

# SMD Coupled Inductor CDRH127B



## Discriptions

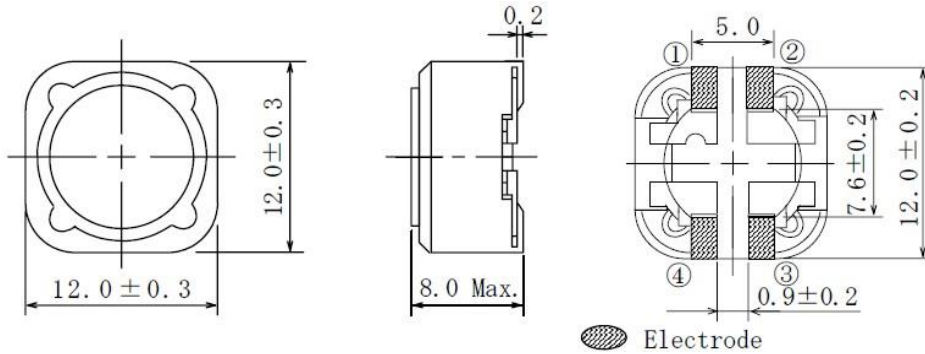
- Ferrite drum ring structure
- Magnetically Shielded
- Qualified AEC-Q200
- 2 coils in 1 package for Sepic topology
- Operating temperature range: -40°C~ +125°C  
(Including self-heating)



## Applications

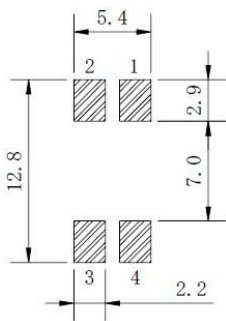
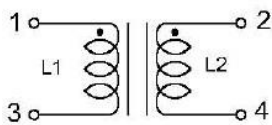
- Recommended for automotive SEPIC converter especially LED headlight and audio

## Dimension - [mm]

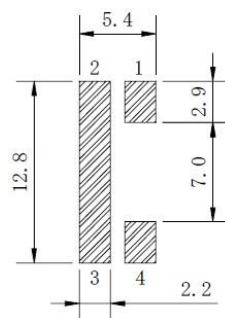
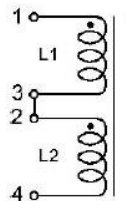


## Reference Land pattern – [mm]

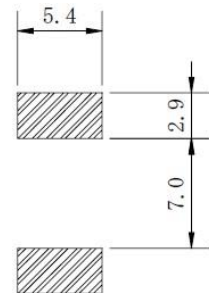
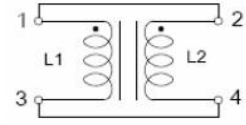
(1) Single winding



(2) Leads connected in series



(3) Leads connected in parallel

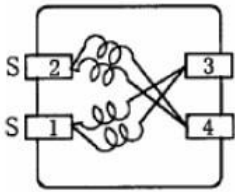


## Connection

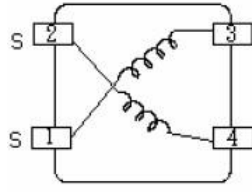
Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# SMD Coupled Inductor

## CDRH127B



(4.7  $\mu$  H ~ 47  $\mu$  H)



(68  $\mu$  H ~ 470  $\mu$  H)

### Electrical Characteristics

【Single winding (Pin1 to Pin3 or Pin2 to Pin4)】

Part No.	Inductance ( $\mu$ H) ※1	D.C.R. (m $\Omega$ ) Max. (Typ.)	Saturation Current (A) Max. (Typ.) ※2	Temperature Rise Current (A) Max. (Typ.) ※3
CDRH127BNP-4R7NC	4.7 $\pm$ 30%	29.0m(22.0m)	10.0 (13.0)	(5.00)
CDRH127BNP-6R3NC	6.3 $\pm$ 30%	35.0m(27.0m)	8.20 (10.4)	(4.80)
CDRH127BNP-100NC	10 $\pm$ 30%	41.0m(32.0m)	7.00 (8.80)	(4.30)
CDRH127BNP-150PC	15 $\pm$ 25%	54.0m(42.0m)	6.00 (7.60)	(4.10)
CDRH127BNP-220PC	22 $\pm$ 25%	84.0m(65.0m)	5.00 (6.20)	(2.90)
CDRH127BNP-330PC	33 $\pm$ 25%	124m(96.0m)	4.00 (5.00)	(2.40)
CDRH127BNP-470PC	47 $\pm$ 25%	156m(120m)	3.30 (4.10)	(2.10)
CDRH127BNP-680PC	68 $\pm$ 25%	286m(220m)	2.70 (3.40)	(1.50)
CDRH127BNP-101PC	100 $\pm$ 25%	438m(350m)	2.30 (2.90)	(1.30)
CDRH127BNP-151PC	150 $\pm$ 25%	519m(415m)	1.70 (2.20)	(1.10)
CDRH127BNP-221PC	220 $\pm$ 25%	821m(657m)	1.50 (1.90)	(900m)
CDRH127BNP-331PC	330 $\pm$ 25%	1.24(990m)	1.20 (1.50)	(700m)
CDRH127BNP-471PC	470 $\pm$ 25%	1.88(1.50)	900m (1.20)	(600m)

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# SMD Coupled Inductor

## CDRH127B



【Leads connected in series (Pin1 to Pin4, Pin2 and Pin3 short)】

Part No.	Inductance ( $\mu$ H) ※1	D.C.R. (m $\Omega$ ) Max. (Typ.)	Saturation Current (A) Max. (Typ.) ※2	Temperature Rise Current (A) Max. (Typ.) ※3
CDRH127BNP-4R7NC	18.8 $\pm$ 30%	58.0m (44.0m)	5.00 (6.70)	(3.50)
CDRH127BNP-6R3NC	25.2 $\pm$ 30%	70.0m(54.0m)	4.10 (5.20)	(3.40)
CDRH127BNP-100NC	40 $\pm$ 30%	82.0m (64.0m)	3.50 (4.40)	(3.20)
CDRH127BNP-150PC	60 $\pm$ 25%	108m (84.0m)	3.00 (3.80)	(2.70)
CDRH127BNP-220PC	88 $\pm$ 25%	168m (130m)	2.50 (3.10)	(2.10)
CDRH127BNP-330PC	132 $\pm$ 25%	248m (192m)	2.00 (2.50)	(1.70)
CDRH127BNP-470PC	188 $\pm$ 25%	312m (240m)	1.65 (2.10)	(1.50)
CDRH127BNP-680PC	272 $\pm$ 25%	572m (440m)	1.35 (1.70)	(1.10)
CDRH127BNP-101PC	400 $\pm$ 25%	876m (700m)	1.20 (1.50)	(900m)
CDRH127BNP-151PC	600 $\pm$ 25%	1.04 (830m)	850m (1.10)	(800m)
CDRH127BNP-221PC	880 $\pm$ 25%	1.64 (1.31)	750m (950m)	(600m)
CDRH127BNP-331PC	1320 $\pm$ 25%	2.48(1.98)	600m (750m)	(500m)
CDRH127BNP-471PC	1880 $\pm$ 25%	3.76 (3.00)	450m (600m)	(400m)

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# SMD Coupled Inductor

## CDRH127B



【Leads connected in parallel (Pin1,2 to Pin3,4, Pin1 and Pin2, Pin3 and Pin4) short 】

Part No.	Inductance ( $\mu$ H) ※1	D.C.R. (m $\Omega$ ) Max. (Typ.)	Saturation Current (A) Max. (Typ.) ※2	Temperature Rise Current (A) Max. (Typ.) ※3
CDRH127BNP-4R7NC	4.7 $\pm$ 30%	14.5m(11m)	10.0 (13.0)	(7.00)
CDRH127BNP-6R3NC	6.3 $\pm$ 30%	17.5m(13.5m)	8.20 (10.4)	(6.80)
CDRH127BNP-100NC	10 $\pm$ 30%	20.5m(16m)	7.00 (8.80)	(6.40)
CDRH127BNP-150PC	15 $\pm$ 25%	27m(21m)	6.00 (7.60)	(5.40)
CDRH127BNP-220PC	22 $\pm$ 25%	42m(32.5m)	5.00 (6.20)	(4.20)
CDRH127BNP-330PC	33 $\pm$ 25%	62m(48m)	4.00 (5.00)	(3.40)
CDRH127BNP-470PC	47 $\pm$ 25%	78m(60m)	3.30 (4.10)	(3.00)
CDRH127BNP-680PC	68 $\pm$ 25%	143m(110m)	2.70 (3.40)	(2.20)
CDRH127BNP-101PC	100 $\pm$ 25%	219m(175m)	2.30 (2.90)	(1.80)
CDRH127BNP-151PC	150 $\pm$ 25%	260m(207.5m)	1.70 (2.20)	(1.60)
CDRH127BNP-221PC	220 $\pm$ 25%	410m(328.5m)	1.50 (1.90)	(1.20)
CDRH127BNP-331PC	330 $\pm$ 25%	620m(495m)	1.20 (1.50)	(1.00)
CDRH127BNP-471PC	470 $\pm$ 25%	940m(755m)	900m (1.20)	(800m)

※1 Measuring frequency at 100kHz, 0.1V

※2 Saturation current: This indicates the actual value of D.C. current when the inductance becomes 30% lower than its initial value.

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

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

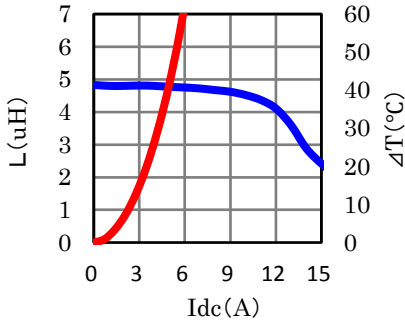
# SMD Coupled Inductor CDRH127B



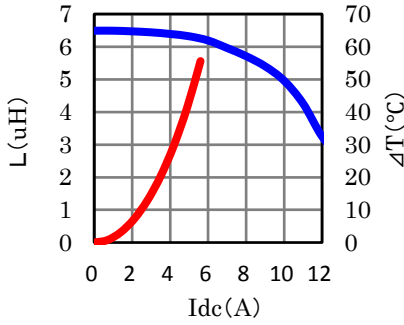
## 3-2-1. Single Winding (Pin1 to Pin3 or Pin2 to Pin4)

Saturation Current & Temperature Rise Graph — L (25°C) —  $\Delta T$

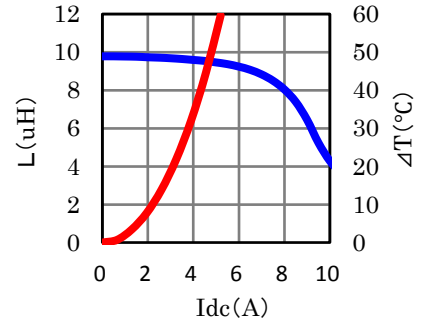
**CDRH127BNP-4R7NC**



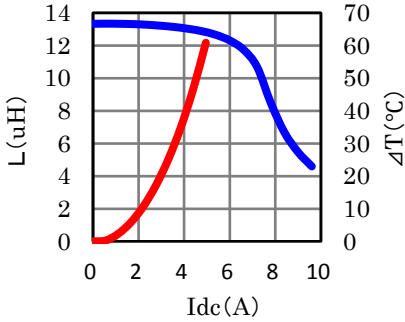
**CDRH127BNP-6R3NC**



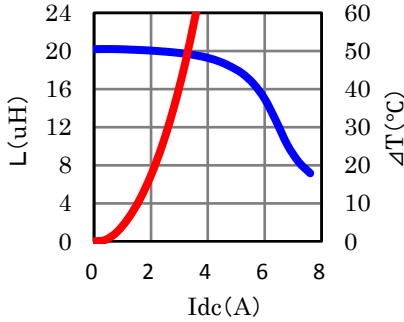
**CDRH127BNP-100NC**



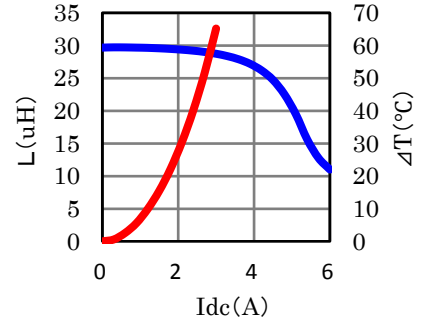
**CDRH127BNP-150PC**



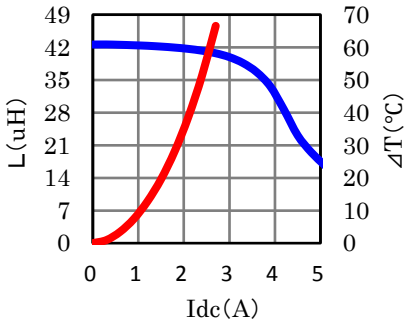
**CDRH127BNP-220PC**



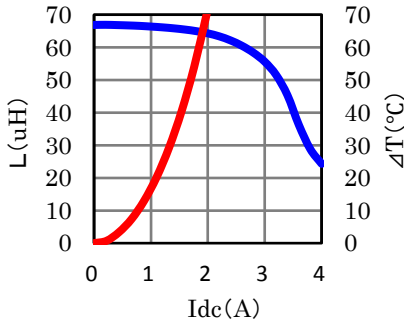
**CDRH127BNP-330PC**



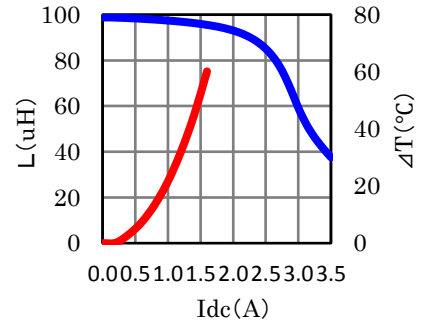
**CDRH127BNP-470PC**



**CDRH127BNP-680PC**



**CDRH127BNP-101PC**



Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# SMD Coupled Inductor

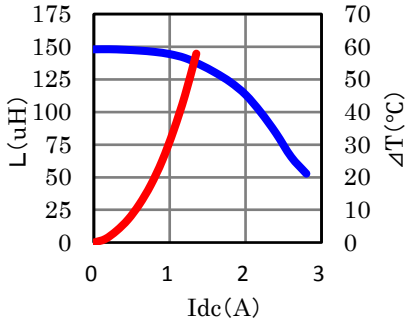
## CDRH127B



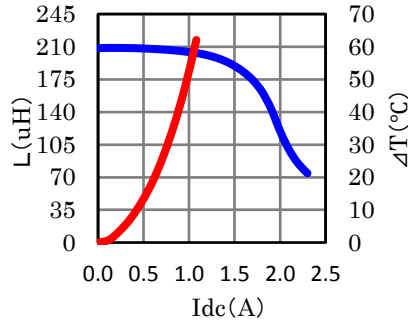
### 3-2-1. Single Winding (Pin1 to Pin3 or Pin2 to Pin4)

Saturation Current & Temperature Rise Graph — L (25°C) —  $\Delta T$

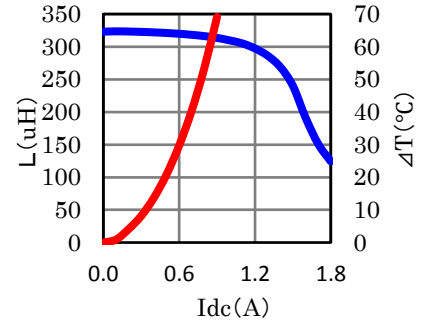
**CDRH127BNP-151PC**



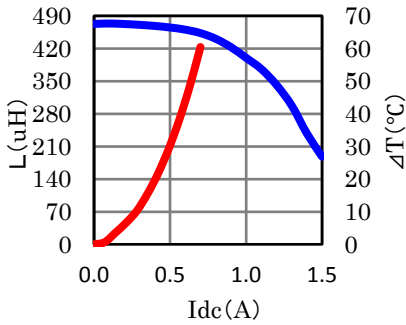
**CDRH127BNP-221PC**



**CDRH127BNP-331PC**



**CDRH127BNP-471PC**



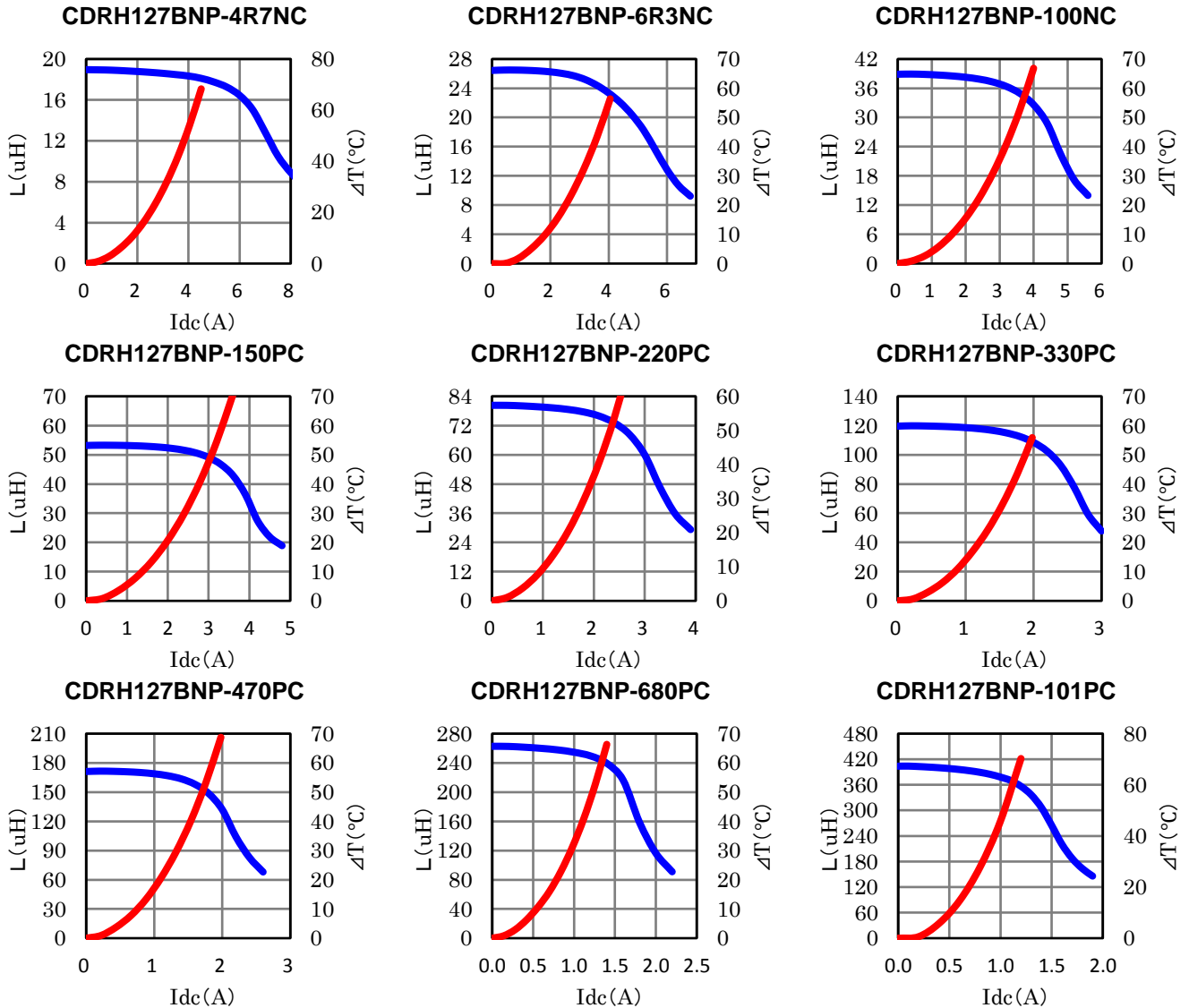
Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# SMD Coupled Inductor CDRH127B



## 3-2-2. Leads connected in series (Pin1 to Pin4, Pin2 and Pin3 short)

Saturation Current & Temperature Rise Graph — L (25°C) —  $\Delta T$



Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# SMD Coupled Inductor

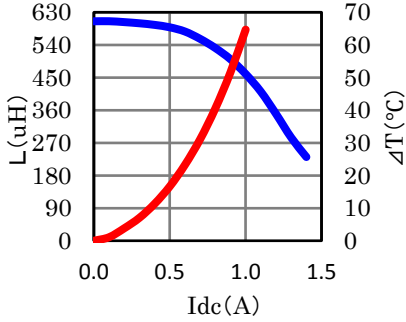
## CDRH127B



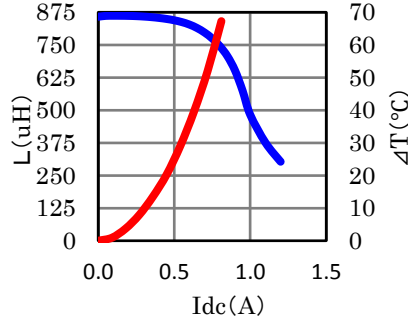
### 3-2-2. Leads connected in series (Pin1 to Pin4, Pin2 and Pin3 short)

Saturation Current & Temperature Rise Graph — L (25°C) —  $\Delta T$

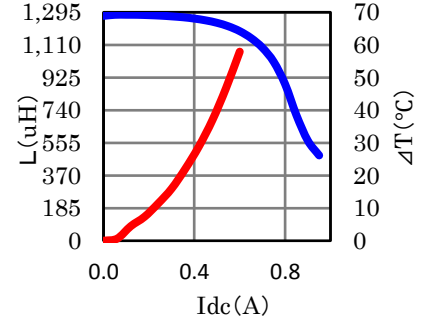
**CDRH127BNP-151PC**



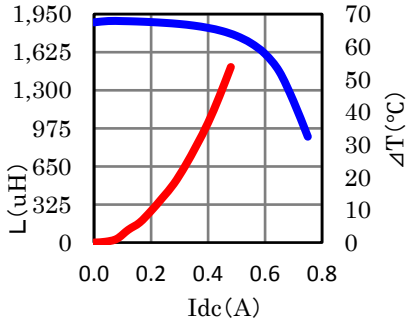
**CDRH127BNP-221PC**



**CDRH127BNP-331PC**



**CDRH127BNP-471PC**



Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

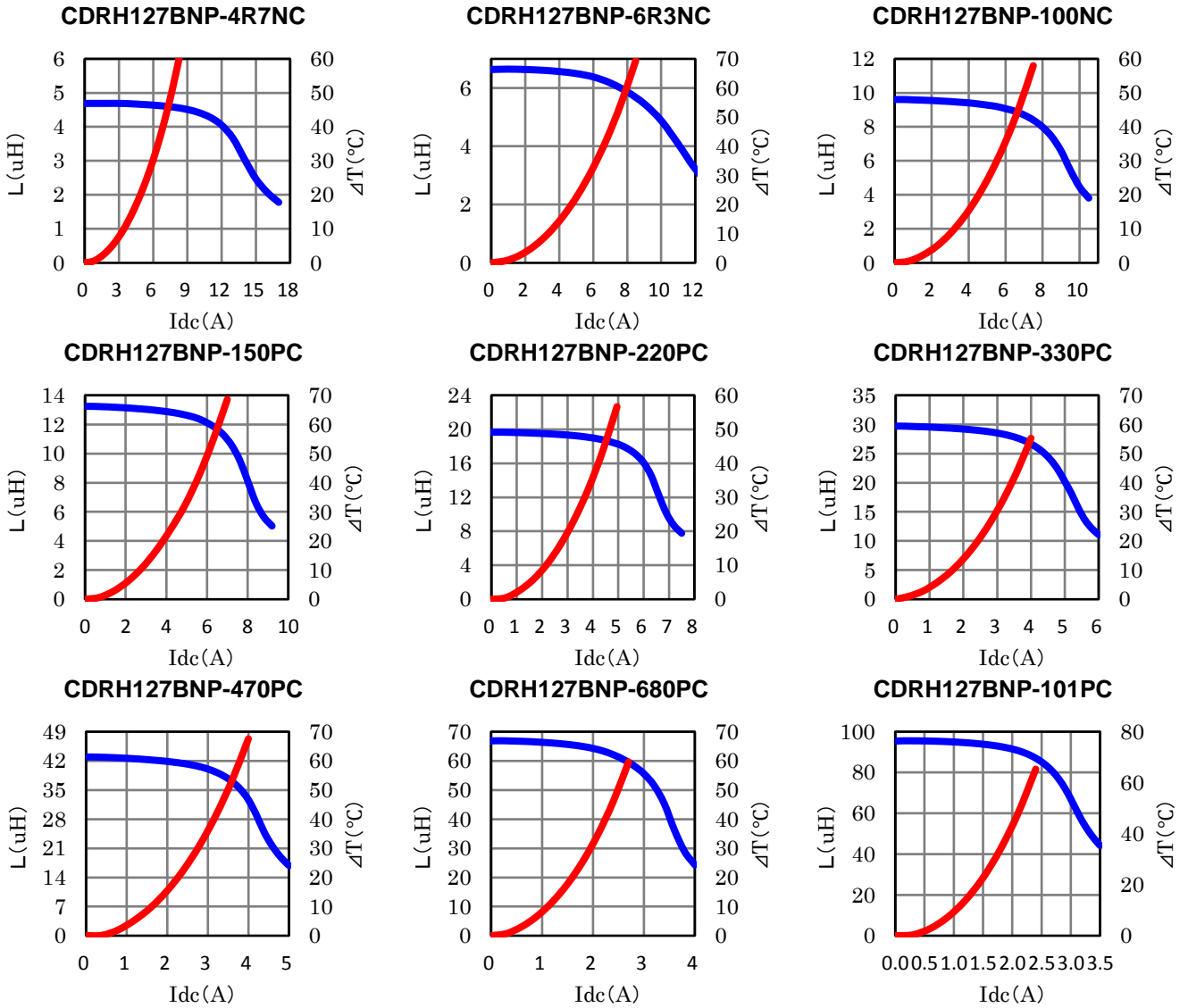


# SMD Coupled Inductor CDRH127B



## 3-2-3. Leads connected in parallel (Pin1,2 to Pin3,4, Pin1 and Pin2, Pin3 and Pin4 short)

Saturation Current & Temperature Rise Graph — L (25°C) —  $\Delta T$



Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# SMD Coupled Inductor

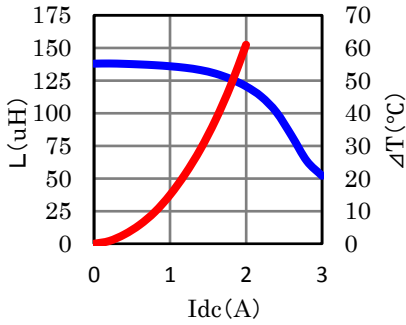
## CDRH127B



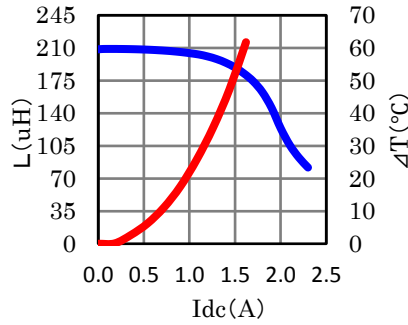
3-2-3. Leads connected in parallel (Pin1,2 to Pin3,4, Pin1 and Pin2, Pin3 and Pin4 short)

Saturation Current & Temperature Rise Graph — L (25°C) —  $\Delta T$

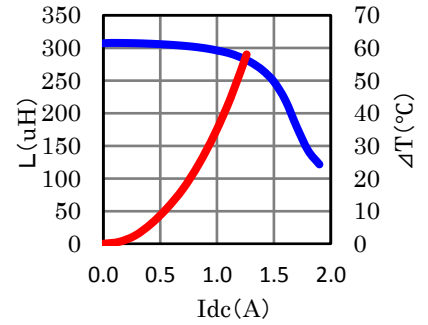
CDRH127BNP-151PC



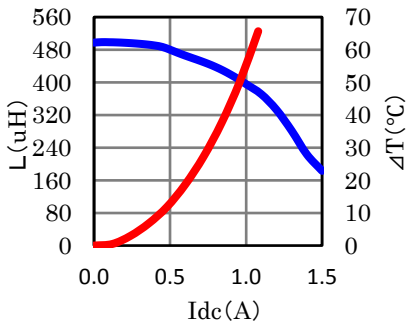
CDRH127BNP-221PC



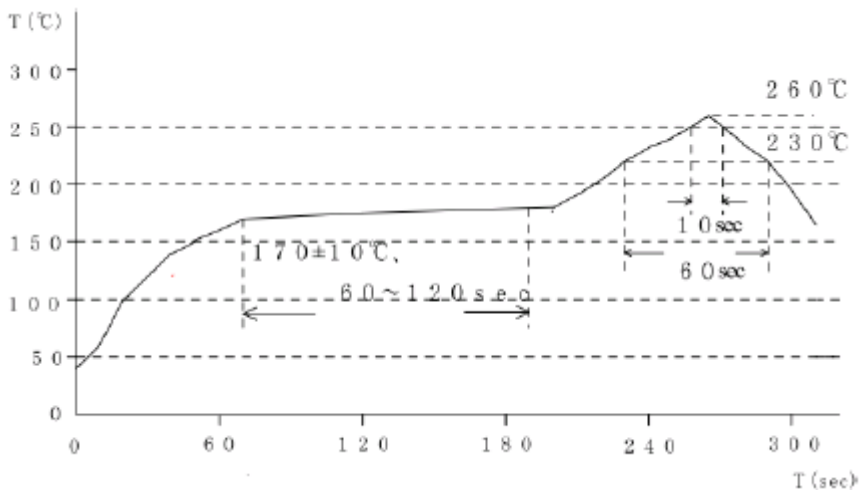
CDRH127BNP-331PC



CDRH127BNP-471PC



### Solder Reflow Condition



For sales office information, please [click here](#) to visit our website.

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.