



**THE DATASHEET OF  
CDRH12D77BT150NP-470MC**



# SMD Power Inductor CDRH12D77B/T150



Provisional

## Description

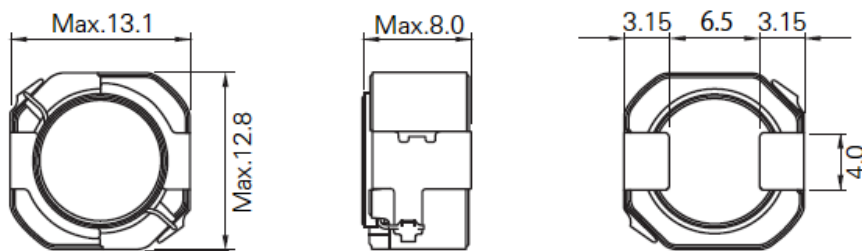
- Ferrite drum core construction
- Magnetically shielded
- Qualified AEC-Q200
- Operating Temperature: -55°C to +150°C (including self-heating)



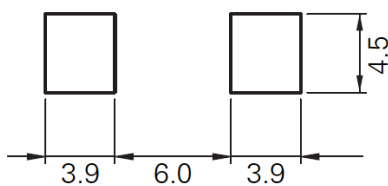
## Applications

- LED Head light for Automobile
- ECU, DC/DC converter
- Automotive and other high temperature, high reliability application

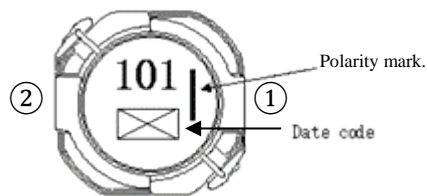
## Dimension [mm]



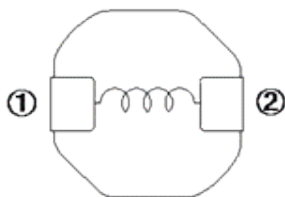
## Reference Land pattern [mm]



## Stamp Example



## Connection (Bottom View)



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

# SMD Power Inductor

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### Electrical Characteristics

Part No.	Inductance ( $\mu$ H) ※1	D.C.R (m $\Omega$ )	Saturation Current (A) at 20°C TYP. ※2	Temperature Rise Current (A) TYP. ※3
CDRH12D77BT150NP -1R0NC	1.0 $\pm$ 30%	5.85(4.50)	31.0	14.0
CDRH12D77BT150NP -1R5NC	1.5 $\pm$ 30%	7.02(5.40)	25.0	12.7
CDRH12D77BT150NP -2R2NC	2.2 $\pm$ 30%	8.19(6.30)	20.6	11.7
CDRH12D77BT150NP -3R3NC	3.3 $\pm$ 30%	9.62(7.40)	16.7	11.2
CDRH12D77BT150NP -4R2NC	4.2 $\pm$ 30%	10.9(8.40)	14.7	10.5
CDRH12D77BT150NP -6R8NC	6.8 $\pm$ 30%	16.9(13.0)	11.7	8.10
CDRH12D77BT150NP -100MC	10 $\pm$ 20%	19.0(15.8)	9.70	7.50
CDRH12D77BT150NP -150MC	15 $\pm$ 20%	27.6(23.0)	7.80	6.40
CDRH12D77BT150NP -220MC	22 $\pm$ 20%	40.8(34.0)	6.40	5.10
CDRH12D77BT150NP -330MC	33 $\pm$ 20%	57.6(48.0)	5.20	4.30
CDRH12D77BT150NP -470MC	47 $\pm$ 20%	72.0(60.0)	4.40	4.00
CDRH12D77BT150NP -680MC	68 $\pm$ 20%	92.4(77.0)	3.70	3.60
CDRH12D77BT150NP -101MC	100 $\pm$ 20%	138(115)	3.05	2.80
CDRH12D77BT150NP -151MC	150 $\pm$ 20%	198(165)	2.55	2.45
CDRH12D77BT150NP -221MC	220 $\pm$ 20%	318(265)	2.05	1.80
CDRH12D77BT150NP -331MC	330 $\pm$ 20%	444(370)	1.70	1.50
CDRH12D77BT150NP -471MC	470 $\pm$ 20%	612(510)	1.40	1.32

※ Measuring frequency inductance at 100kHz,1V.

※ Saturation current: DC current which becomes inductance value drop by 30% from the nominal value.

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

Please note that when using the product for automotive while applying current with audio-frequency (AF) signals may result in audible noises due to magnetostriction. Also, in order to avoid noise problem, operating with Non-AF signals would be recommended. The noise may amplify depending on the coil mount area on the PCB.

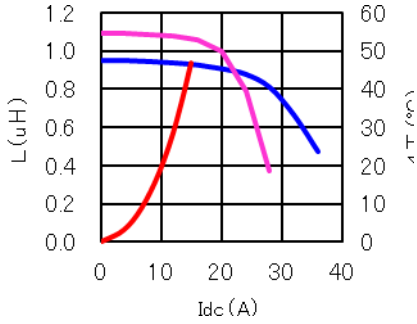
# SMD Power Inductor CDRH12D77B/T150



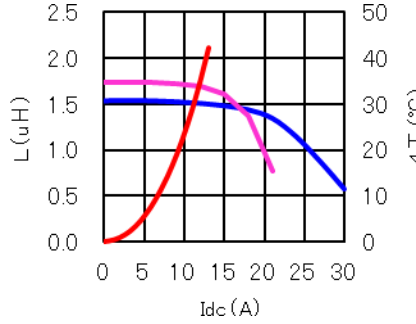
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Saturation Current & Temperature Rise Graph — L (25°C) — L (150°C) —  $\Delta T$

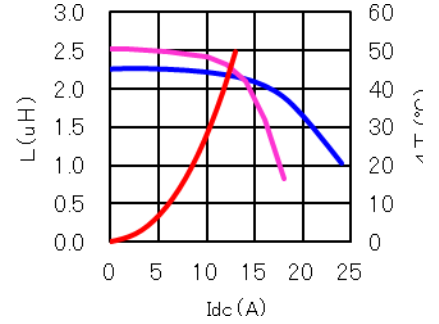
CDRH12D77BT150NP-1R0NC



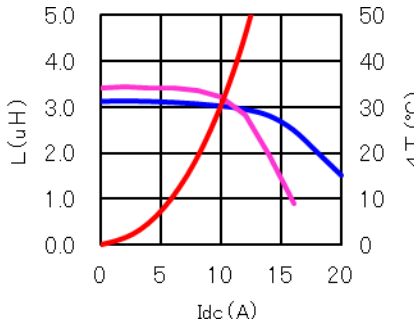
CDRH12D77BT150NP-1R5NC



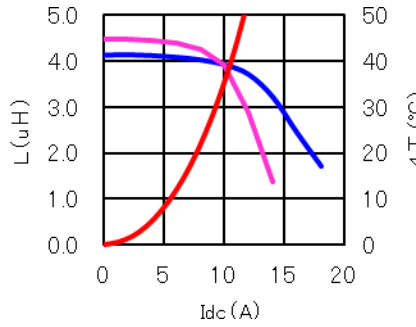
CDRH12D77BT150NP-2R2NC



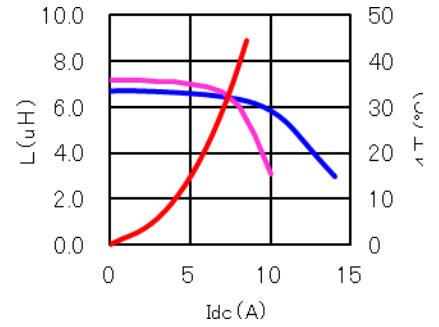
CDRH12D77BT150NP-3R3NC



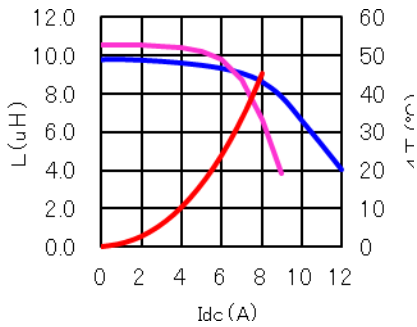
CDRH12D77BT150NP-4R2NC



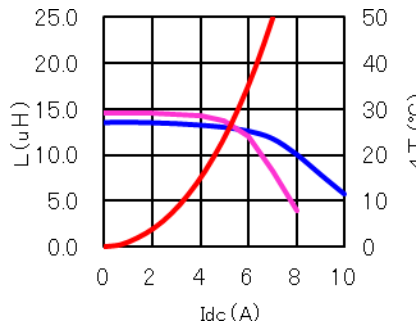
CDRH12D77BT150NP-6R8NC



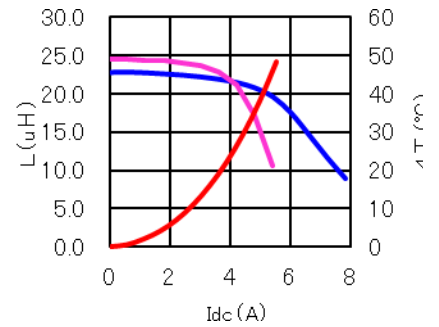
CDRH12D77BT150NP-100MC



CDRH12D77BT150NP-150MC



CDRH12D77BT150NP-220MC



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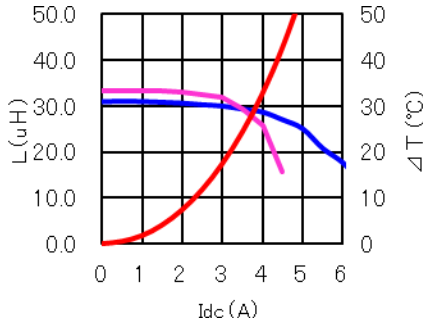
# SMD Power Inductor CDRH12D77B/T150



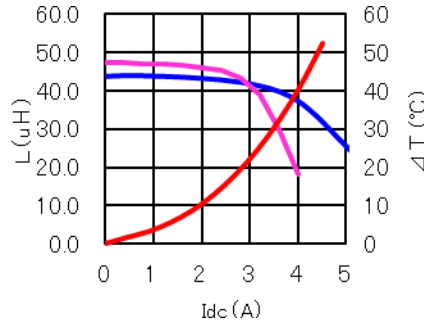
Provisional

Saturation Current & Temperature Rise Graph — L (25°C) — L (150°C) —  $\Delta T$

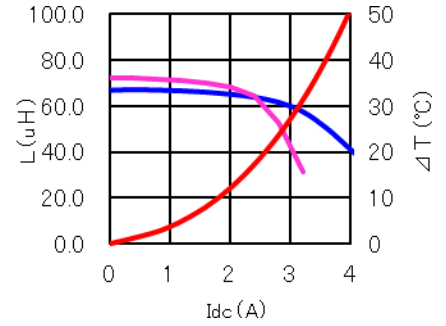
CDRH12D77BT150NP-330MC



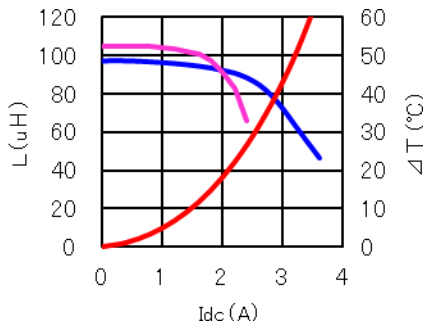
CDRH12D77BT150NP-470MC



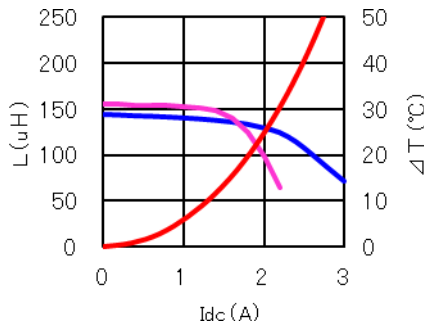
CDRH12D77BT150NP-680MC



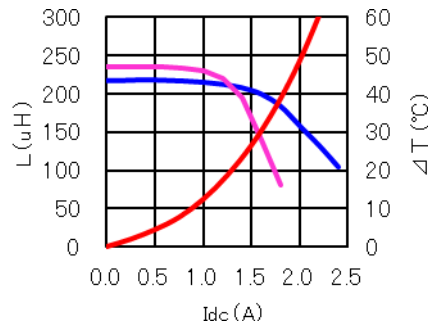
CDRH12D77BT150NP-101MC



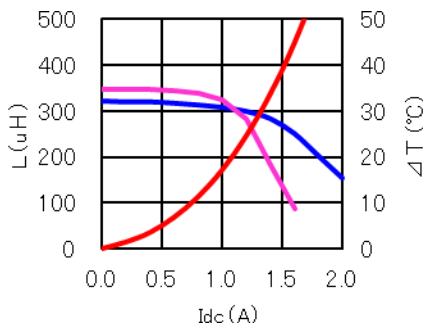
CDRH12D77BT150NP-151MC



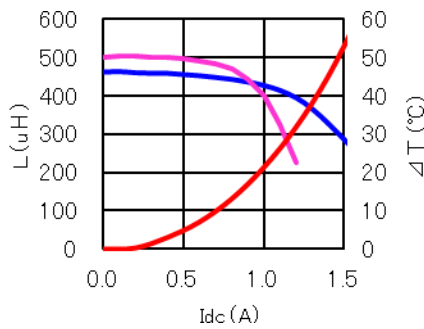
CDRH12D77BT150NP-221MC



CDRH12D77BT150NP-331MC



CDRH12D77B/T150NP-471MC



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- ⊖ [Sumida America Components Inc. Information](#)

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