

# Low-Profile High Current Power Inductor CY0630AT125/DS



## Description

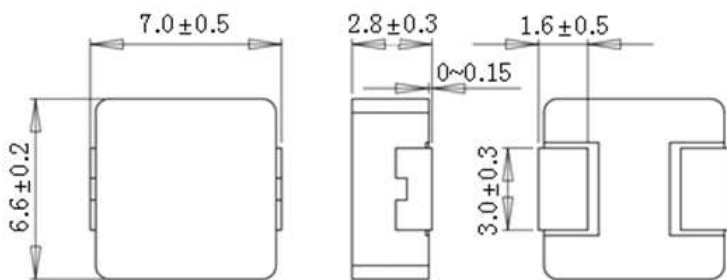
- Metal composite type
- L x W x H: 6.80 x 7.50 x 3.10 mm Max.
- Absolute maximum voltage (across inductor): 50V
- Magnetically shielded
- Qualified AEC-Q200
- Operating temperature range: -40°C~ +125°C (including self-heating)



## Applications

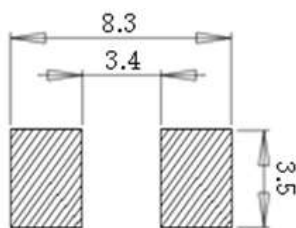
- Infotainment system, ADAS, LED lighting
- ECU
- Automotive and other high temperature, high reliability applications

## Dimension - [mm]

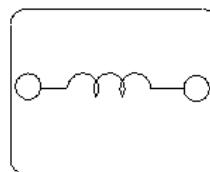


\* Dimension without tolerance is reference value.

## Reference Land pattern - [mm]



## Connection



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

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## CY0630AT125/DS



### Electrical Characteristics

Part No.	Stamp	Inductance [within] ( $\mu$ H) ※1	D.C.R (m $\Omega$ ) at 25°C Max. (Typ.)	Saturation Current (A) (at 25°C) Max. (Typ.) ※2	Temperature Rise Current (A) Max. (Typ.) ※3
CY0630AT125DS-R22MC	R22	0.22±20%	2.9(2.5)	25.6(32.0)	18.2(20.9)
CY0630AT125DS-R33MC	R33	0.33±20%	3.2(2.8)	25.0(31.6)	17.2(19.9)
CY0630AT125DS-R47MC	R47	0.47±20%	4.4(3.8)	18.9(23.7)	14.4(16.4)
CY0630AT125DS-R68MC	R68	0.68±20%	5.4(4.7)	15.6(19.6)	13.2(15.1)
CY0630AT125DS-R82MC	R82	0.82±20%	6.3(5.5)	12.9(16.2)	12.0(14.0)
CY0630AT125DS-1R0MC	1R0	1.0±20%	8.1(7.0)	12.6(15.8)	10.5(12.0)
CY0630AT125DS-1R5MC	1R5	1.5±20%	12.2(10.6)	11.8(14.8)	8.5(9.6)
CY0630AT125DS-2R2MC	2R2	2.2±20%	17.3(15.0)	9.6(12.0)	7.0(8.0)
CY0630AT125DS-3R3MC	3R3	3.3±20%	26.0(22.6)	8.4(10.6)	5.9(6.7)
CY0630AT125DS-4R7MC	4R7	4.7±20%	38.3(33.3)	6.5(8.4)	4.8(5.4)
CY0630AT125DS-6R8MC	6R8	6.8±20%	54.1(47.0)	6.2(7.8)	3.4(3.9)
CY0630AT125DS-8R2MC	8R2	8.2±20%	58.1(50.5)	5.2(6.5)	3.2(3.7)
CY0630AT125DS-100MC	100	10.0±20%	68.0(59.0)	5.0(6.2)	3.0(3.5)
CY0630AT125DS-150MC	150	15.0±20%	111.6(97.0)	4.2(5.3)	2.3(2.6)
CY0630AT125DS-220MC	220	22.0±20%	161.0(140.0)	3.2(4.1)	2.1(2.4)
CY0630AT125DS-330MC	330	33.0±20%	253.0(220.0)	2.5(3.3)	1.7(2.0)

※1 Measuring frequency inductance at 100kHz, 0.25V

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

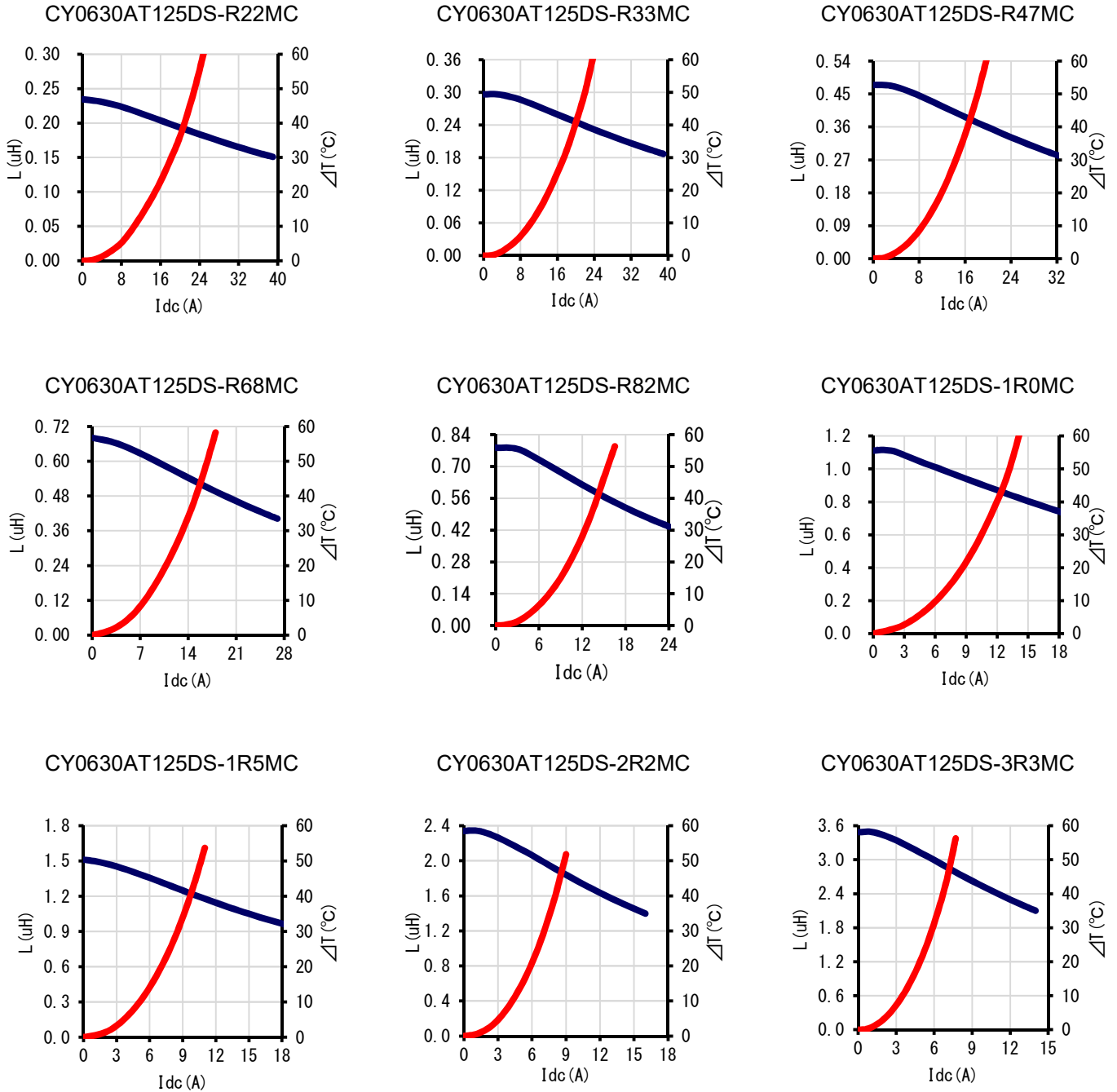
※3 The value of DC current when the temperature of coil becomes  $\Delta T=40^{\circ}\text{C}$  ( $T_a=25^{\circ}\text{C}$ ).

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



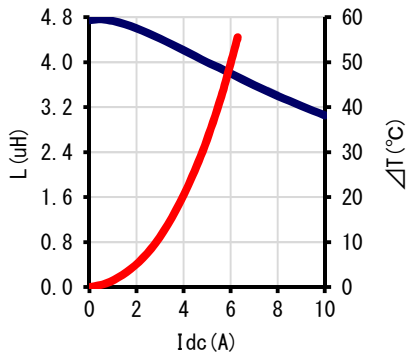
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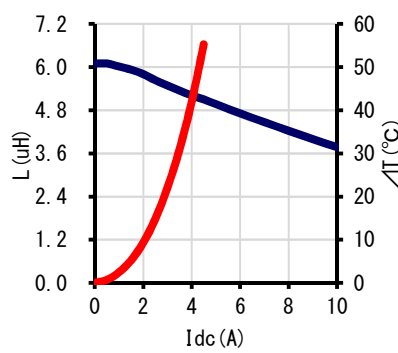


Saturation Current & Temperature Rise Graph — L (25°C) —  $\Delta T$

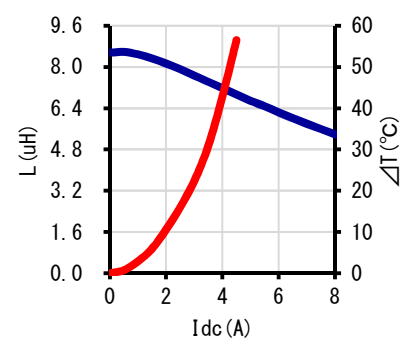
CY0630AT125DS-4R7MC



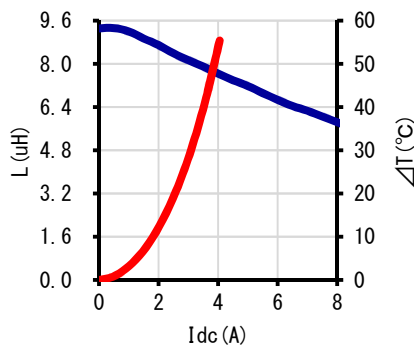
CY0630AT125DS-6R8MC



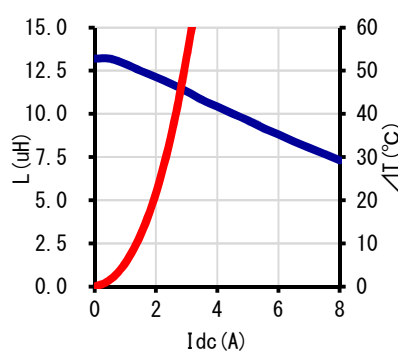
CY0630AT125DS-8R2MC



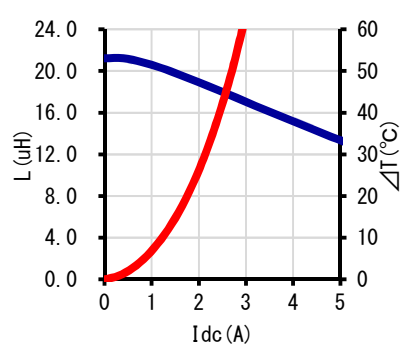
CY0630AT125DS-100MC



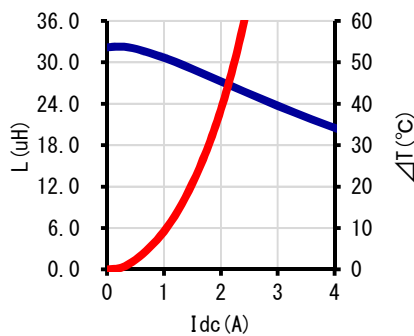
CY0630AT125DS-150MC



CY0630AT125DS-220MC



CY0630AT125DS-330MC

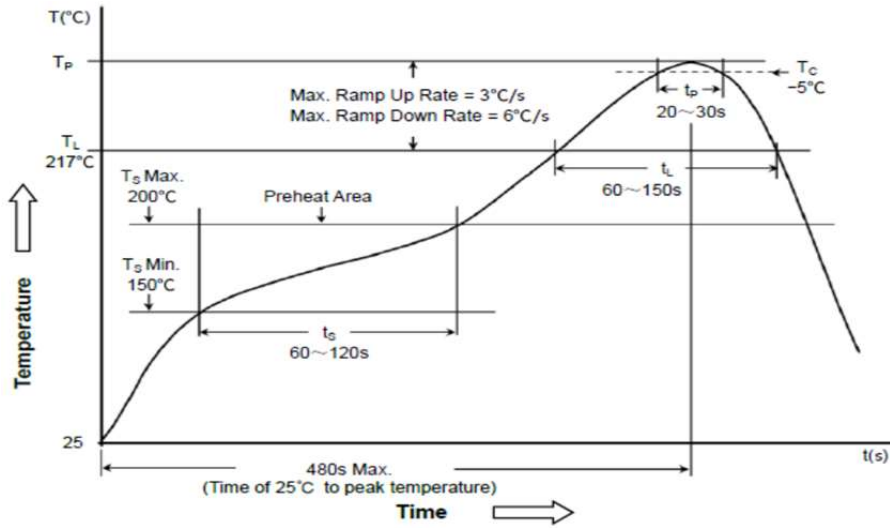


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## Solder Reflow Condition



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

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