SMD Power Inductor
CDRH105R

RoHS

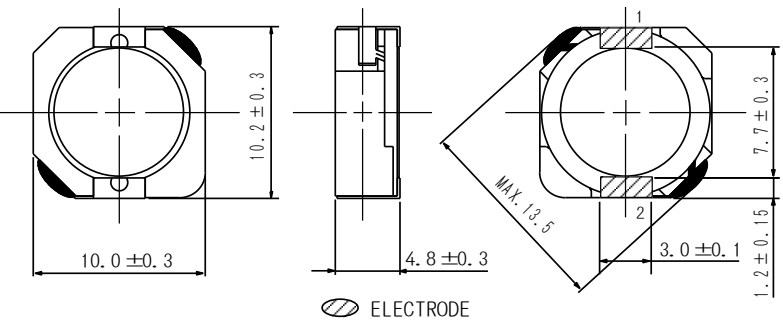
Description
- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H:10.5 × 10.3 × 5.1mm Max.
- Product weight: 1.8g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data
- Operating temperature range: -40℃～+100℃ (including coil's self temperature rise)
- Storage temperature range: -40℃～+100℃
- Solder reflow temperature: 260 ℃ peak.

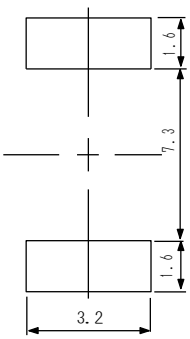
Packaging
- Carrier tape and reel packaging.
- 12.9"diameter reel.
- 500pcs per reel.

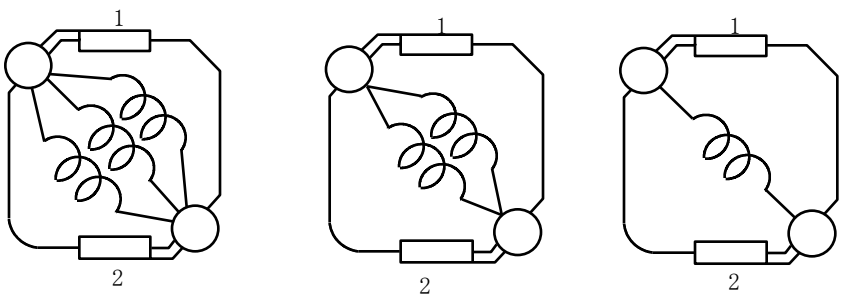
Applications
- Ideally used in Notebook PC, LCD TV,DVD, Game machine, STB ,Projector etc as DC-DC converter inductors.

Dimension - [mm]



Land pattern and Schematics - [mm]





(0.8μH～22μH) (27μH～82μH) (100μH～1.0mH)

Revised: 6-Jan-17

Electrical Characteristics

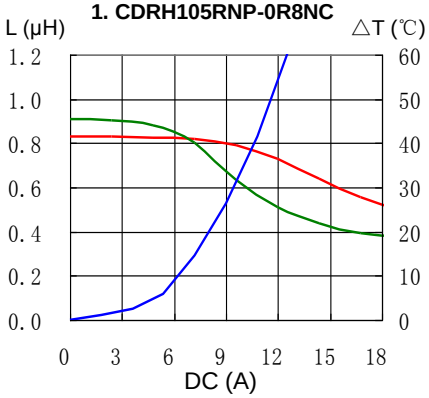
Part Name	Stamp	Inductance (μH) [within] ※1	D.C.R. (mΩ) Max. (Typ.) (at 20℃)	Saturation Current (A)※2	Temperature Rise Current (A) ※3
CDRH105RNP-0R8NC	0R8	0.8±30%	4.3 (3.3)	13.5	9.50
CDRH105RNP-1R5NC	1R5	1.5±30%	5.8 (4.5)	10.5	8.30
CDRH105RNP-2R2NC	2R2	2.2±30%	7.2 (5.6)	9.25	7.50
CDRH105RNP-3R3NC	3R3	3.3±30%	10.4 (8.0)	7.80	6.50
CDRH105RNP-4R7NC	4R7	4.7±30%	12.3 (9.5)	6.40	6.10
CDRH105RNP-6R8NC	6R8	6.8±30%	18.0 (14.0)	5.40	5.40
CDRH105RNP-8R2NC	8R2	8.2±30%	20.0 (16.0)	4.85	5.00
CDRH105RNP-100NC	100	10±30%	26.0 (20.0)	4.45	4.50
CDRH105RNP-120NC	120	12±30%	33.0 (25.0)	4.00	3.80
CDRH105RNP-150NC	150	15±30%	41.0 (32.0)	3.60	3.40
CDRH105RNP-180NC	180	18±30%	46.0 (35.0)	3.20	3.10
CDRH105RNP-220NC	220	22±30%	61.0 (47.0)	2.95	2.90
CDRH105RNP-270NC	270	27±30%	69.0 (53.0)	2.70	2.60
CDRH105RNP-330NC	330	33±30%	84.0 (65.0)	2.40	2.50
CDRH105RNP-390NC	390	39±30%	106 (82.0)	2.30	2.25
CDRH105RNP-470NC	470	47±30%	130 (100)	2.00	2.00
CDRH105RNP-560NC	560	56±30%	149 (115)	1.90	1.90
CDRH105RNP-680NC	680	68±30%	201 (155)	1.65	1.60
CDRH105RNP-820NC	820	82±30%	227 (175)	1.50	1.45
CDRH105RNP-101NC	101	100±30%	253 (195)	1.35	1.35
CDRH105RNP-121NC	121	120±30%	303 (233)	1.28	1.18
CDRH105RNP-151NC	151	150±30%	370 (285)	1.12	1.10
CDRH105RNP-181NC	181	180±30%	419 (322)	1.04	1.00
CDRH105RNP-221NC	221	220±30%	500 (385)	0.94	0.94
CDRH105RNP-271NC	271	270±30%	672 (512)	0.84	0.80
CDRH105RNP-331NC	331	330±30%	812 (625)	0.75	0.73
CDRH105RNP-391NC	391	390±30%	953 (733)	0.70	0.70
CDRH105RNP-471NC	471	470±30%	1289 (992)	0.60	0.54
CDRH105RNP-561NC	561	560±30%	1430 (1100)	0.54	0.52
CDRH105RNP-681NC	681	680±30%	1599 (1230)	0.52	0.51
CDRH105RNP-821NC	821	820±30%	1768 (1360)	0.50	0.48
CDRH105RNP-102NC	102	1000±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 △T＝40℃ (Ta＝20℃).

Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

1. CDRH105RNP-0R8NC



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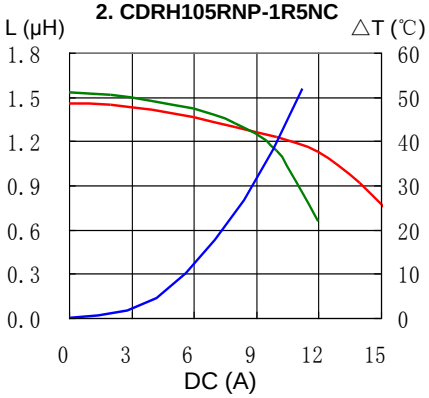

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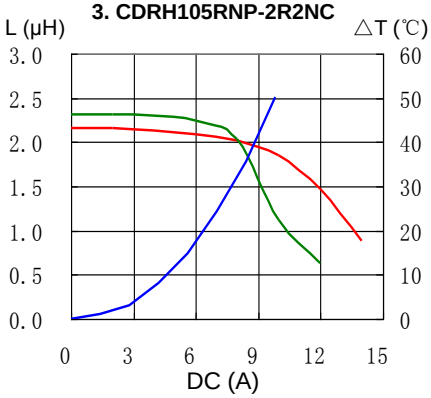

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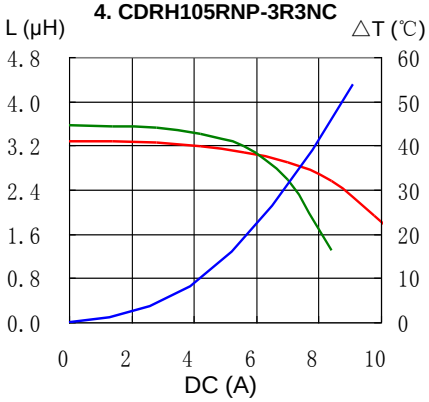

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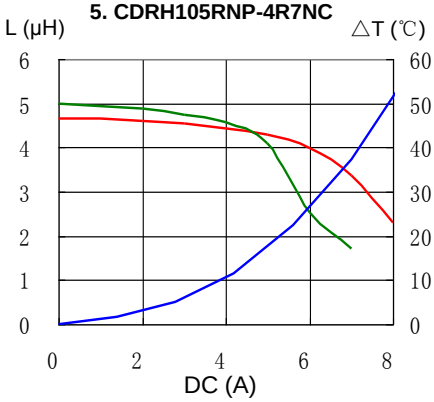

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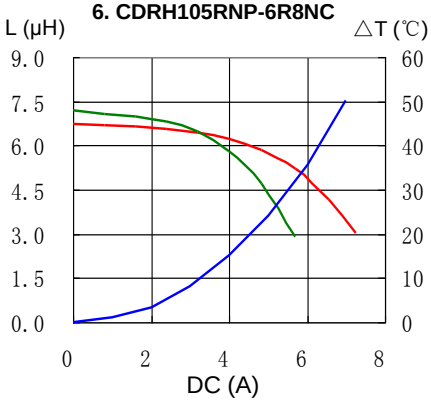

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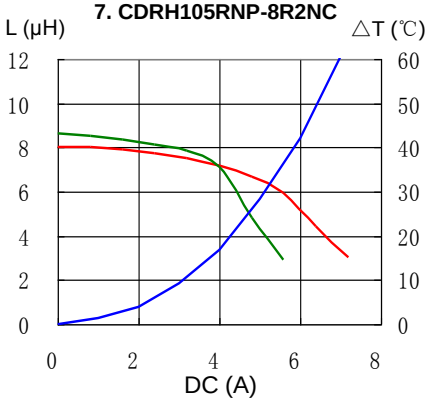

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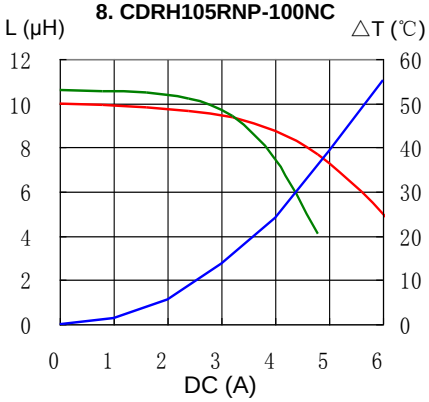
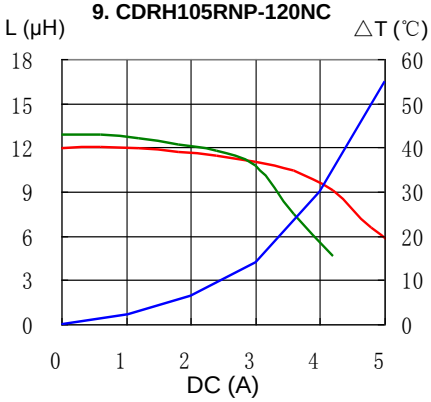


9. CDRH105RNP-120NC



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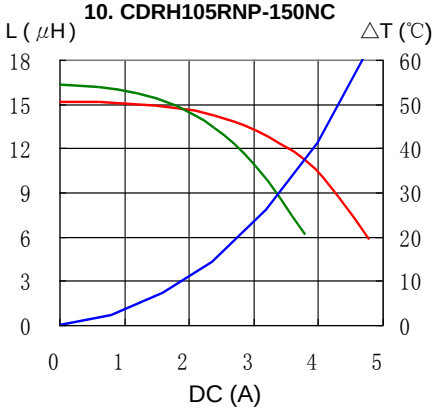

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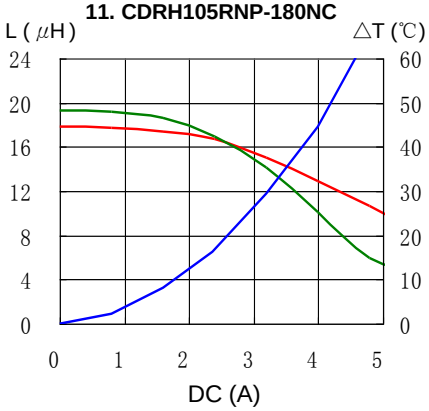

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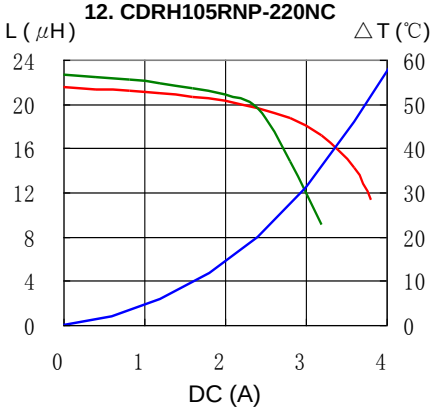
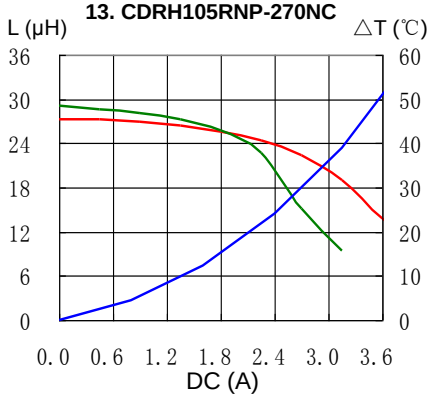


Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

13. CDRH105RNP-270NC



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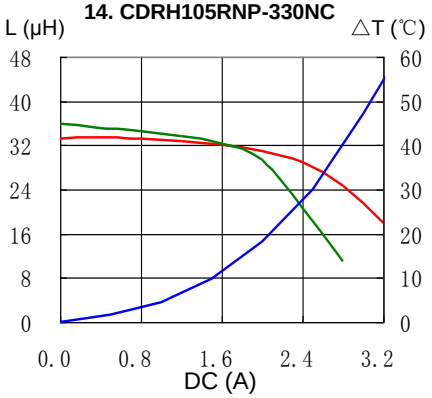

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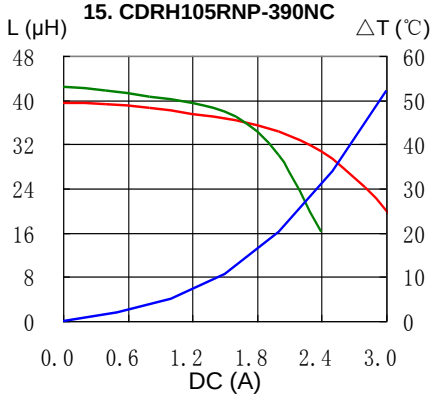

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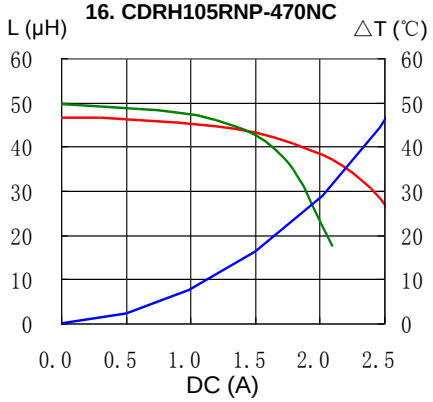

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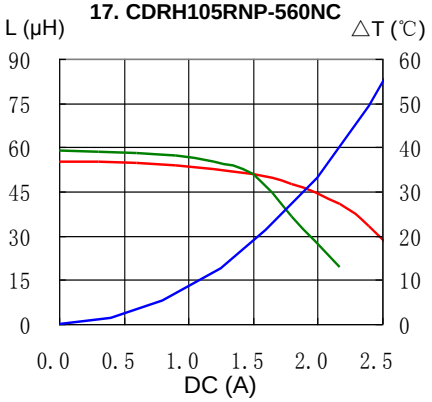

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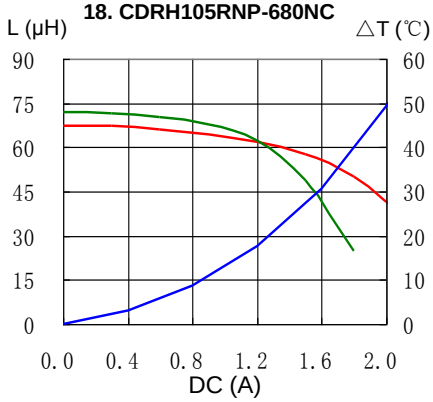

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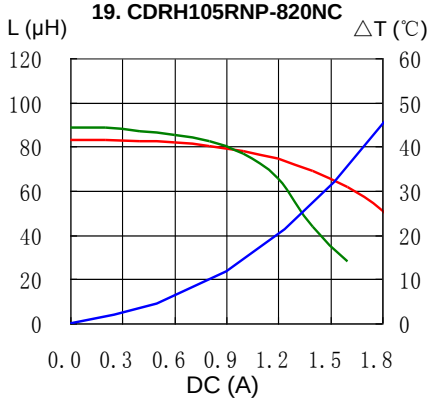

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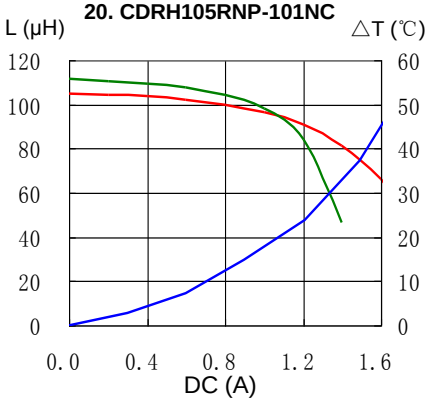

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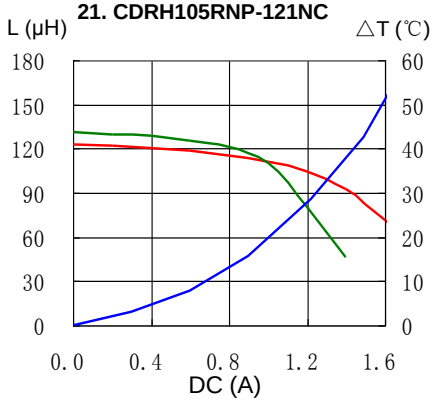

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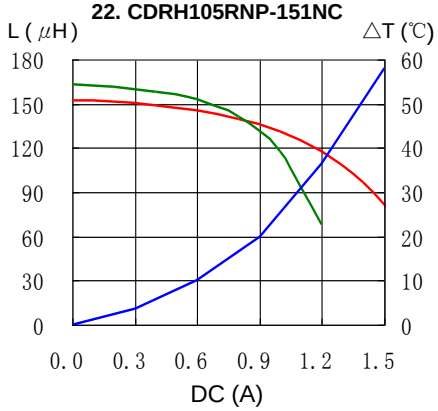

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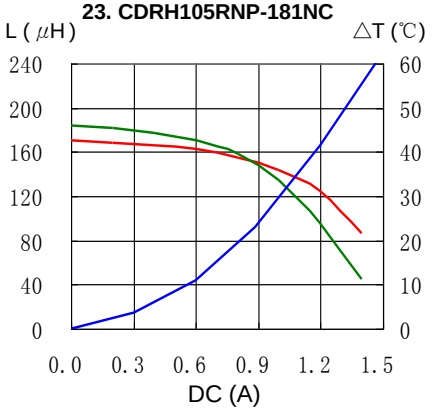

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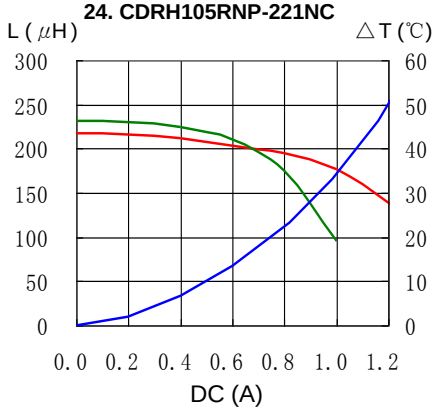

Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

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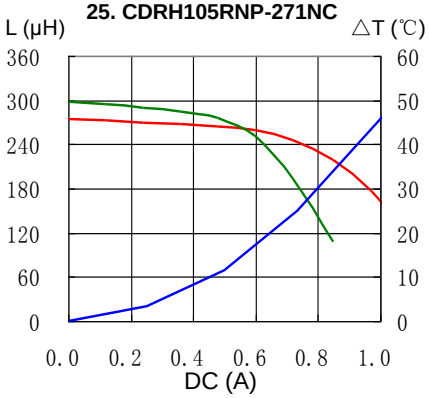

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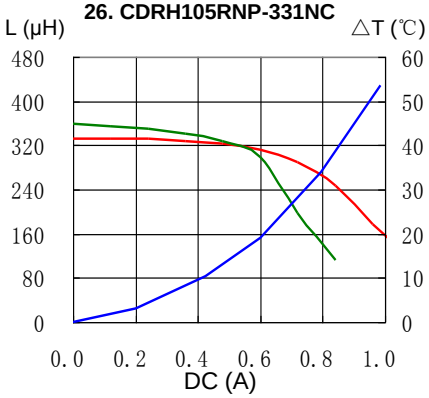

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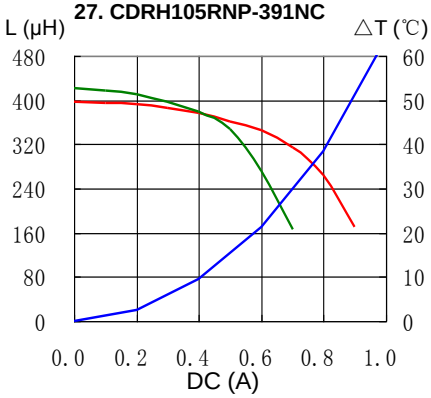

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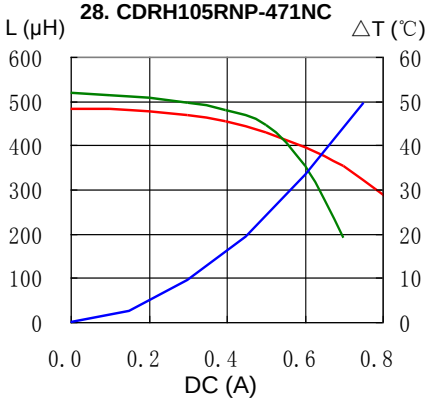

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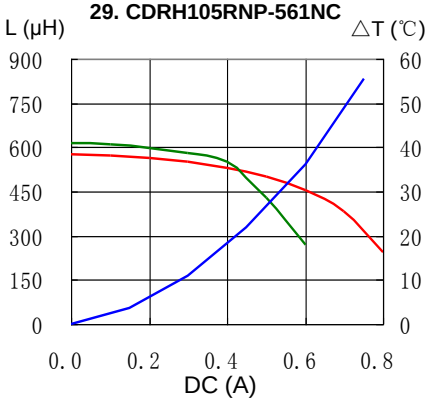

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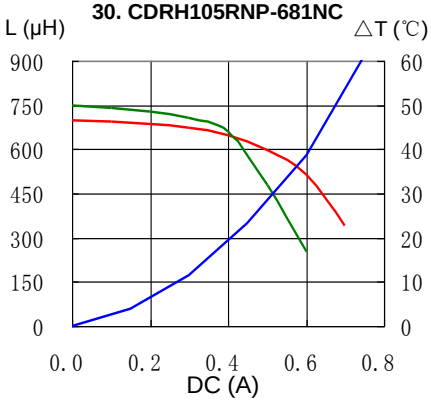
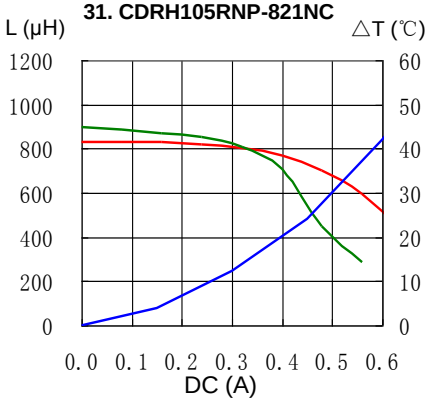
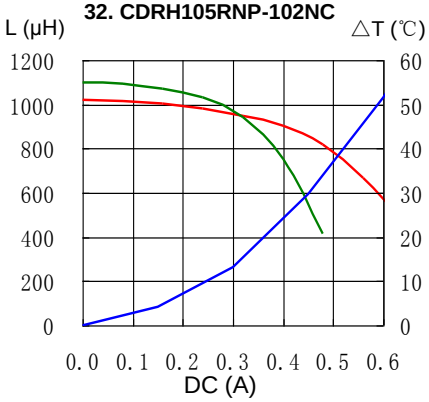


31. CDRH105RNP-821NC

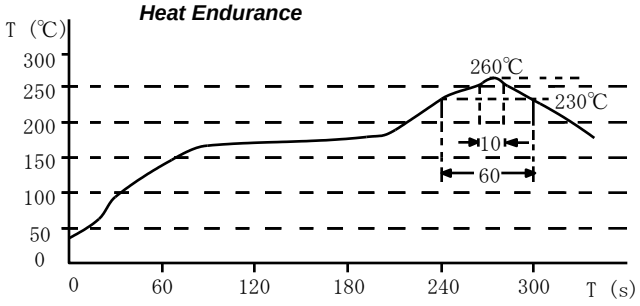


32. CDRH105RNP-102NC

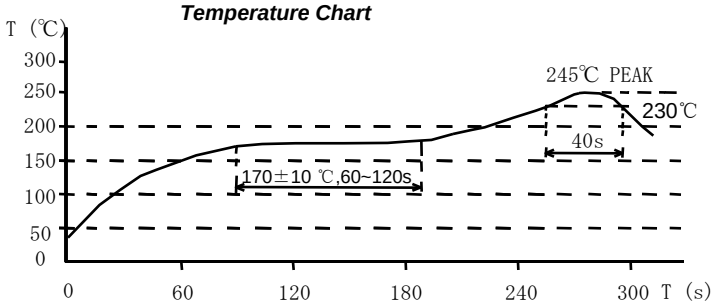


Solder Reflow Condition

Heat Endurance



Temperature Chart



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