



**THE DATASHEET OF  
CDRH127/LDNP-5R8NC**



# SMD Power Inductor CDRH127/LD



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.3 × 12.3 × 8.0 mm Max.
- Product weight: 3.6g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

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

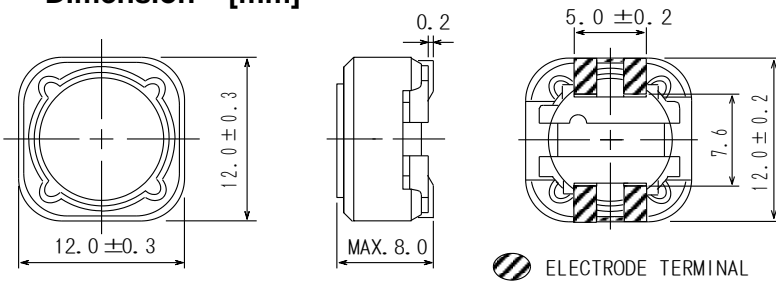
## Packaging

- Carrier tape and reel packaging
- 13" diameter reel
- 500pcs per reel

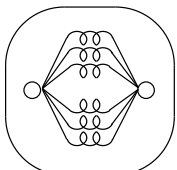
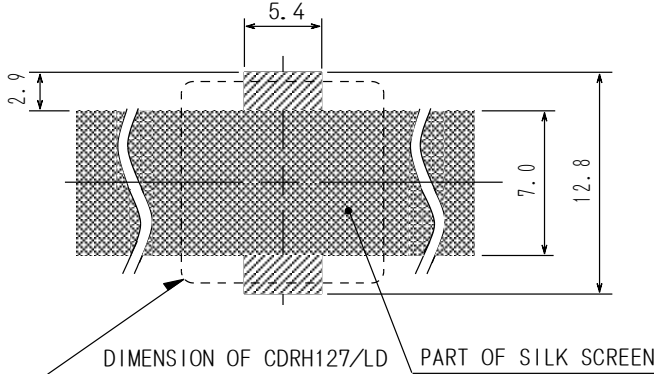
## Applications

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

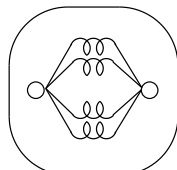
## Dimension - [mm]



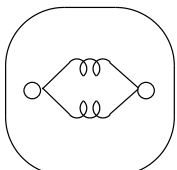
## Land pattern and Schematics - [mm]



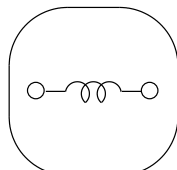
1.0  $\mu\text{H}$



2.4  $\mu\text{H}$  ~ 56  $\mu\text{H}$



68  $\mu\text{H}$  ~ 150  $\mu\text{H}$



180  $\mu\text{H}$  ~ 1 mH



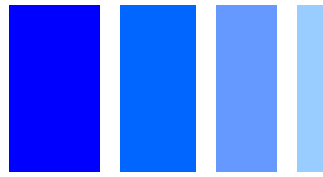
### Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [ within ] ※1	D.C.R.( $\Omega$ ) Max. (Typ.) (at 20°C)	Rated Current (A) ※2
CDRH127/LDNP-1R0NC	1R0	1.0 $\pm$ 30%	6.5m(5.0m)	14.0
CDRH127/LDNP-2R4NC	2R4	2.4 $\pm$ 30%	10.5m(8.1m)	10.3
CDRH127/LDNP-3R5NC	3R5	3.5 $\pm$ 30%	12.4m(9.5m)	9.30
CDRH127/LDNP-4R6NC	4R6	4.6 $\pm$ 30%	13.8m(10.6m)	9.10
CDRH127/LDNP-5R8NC	5R8	5.8 $\pm$ 30%	16.2m(12.4m)	8.60
CDRH127/LDNP-7R4NC	7R4	7.4 $\pm$ 30%	17.7m(13.6m)	7.40
CDRH127/LDNP-100MC	100	10 $\pm$ 20%	19.5m(15.0m)	6.70
CDRH127/LDNP-120MC	120	12 $\pm$ 20%	21.3m(16.4m)	6.45
CDRH127/LDNP-150MC	150	15 $\pm$ 20%	26.4m(20.3m)	5.65
CDRH127/LDNP-180MC	180	18 $\pm$ 20%	28.0m(21.5m)	5.10
CDRH127/LDNP-220MC	220	22 $\pm$ 20%	36.4m(28.0m)	4.70
CDRH127/LDNP-270MC	270	27 $\pm$ 20%	41.6m(32.0m)	4.20
CDRH127/LDNP-330MC	330	33 $\pm$ 20%	53.3m(41.0m)	3.90
CDRH127/LDNP-390MC	390	39 $\pm$ 20%	60.5m(46.5m)	3.50
CDRH127/LDNP-470MC	470	47 $\pm$ 20%	78.0m(60.0m)	3.25
CDRH127/LDNP-560MC	560	56 $\pm$ 20%	90.0m(69.0m)	2.90
CDRH127/LDNP-680MC	680	68 $\pm$ 20%	120m(92.0m)	2.60
CDRH127/LDNP-820MC	820	82 $\pm$ 20%	119m(91.0m)	2.40
CDRH127/LDNP-101MC	101	100 $\pm$ 20%	151m (119m)	2.10
CDRH127/LDNP-121MC	121	120 $\pm$ 20%	169m (130m)	1.90
CDRH127/LDNP-151MC	151	150 $\pm$ 20%	227m (174m)	1.80
CDRH127/LDNP-181MC	181	180 $\pm$ 20%	299m (230m)	1.55
CDRH127/LDNP-221MC	221	220 $\pm$ 20%	338m (260m)	1.45
CDRH127/LDNP-271MC	271	270 $\pm$ 20%	419m (322m)	1.30
CDRH127/LDNP-331MC	331	330 $\pm$ 20%	471m (362m)	1.20
CDRH127/LDNP-391MC	391	390 $\pm$ 20%	572m (440m)	1.10
CDRH127/LDNP-471MC	471	470 $\pm$ 20%	741m (570m)	1.00
CDRH127/LDNP-561MC	561	560 $\pm$ 20%	852m (655m)	0.95
CDRH127/LDNP-681MC	681	680 $\pm$ 20%	1.13 (870m)	0.85
CDRH127/LDNP-821MC	821	820 $\pm$ 20%	1.24 (950m)	0.75
CDRH127/LDNP-102MC	102	1000 $\pm$ 20%	1.50 (1.15)	0.70

※1. Inductance Measuring condition: at 100 kHz.

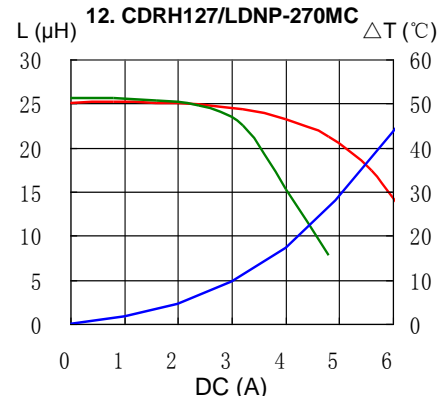
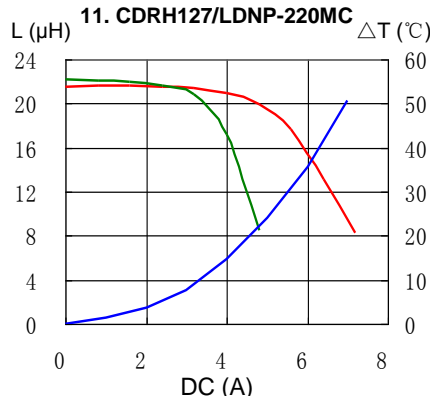
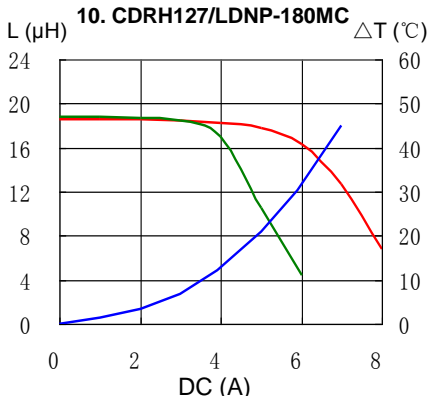
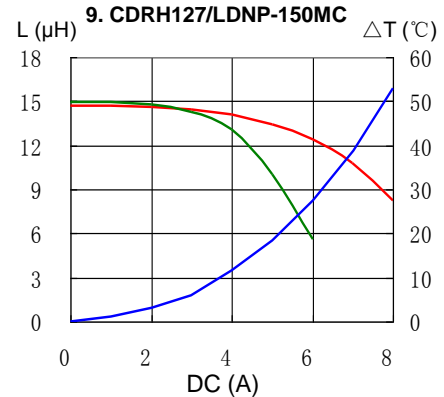
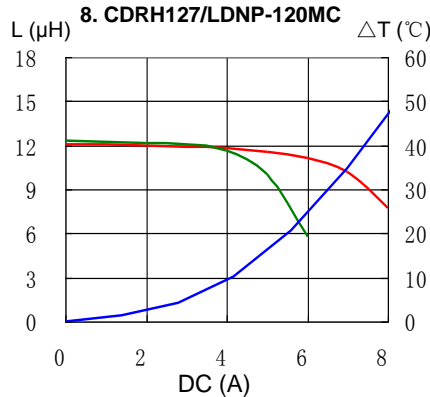
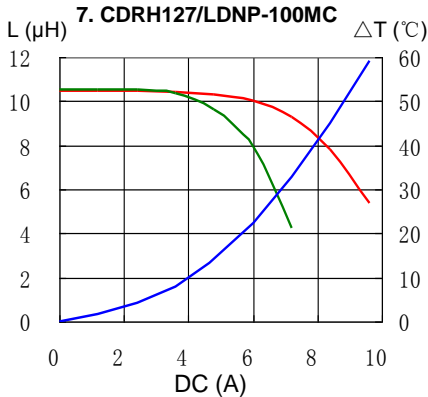
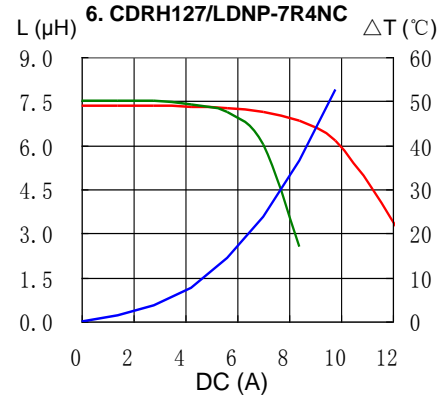
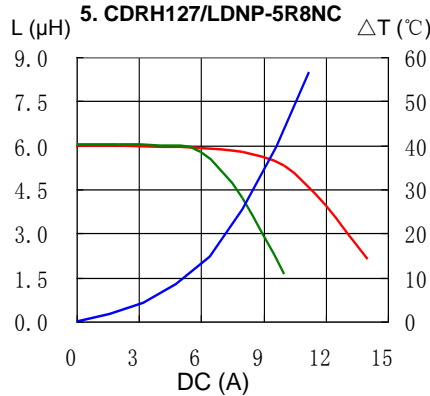
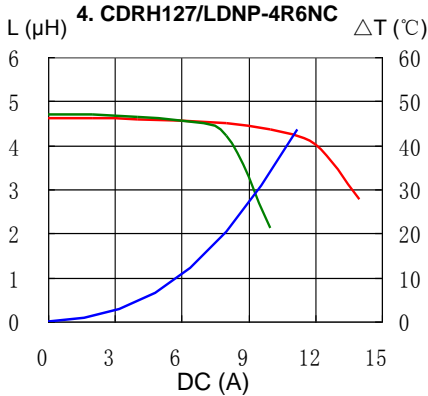
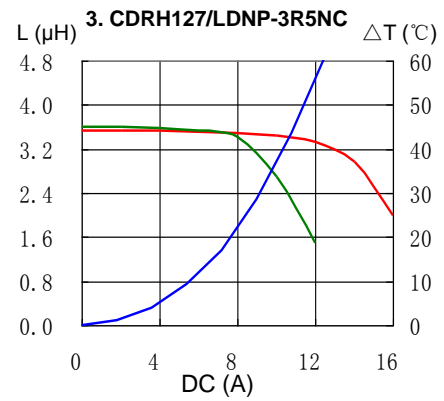
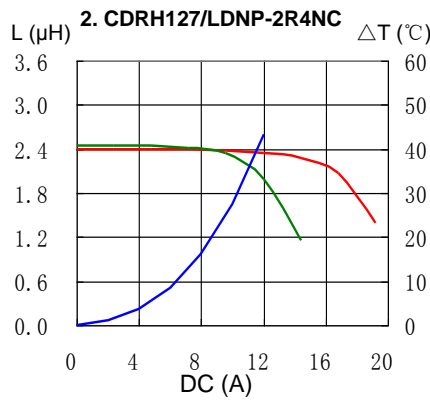
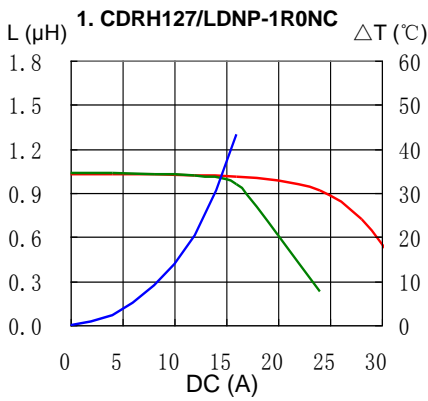
※2. Rated current: The DC current at which the inductance decreases to 75% of its nominal value or when  $\Delta t=40^\circ\text{C}$ , whichever is lower .

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

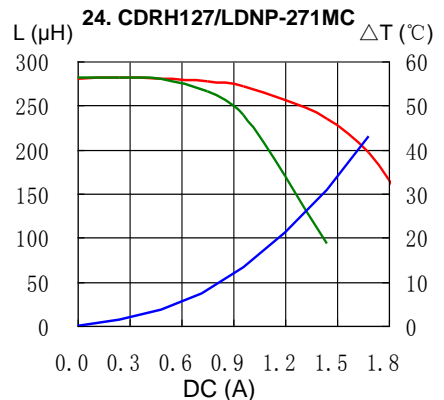
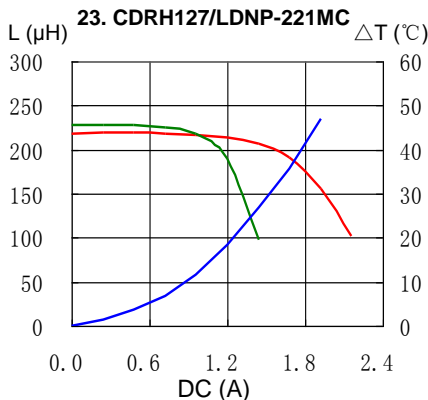
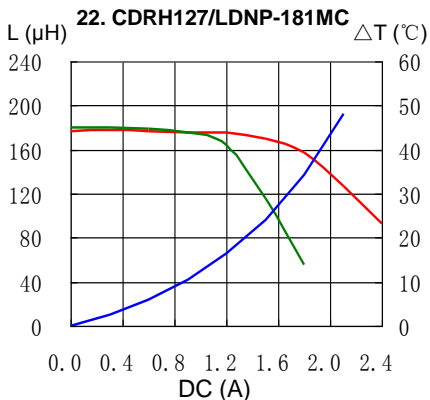
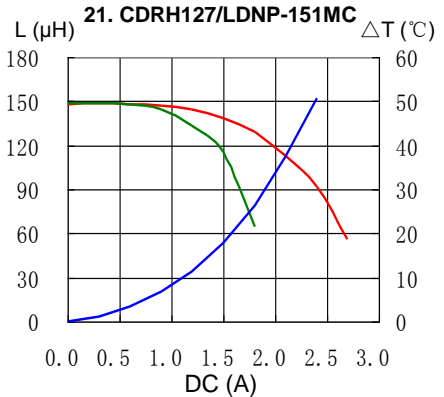
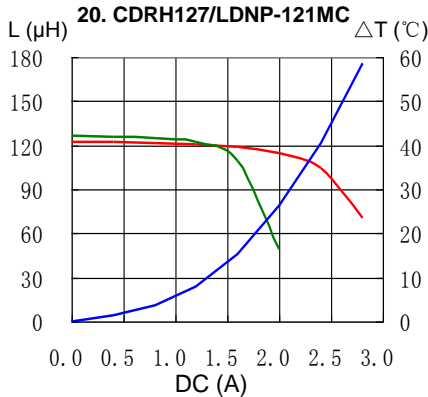
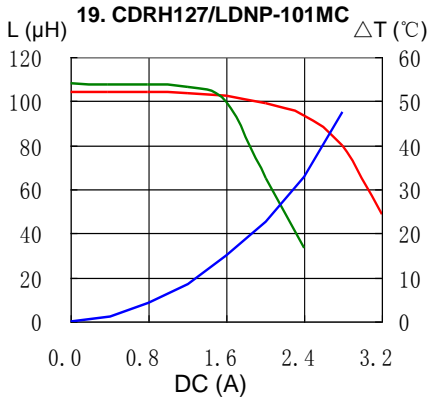
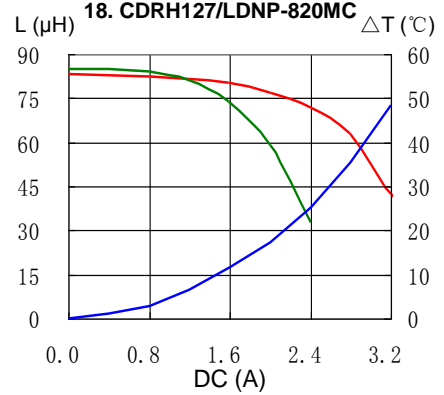
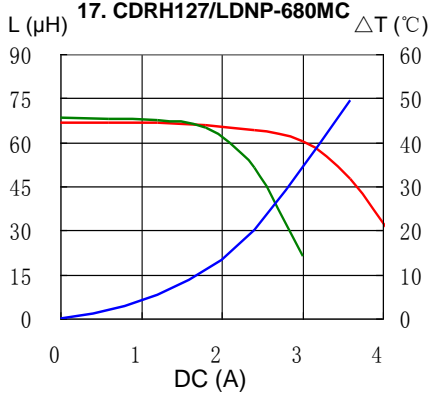
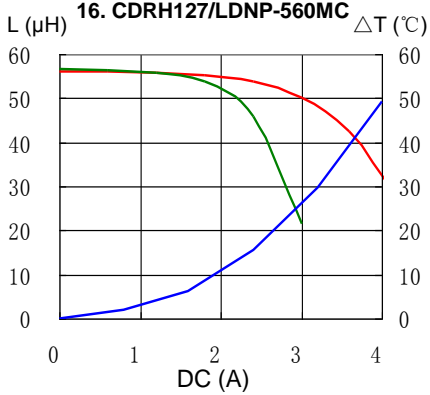
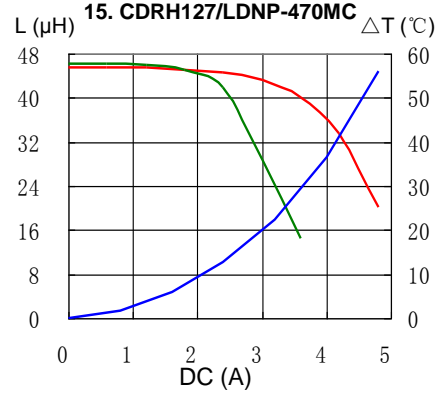
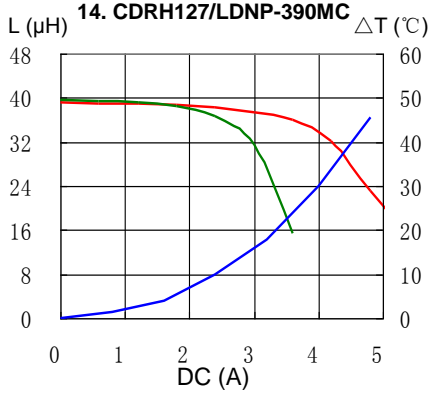
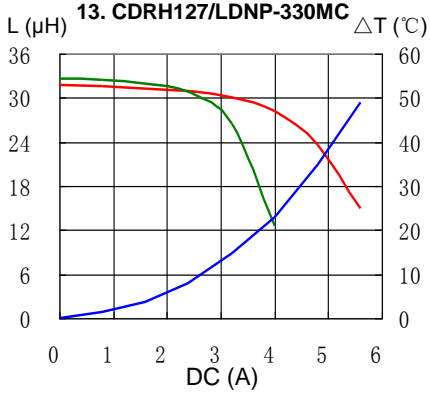


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

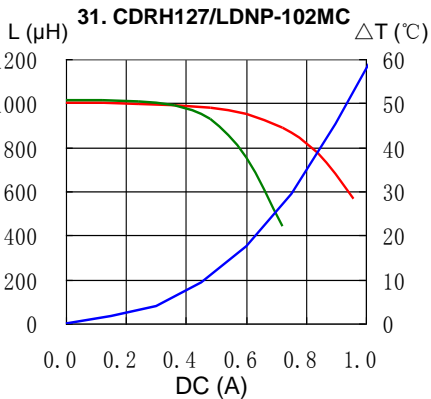
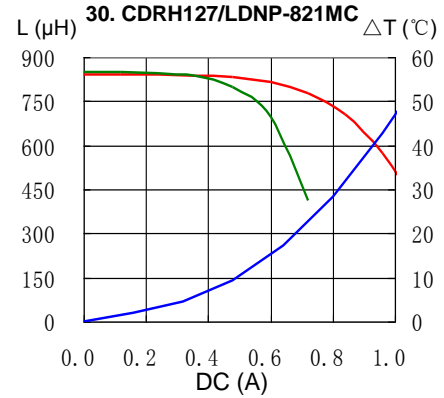
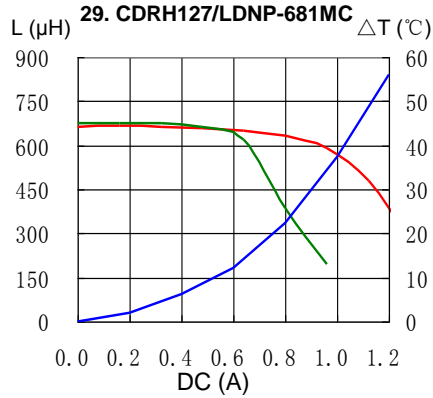
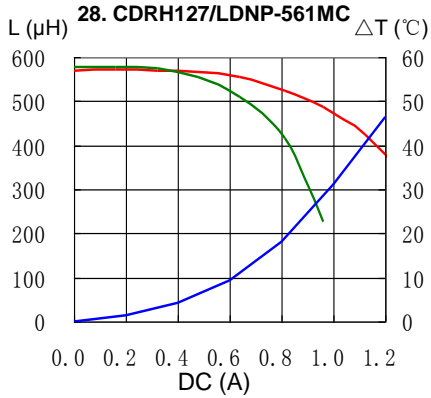
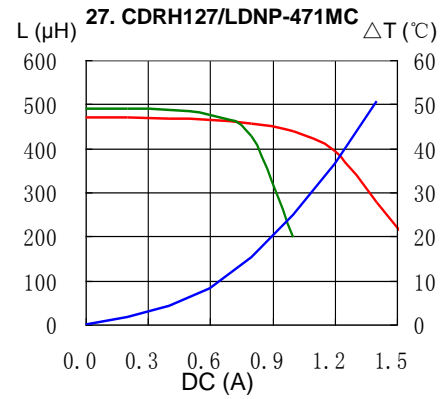
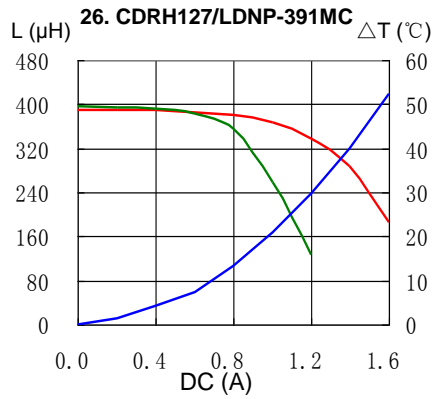
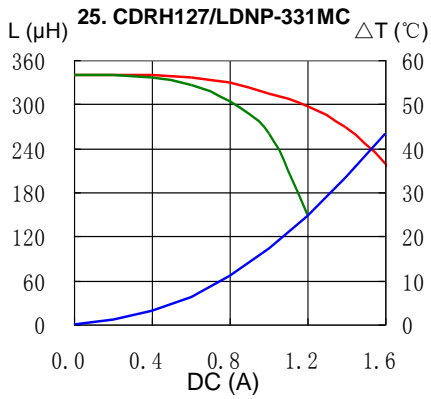


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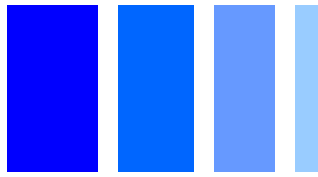


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



# SMD Power Inductor CDRH127/LD



## Solder Reflow Condition

Heat Endurance



Temperature Chart



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