

Low-Profile High Current Power Inductor

CY1260AT125/DS



Description

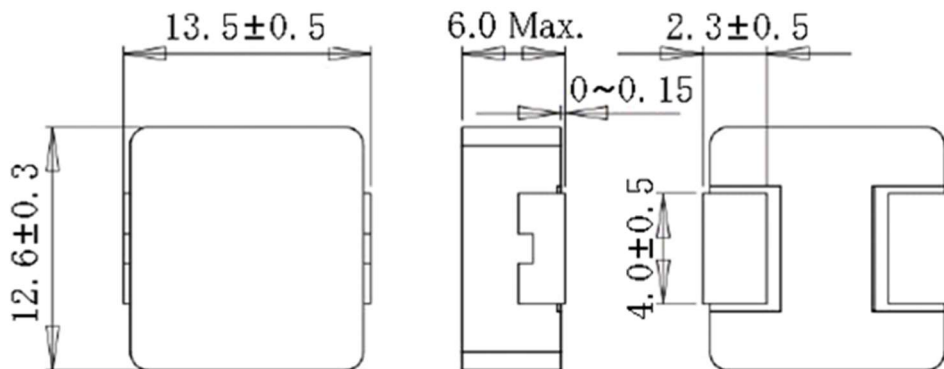
- Metal compound molding type
- L x W x H: 12.9 x 14.0 x 6.1 mm Max.
- Absolute maximum voltage (across inductor): 50V
- Magnetically shielded
- Qualified AEC-Q200
- Operating temperature range: -40°C~ +125°C (including self-heating)



Applications

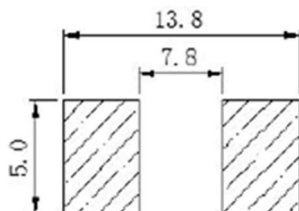
- Infotainment system, ADAS, LED lighting
- ECU
- Automotive and other high temperature, high reliability applications

Dimension - [mm]

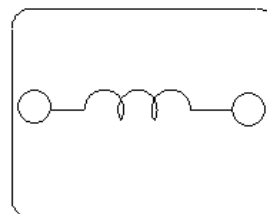


* Dimension without tolerance is reference value.

Reference Land pattern - [mm]



Connection



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Electrical Characteristics

Part No.	Stamp	Inductance [within] (μ H) ※1	D.C.R (m Ω) at 25°C Max. (Typ.)	Saturation Current (A) (at 25°C) Max. (Typ.) ※2	Temperature Rise Current (A) Max. (Typ.) ※3
CY1260AT125DS-R33MC	R33	0.33±20%	1.1(0.9)	60.0(75.0)	38.0(43.0)
CY1260AT125DS-R47MC	R47	0.47±20%	1.2(1.0)	55.0(67.0)	37.0(42.0)
CY1260AT125DS-R68MC	R68	0.68±20%	1.8(1.6)	46.0(58.5)	29.0(33.0)
CY1260AT125DS-1R0MC	1R0	1.0±20%	2.3(2.0)	37.1(46.4)	25.0(28.3)
CY1260AT125DS-1R5MC	1R5	1.5±20%	3.0(2.6)	28.0(35.0)	19.6(22.2)
CY1260AT125DS-2R2MC	2R2	2.2±20%	4.8(4.2)	25.6(32.0)	16.0(18.2)
CY1260AT125DS-3R3MC	3R3	3.3±20%	7.1(6.2)	24.0(30.0)	13.5(16.0)
CY1260AT125DS-4R7MC	4R7	4.7±20%	9.9(8.6)	16.8(21.0)	11.0(12.5)
CY1260AT125DS-6R8MC	6R8	6.8±20%	13.2(11.5)	16.0(20.0)	9.5(11.0)
CY1260AT125DS-8R2MC	8R2	8.2±20%	17.5(15.2)	11.2(14.0)	8.7(9.8)
CY1260AT125DS-100MC	100	10.0±20%	20.7(18.0)	10.8(13.5)	7.5(8.6)
CY1260AT125DS-120MC	120	12.0±20%	23.0(20.0)	9.0(11.3)	6.5(7.5)
CY1260AT125DS-150MC	150	15.0±20%	29.0(25.0)	8.8(11.0)	6.0(6.6)
CY1260AT125DS-180MC	180	18.0±20%	30.2(26.2)	8.5(10.6)	5.8(6.4)
CY1260AT125DS-220MC	220	22.0±20%	39.5(34.0)	8.0(10.0)	5.0(6.0)
CY1260AT125DS-270MC	270	27.0±20%	56.3(49.0)	7.2(9.0)	4.2(4.7)
CY1260AT125DS-330MC	330	33.0±20%	63.3(55.0)	6.8(8.5)	4.0(4.6)
CY1260AT125DS-470MC	470	47.0±20%	92.0(80.0)	5.5(6.8)	3.2(3.6)
CY1260AT125DS-680MC	680	68.0±20%	127.0(110.0)	4.3(5.4)	2.9(3.3)
CY1260AT125DS-820MC	820	82.0±20%	138.0(120.0)	3.6(4.5)	2.8(3.2)
CY1260AT125DS-101MC	101	100.0±20%	190.0(165.0)	3.5(4.4)	2.4(2.7)
CY1260AT125DS-151MC	151	150.0±20%	316.0(275.0)	2.8(3.5)	2.0(2.5)

※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 $\Delta T=40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).

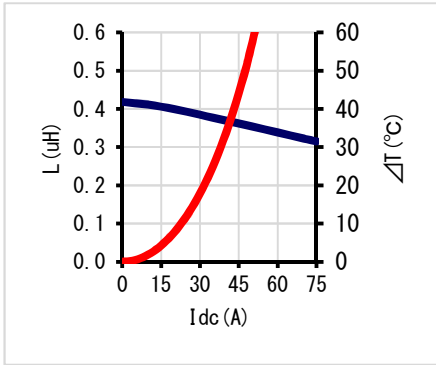
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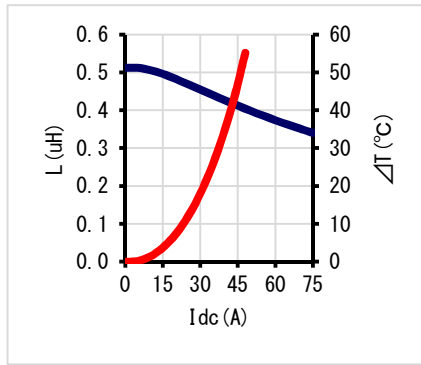


Saturation Current & Temperature Rise Graph — L (25°C) — ΔT

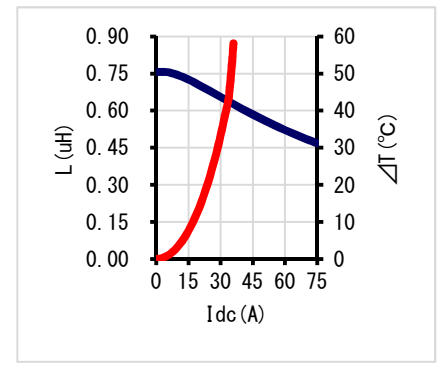
CY1260AT125DS-R33MC



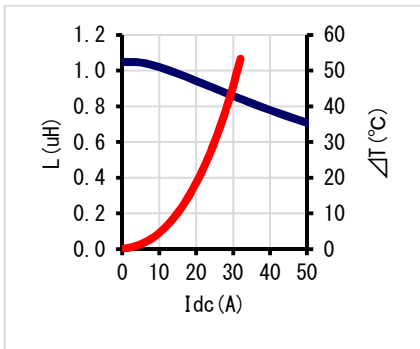
CY1260AT125DS-R47MC



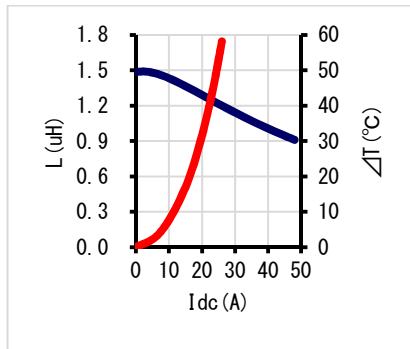
CY1260AT125DS-R68MC



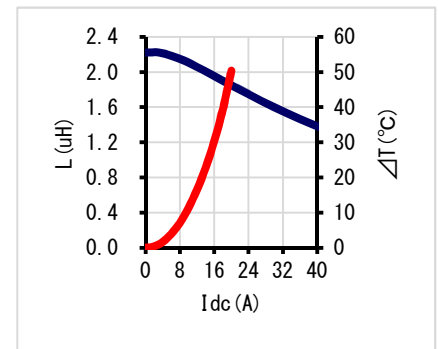
CY1260AT125DS-1R0MC



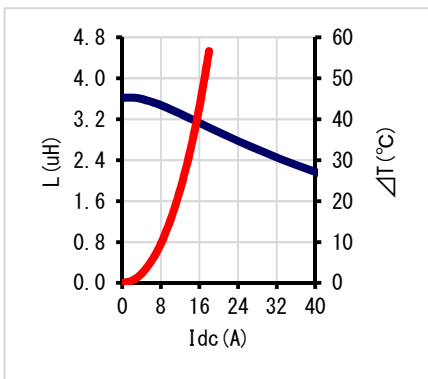
CY1260AT125DS-1R5MC



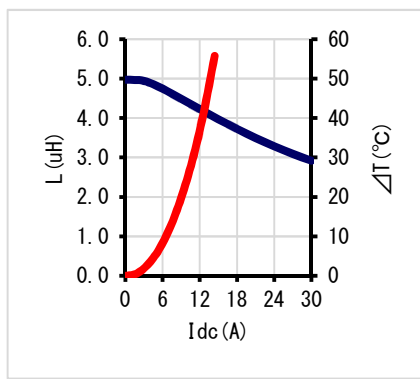
CY1260AT125DS-2R2MC



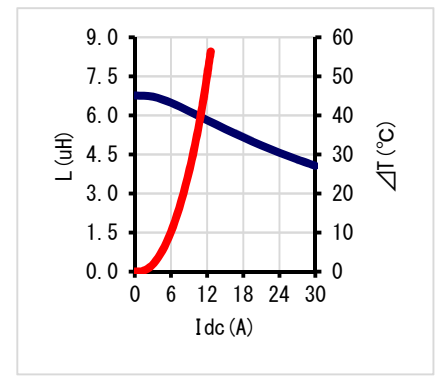
CY1260AT125DS-3R3MC



CY1260AT125DS-4R7MC



CY1260AT125DS-6R8MC



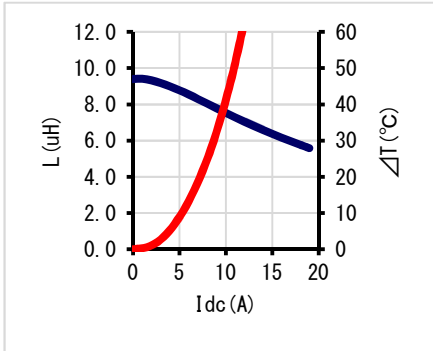
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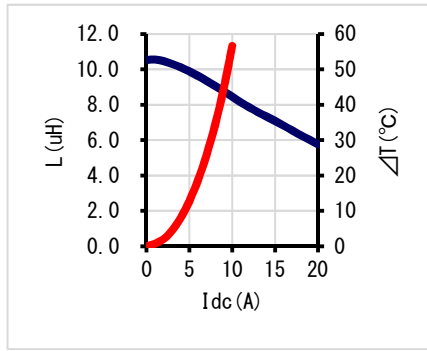


Saturation Current & Temperature Rise Graph — L (25°C) — ΔT

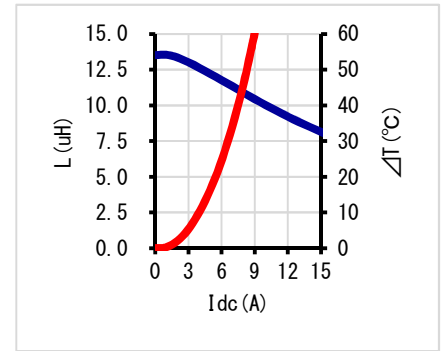
CY1260AT125DS-8R2MC



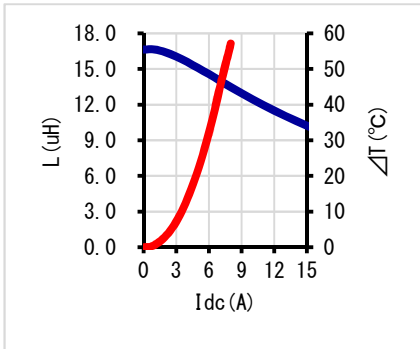
CY1260AT125DS-100MC



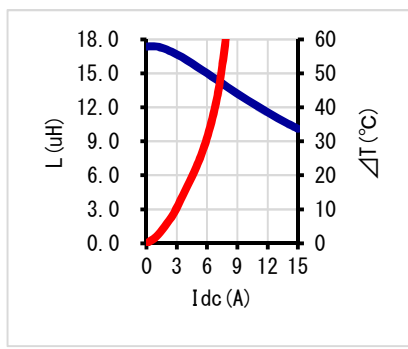
CY1260AT125DS-120MC



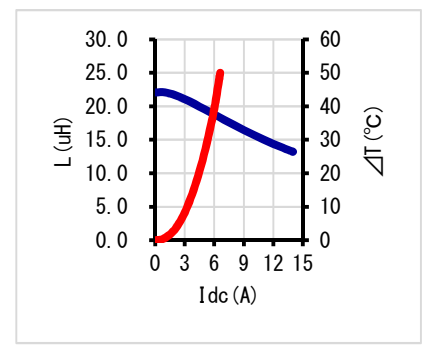
CY1260AT125DS-150MC



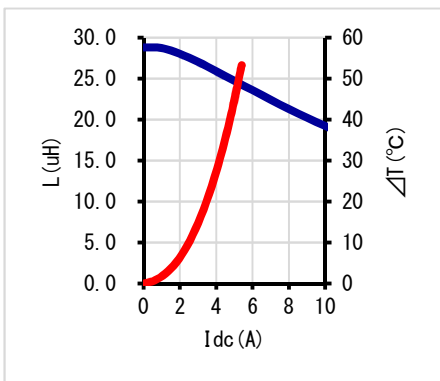
CY1260AT125DS-180MC



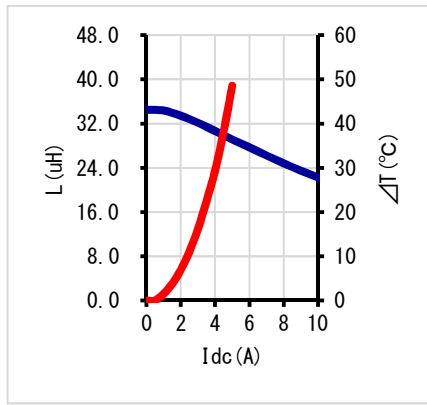
CY1260AT125DS-220MC



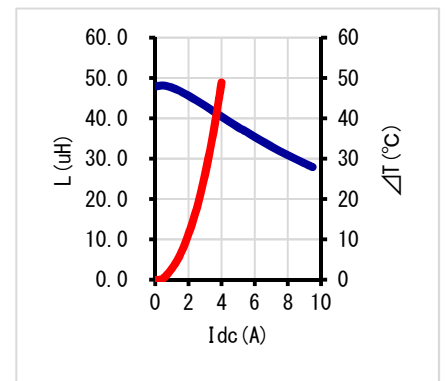
CY1260AT125DS-270MC



CY1260AT125DS-330MC



CY1260AT125DS-470MC



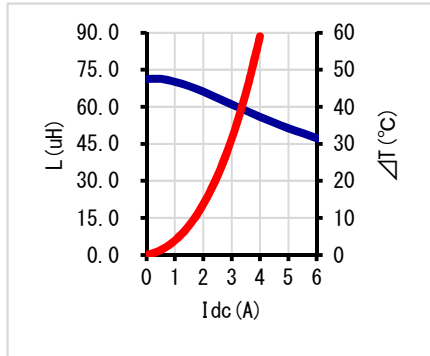
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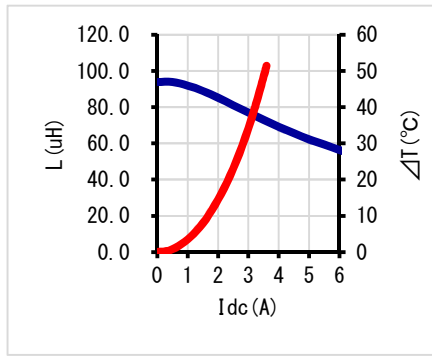


Saturation Current & Temperature Rise Graph — L (25°C) — ΔT

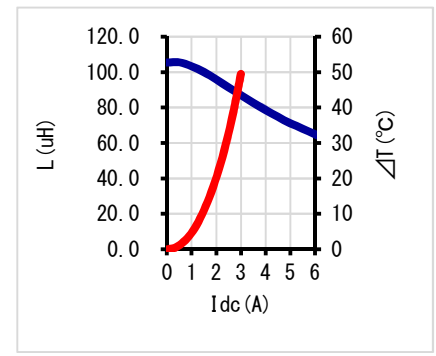
CY1260AT125DS-680MC



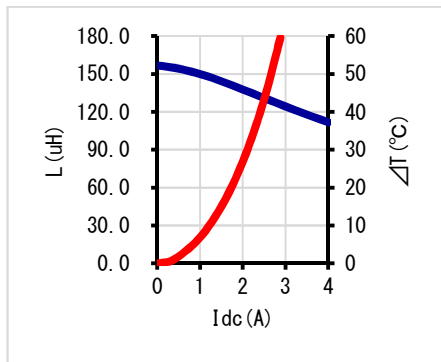
CY1260AT125DS-820MC



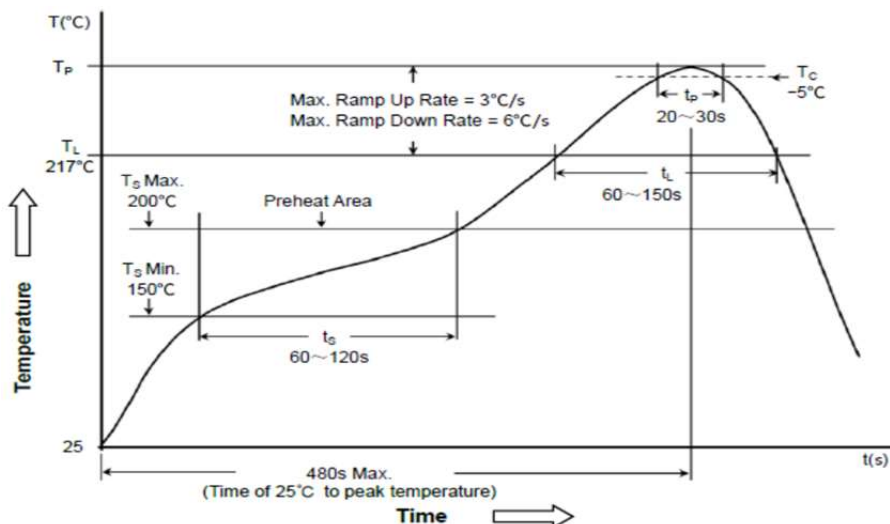
CY1260AT125DS-101MC



CY1260AT125DS-151MC



Solder Reflow Condition



For sales office information, please visit our website (<https://www.sumida.com/>).

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