5.7
CDR10D48MNNP-8R5NC	8R5	8.5 μ H ±25%	28.8(23.0)	6.3	5.1	4.8
CDR10D48MNNP-100NC	100	10 μ H ±25%	40.0(32.0)	5.5	4.4	4.3
CDR10D48MNNP-120NC	120	12 μ H ±25%	42.5(34.0)	4.9	4.1	3.6
CDR10D48MNNP-150NC	150	15 μ H ±25%	46.0(37.0)	4.5	3.6	3.4
CDR10D48MNNP-180NC	180	18 μ H ±25%	50.0(40.0)	4.1	3.4	3.2
CDR10D48MNNP-220NC	220	22 μ H ±25%	56.0(45.0)	4.0	3.2	2.8
CDR10D48MNNP-270NC	270	27 μ H ±25%	63.0(50.0)	3.6	2.9	2.7
CDR10D48MNNP-330NC	330	33 μ H ±25%	90.0(70.0)	3.1	2.5	2.1
CDR10D48MNNP-390NC	390	39 μ H ±25%	105.0(85.0)	3.0	2.4	1.9
CDR10D48MNNP-470NC	470	47 μ H ±25%	120.0(95.0)	2.6	2.1	1.8
CDR10D48MNNP-560NC	560	56 μ H ±25%	150.0(120)	2.4	2.0	1.6
CDR10D48MNNP-680NC	680	68 μ H ±25%	175.0(140)	2.1	1.8	1.5
CDR10D48MNNP-820NC	820	82 μ H ±25%	220.0(175)	2.0	1.6	1.3
CDR10D48MNNP-101NC	101	100 μ H ±25%	275.0(220)	1.8	1.5	1.1
CDR10D48MNNP-121NC	121	120 μ H ±25%	312.5(250)	1.6	1.3	1.0

※1. Measuring condition: at 100kHz.

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

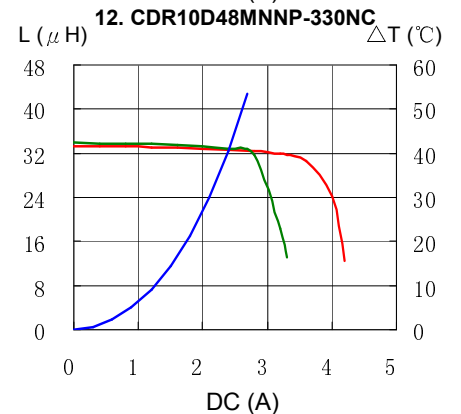
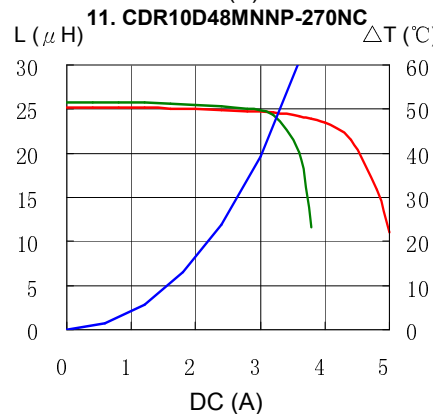
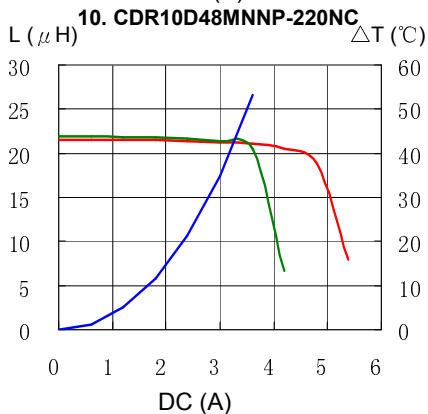
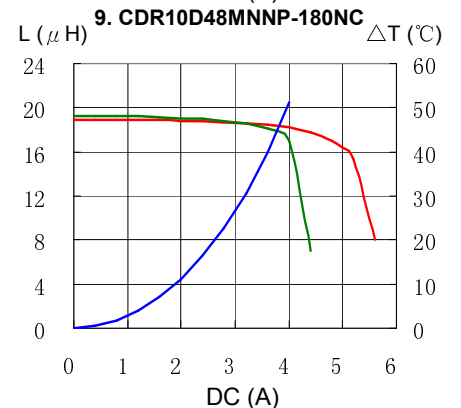
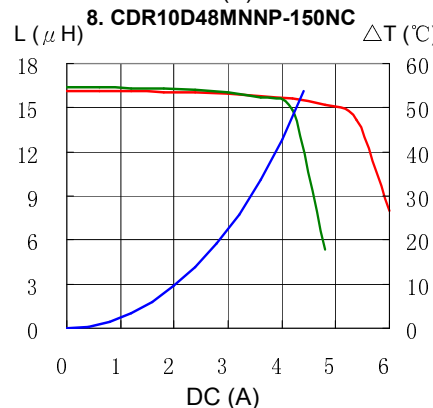
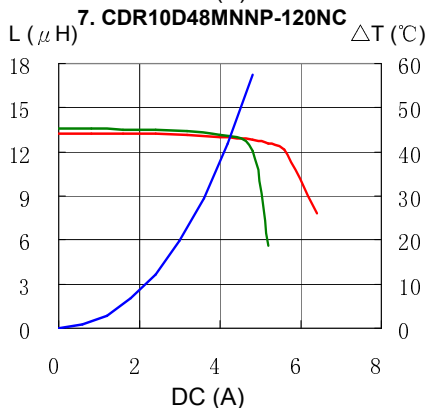
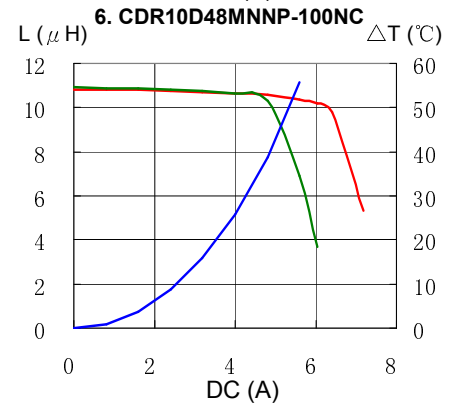
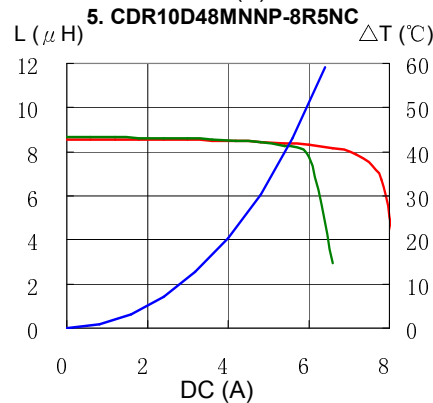
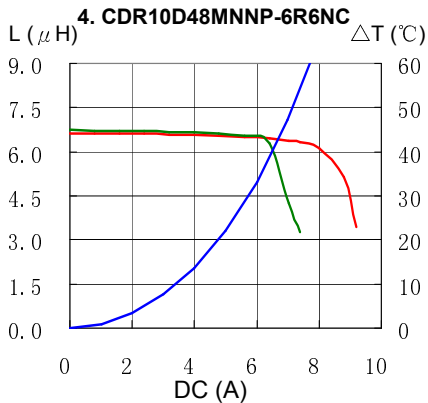
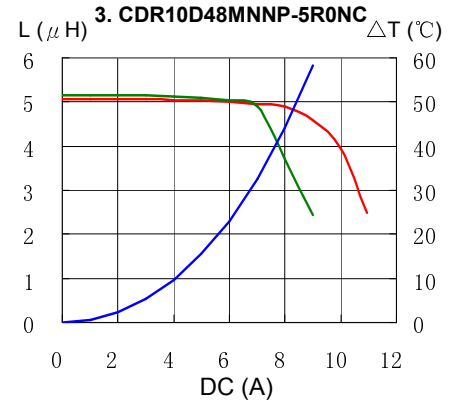
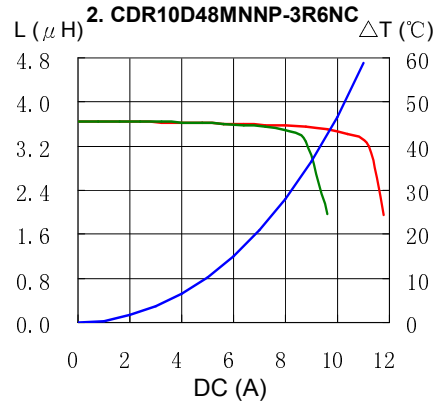
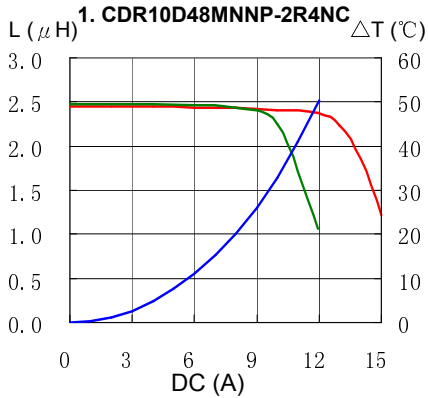
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

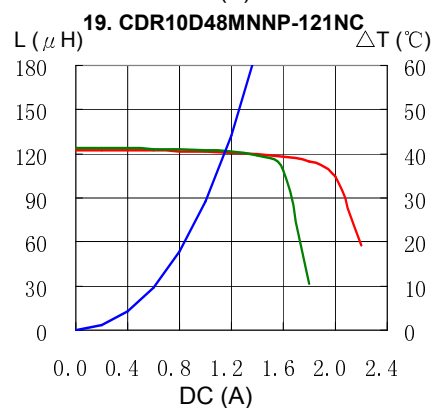
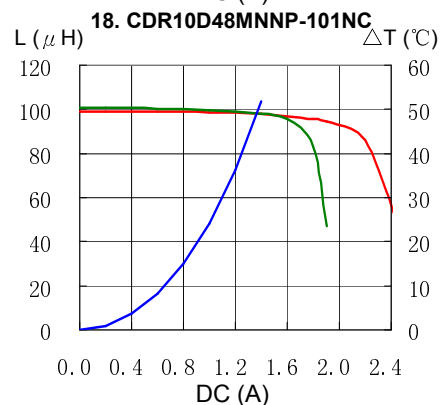
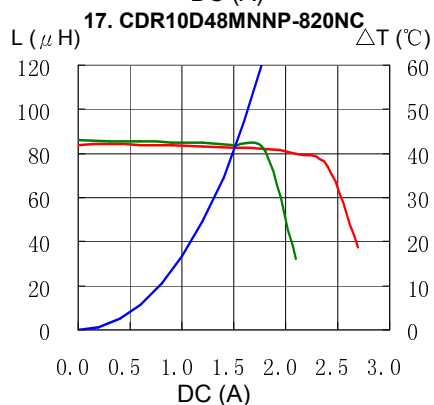
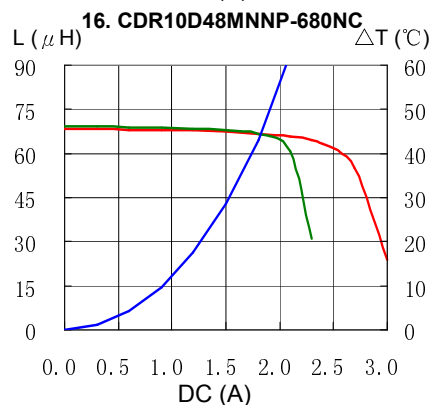
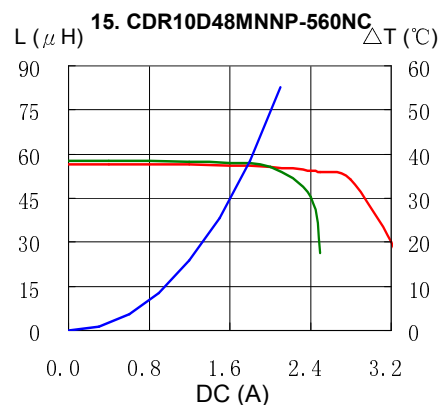
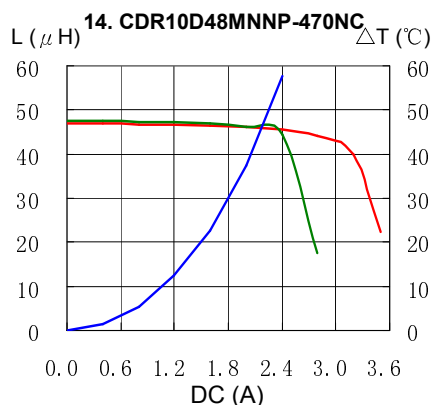
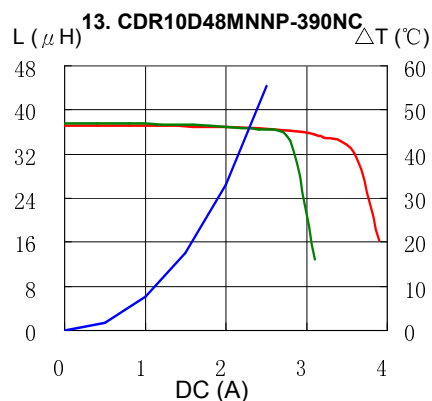


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Saturation Current & Temperature Rise Graph

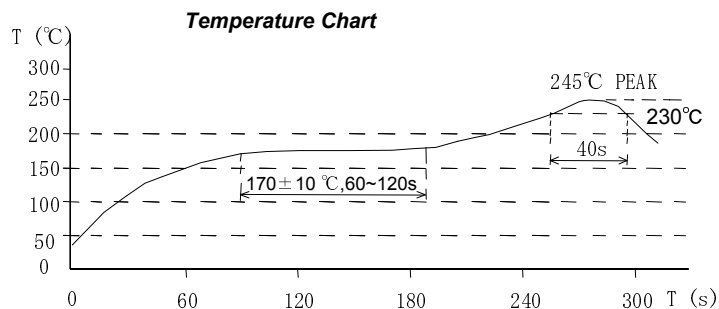
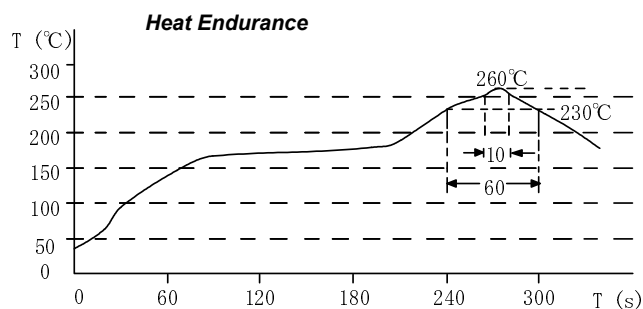
— L (20°C) — L (105°C) — ΔT



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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