

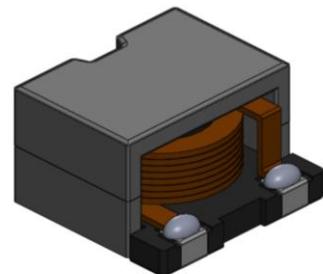
# Low-Profile High Current Power Inductor

## CDEP15D90/T150



### Description

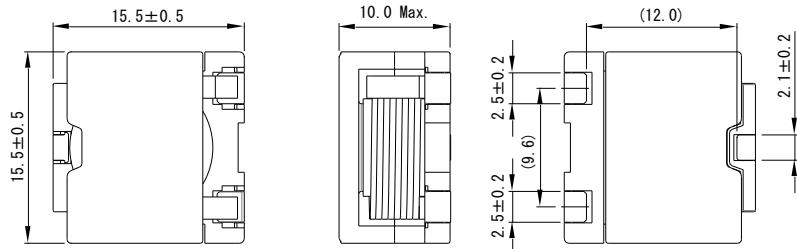
- Inductor for high withstand voltage (DC 120V) and large current
- Magnetically shielded
- Qualified AEC-Q200
- Operating temperature range: - 40°C~+150°C  
(including coil's self temperature rise)



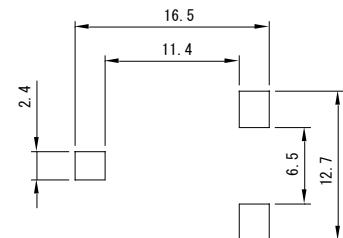
### Applications

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

### Dimension - [mm]



### Reference Land pattern - [mm]



# Low-Profile High Current Power Inductor

## CDEP15D90/T150



### Electrical Characteristics: Standard Types

Part No.	Inductance ( $\mu$ H) ( $\pm 20\%$ ) ※1	D.C.R (m $\Omega$ ) ( $\pm 20\%$ )	Saturation Current (A)		Temperature Rise current (A) ※3
			at 20°C	at 150°C	
CDEP15D90T150NP-4R7MC-125	4.70	3.50	17.0	11.8	16.5
CDEP15D90T150NP-6R2MC-125	6.20	4.90	14.8	10.4	14.8
CDEP15D90T150NP-100MC-125	10.0	7.90	12.0	8.40	12.5
CDEP15D90T150NP-120MC-125	12.5	8.90	10.2	7.60	12.2
CDEP15D90T150NP-150MC-125	15.0	10.6	9.60	6.70	8.50
CDEP15D90T150NP-220MC-125	22.0	14.5	7.70	5.30	7.50

### Electrical Characteristics: High Power Types

Part No.	Inductance ( $\mu$ H) ( $\pm 20\%$ ) ※1	D.C.R (m $\Omega$ ) ( $\pm 20\%$ )	Saturation Current (A)		Temperature Rise current (A) ※3
			at 20°C	at 150°C	
CDEP15D90T150NP-4R7MC-100	4.70	4.90	19.2	13.3	14.8
CDEP15D90T150NP-6R8MC-100	6.80	5.50	16.3	11.0	13.5
CDEP15D90T150NP-100MC-100	10.0	8.90	13.0	9.30	12.2
CDEP15D90T150NP-120MC-100	12.5	10.6	12.0	8.20	8.50
CDEP15D90T150NP-150MC-100	15.0	13.4	10.7	7.70	8.00
CDEP15D90T150NP-220MC-100	22.0	20.1	8.80	6.00	6.50

※ 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 nominal value.

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

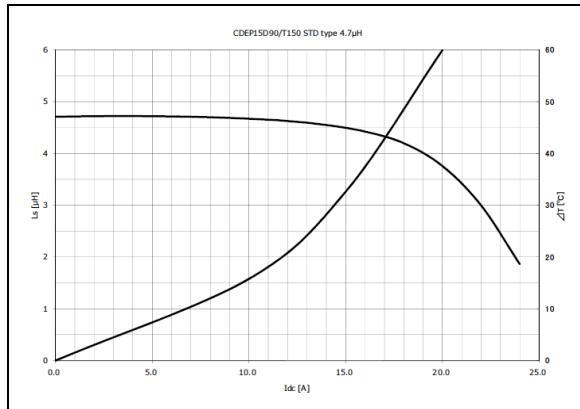
Please note that when using the product while applying current with audio-frequency (AF) signals may results in audible noises due to magnetostriction. Also, in order to avoid an audible noise problem, operating with non-AF signals would be recommended. The noise amplify depending on the coil mount area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

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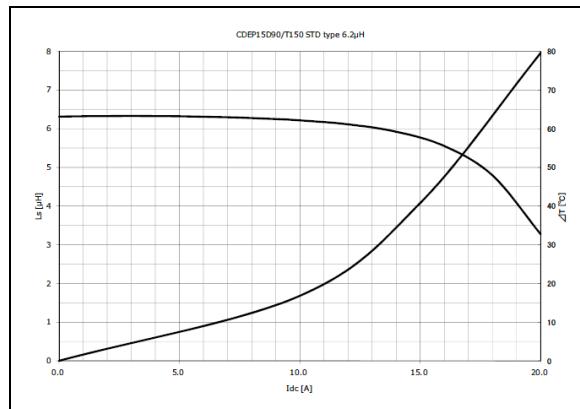
## CDEP15D90/T150



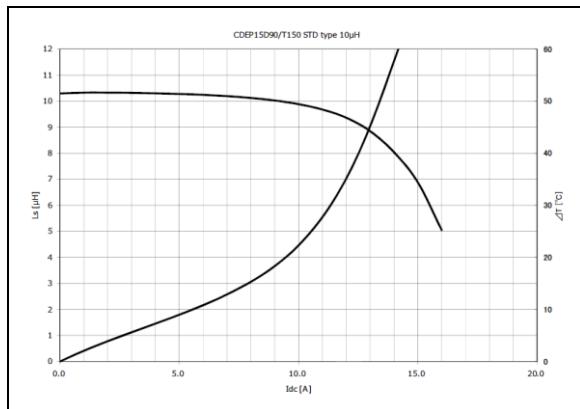
**CDEP15D90/T150NP-4R7MC-125**



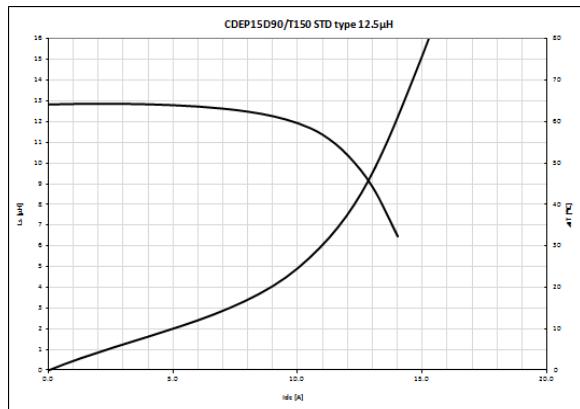
**CDEP15D90/T150NP-6R2MC-125**



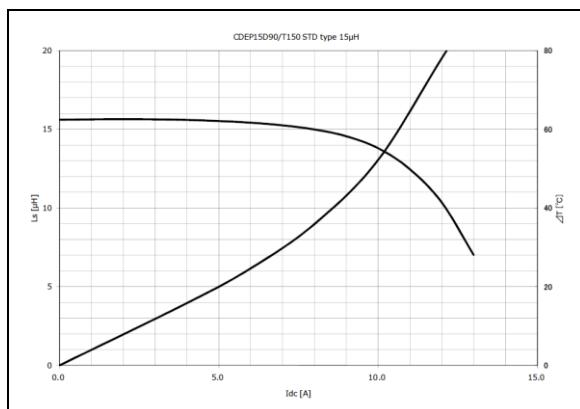
**CDEP15D90/T150NP-100MC-125**



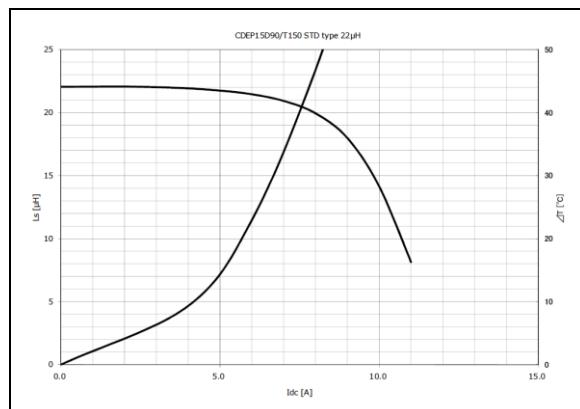
**CDEP15D90/T150NP-120MC-125**



**CDEP15D90/T150NP-150MC-125**



**CDEP15D90/T150NP-220MC-125**

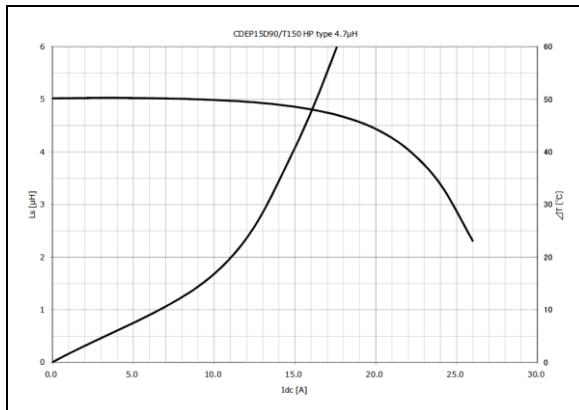


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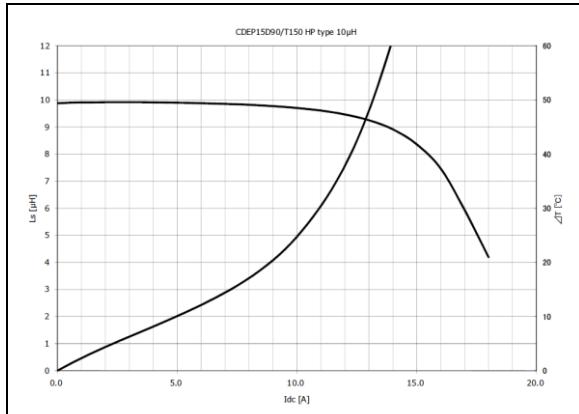
## CDEP15D90/T150



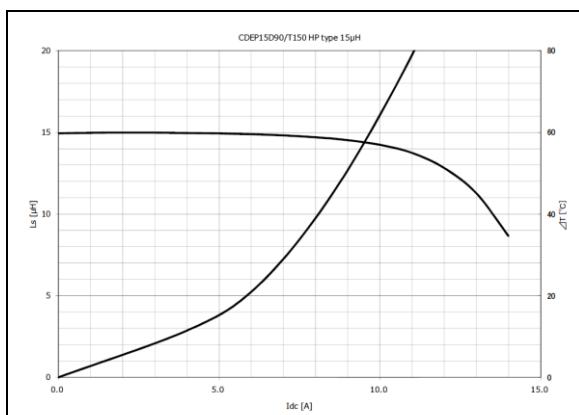
CDEP15D90/T150NP-4R7MC-100



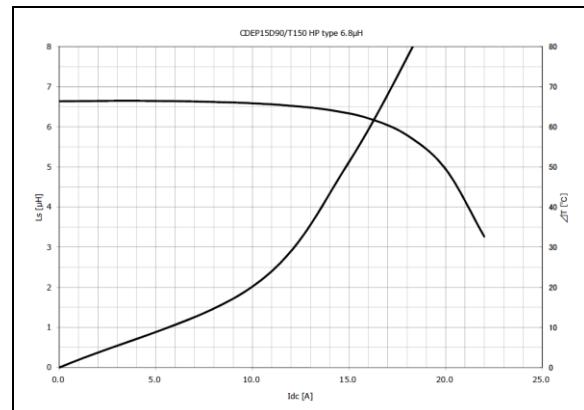
CDEP15D90/T150NP-100MC-100



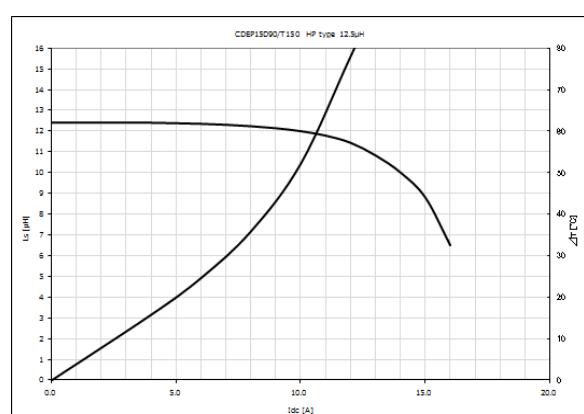
CDEP15D90/T150NP-150MC-100



CDEP15D90/T150NP-6R8MC-100



CDEP15D90/T150NP-120MC-100



CDEP15D90/T150NP-220MC-100

