

SMD Power Inductor CDRH12D77B/T150



Provisional

Description

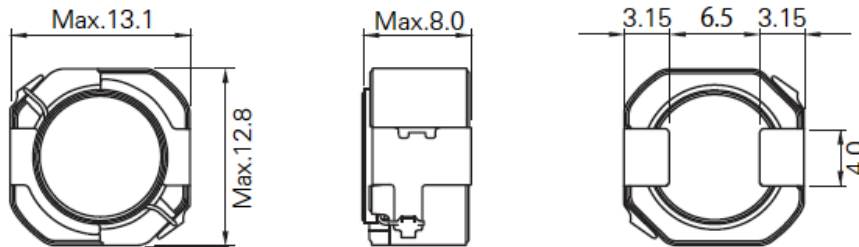
- Ferrite drum core construction
- Magnetically shielded
- Qualified AEC-Q200
- Operating Temperature: -55°C to +150°C (including self-heating)



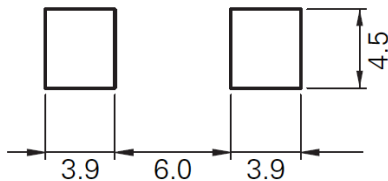
Applications

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

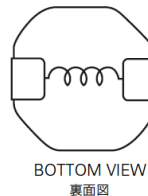
Dimension [mm]



Reference Land pattern [mm]



Connection



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Electrical Characteristics

Part No.	Inductance (μH) ※1	D.C.R (m Ω) ($\pm 30\%$)	Saturation Current (A) at 20°C TYP. ※2	Temperature Rise Current (A) TYP. ※3
CDRH12D77BT150NP -1R0NC	1.0 $\pm 30\%$	4.5	31.0	14.0
CDRH12D77BT150NP -1R5NC	1.5 $\pm 30\%$	5.4	25.0	12.7
CDRH12D77BT150NP -2R2NC	2.2 $\pm 30\%$	6.3	20.6	11.7
CDRH12D77BT150NP -3R3NC	3.3 $\pm 30\%$	7.4	16.7	11.2
CDRH12D77BT150NP -4R2NC	4.2 $\pm 30\%$	8.4	14.7	10.5
CDRH12D77BT150NP -6R8NC	6.8 $\pm 30\%$	13.0	11.7	8.10
CDRH12D77BT150NP -100MC	10 $\pm 20\%$	15.8	9.70	7.50
CDRH12D77BT150NP -150MC	15 $\pm 20\%$	22.0	7.80	6.40
CDRH12D77BT150NP -220MC	22 $\pm 20\%$	34.0	6.40	5.10
CDRH12D77BT150NP -330MC	33 $\pm 20\%$	48.0	5.20	4.30
CDRH12D77BT150NP -470MC	47 $\pm 20\%$	60.0	4.40	4.00
CDRH12D77BT150NP -680MC	68 $\pm 20\%$	77.0	3.70	3.60
CDRH12D77BT150NP -101MC	100 $\pm 20\%$	115	3.05	2.80
CDRH10D60BT150NP -151MC	150 $\pm 20\%$	165	2.55	2.45
CDRH12D77BT150NP -221MC	220 $\pm 20\%$	265	2.05	1.80
CDRH12D77BT150NP -331MC	330 $\pm 20\%$	370	1.70	1.50
CDRH12D77BT150NP -471MC	470 $\pm 20\%$	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.