

One-piece molding powerinductor size CCY1260AT125/DS

1.Features

- Qualified to AEC Q200
 - Small volume,large current,in high frequency and high temperature environment to maintain, excellent temperature current and saturation current characteristics.
 - Low loss alloy powder die casing,low resistance,Firm structrue
- Operating temperature : -55℃ ~ +150℃ (Including coil ' s temperature rise)

2. Applications

ADAS, Infotainment

LED lighting,Internet of vehicle.

Automotive series of electronic equipment

TCDRH 6D 38 T 125 NP - 6R8 N C

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

Type name 形名

Dimensions 外形尺寸

Height (H) 高度尺寸

Characteristic 特性规格

L(D) Low DCR.Type低DCR类型

H(P) High Sturation Current Type高饱和电流类型

None or T Sundard Tye标准类型

Operation Temperature 使用温度

None sandnrd Tpre 标准品

125 The upper limit of operation temperature is +125 (Including coils self temperature rise)

使用温度上限+125C(包含线圈发热)

150 The upper limit of operation temperature is+150 (Inctuding cois selftemperature rise)

使用温度上限+150C(包含线圈发热)

Feature 分类

Lead-free NP无铅

Halogen-free 无卤素

Induetance 电感值

1R0 1.0uH 100 10uH 101 100uH

Tolerance of inductance 电感值公差

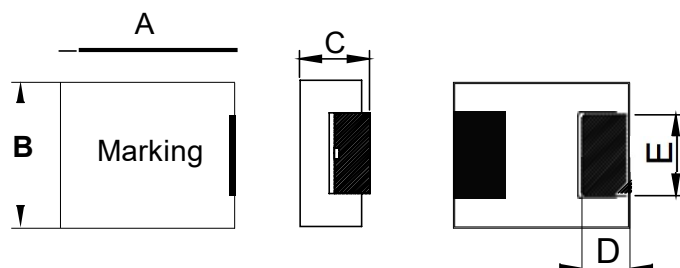
K ± 10% M ± 20% N ± 30%

Packing 据包规格

C 载带Carrier tape B 箱子 Box

Externaldimensions

Unit:(mm)



SERIES	A	B	C	D	E
CCY0420AT125/DS	4.4±0.4	4.2±0.2	1.8±0.2	0.8±0.2	2.0±0.3
CCY0530AT125/DS	5.6±0.4	5.2±0.2	2.8±0.2	1.3±0.3	2.3±0.3
CCY0630AT125/DS	7.0±0.3	6.6±0.2	2.8±0.2	1.6±0.3	3.0±0.3
CCY0650AT125/DS	7.0±0.3	6.6±0.2	4.8±0.2	1.6±0.3	3.0±0.3
CCY1040AT125/DS	11.0±0.5	10.0±0.3	3.8±0.2	2.5±0.5	3.0±0.5
CCY1050AT125/DS	11.0±0.5	10.0±0.3	5.2±0.2	2.2±0.5	4.5±0.3
CCY1250AT125/DS	13.5±0.5	12.6±0.3	4.8±0.2	2.0±0.5	5.0±0.5
CCY1260AT125/DS	13.5±0.5	12.6±0.3	6.2±0.2	2.0±0.5	5.0±0.5
CCY1770AT125/DS	17.2±0.5	17.0±0.3	6.8±0.2	2.5±0.5	12.0±0.3

Electrical Properties:

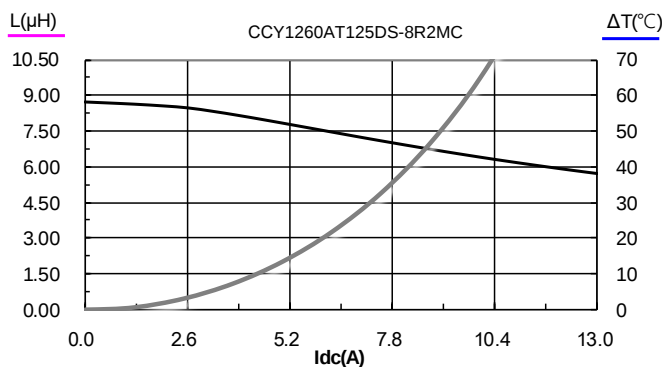
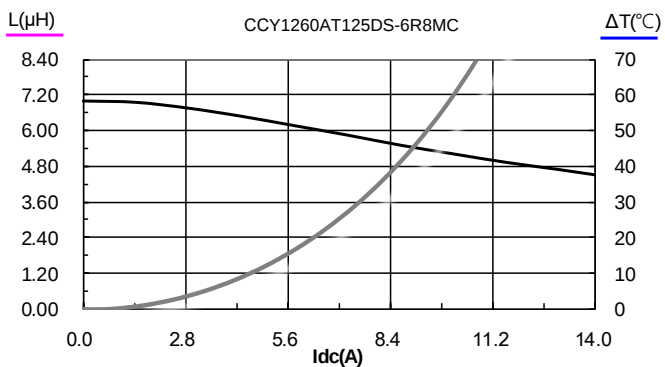
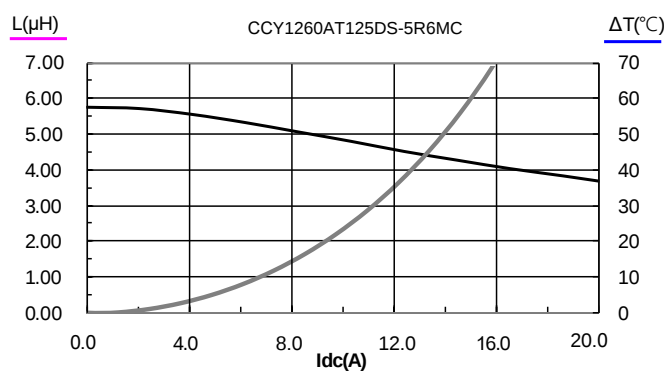
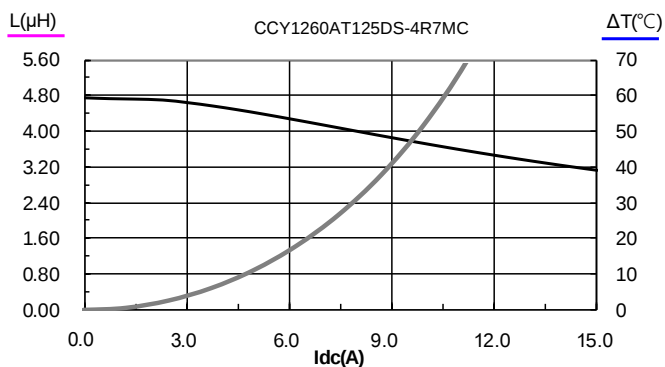
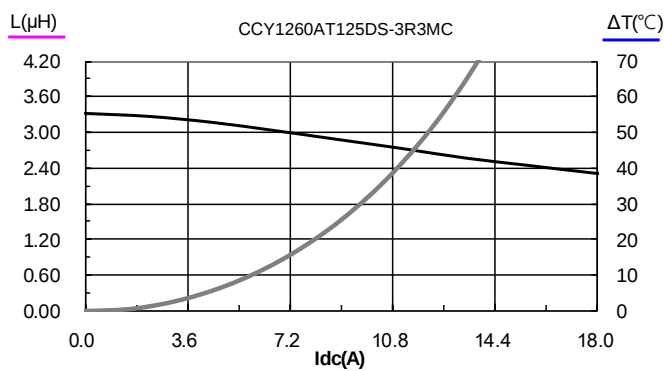
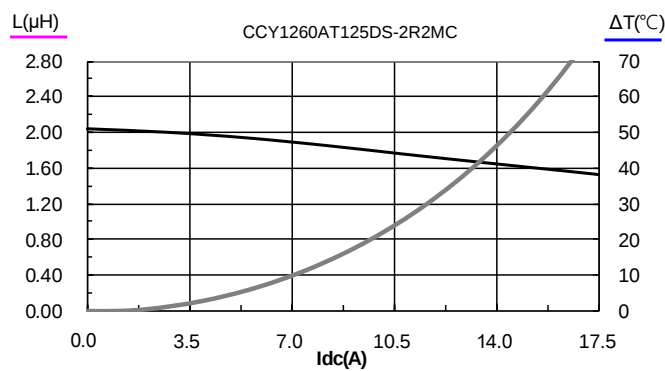
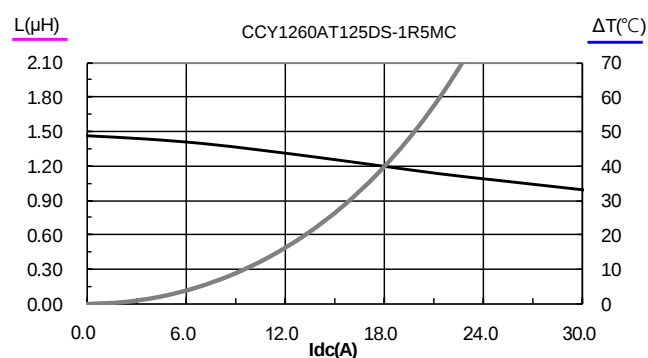
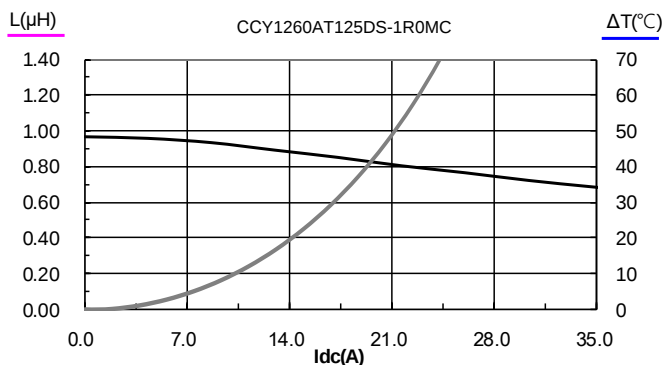
Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)		HeatRating Current DC Amps.Irms(A)	
		Typ.	Max.	Max.	Typ.	Max.	Typ.
CCY1260AT125DS-1R0MC	1.0±20%	2.3	2.5	34.0	42.0	26.0	30.0
CCY1260AT125DS-1R5MC	1.5±20%	3.1	3.5	22.0	26.0	20.0	23.0
CCY1260AT125DS-2R2MC	2.2±20%	3.8	4.6	22.0	26.0	20.0	22.0
CCY1260AT125DS-3R3MC	3.3±20%	5.5	6.5	21.0	23.0	17.0	19.0
CCY1260AT125DS-4R7MC	4.7±20%	7.2	8.6	20.0	22.0	14.0	16.0
CCY1260AT125DS-5R6MC	5.6±20%	8.5	10.0	16.0	18.0	13.0	15.0
CCY1260AT125DS-6R8MC	6.8±20%	10.0	11.8	15.0	17.0	12.0	13.5
CCY1260AT125DS-8R2MC	8.2±20%	12.0	14.0	14.0	16.0	11.9	13.2
CCY1260AT125DS-100MC	10±20%	12.8	16.5	13.0	15.0	11.0	12.0
CCY1260AT125DS-150MC	15±20%	22.0	26.0	10.0	12.0	8.5	9.5
CCY1260AT125DS-220MC	22±20%	32.0	37.7	7.5	8.5	6.0	7.0
CCY1260AT125DS-330MC	33±20%	44.0	52.0	6.0	7.0	5.3	6.0
CCY1260AT125DS-470MC	47±20%	59.0	73.0	5.8	6.8	5.0	5.4
CCY1260AT125DS-680MC	68±20%	90.0	105.0	4.2	5.0	3.8	4.2
CCY1260AT125DS-820MC	82±20%	120.0	140.0	4.2	4.7	3.2	3.7
CCY1260AT125DS-101MC	100±20%	135.0	160.0	4.0	4.5	3.0	3.5

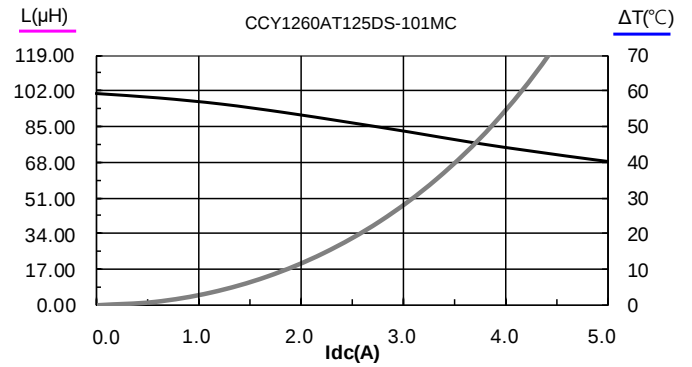
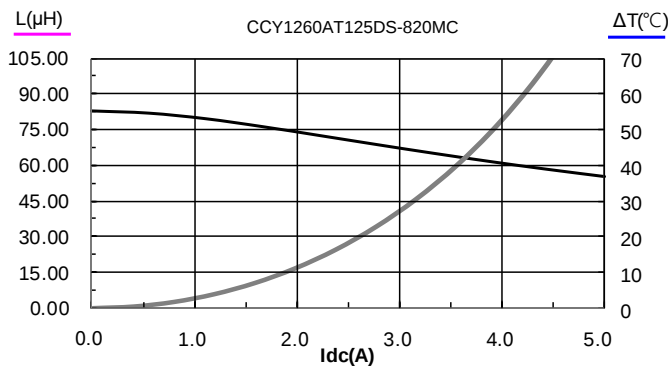
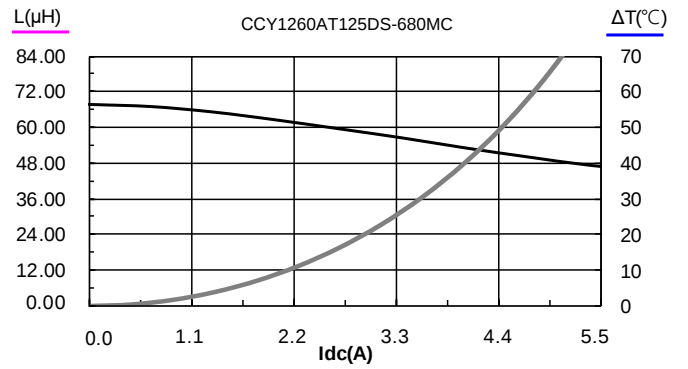
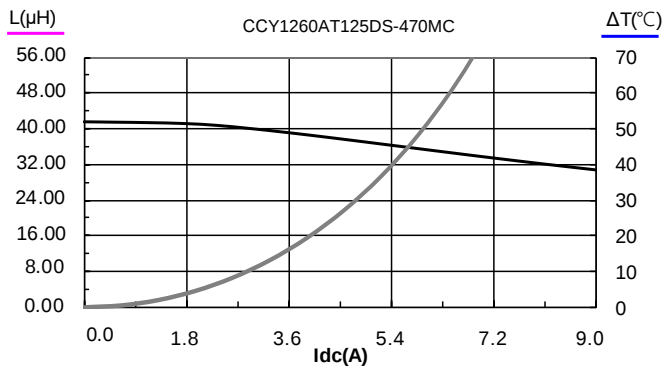
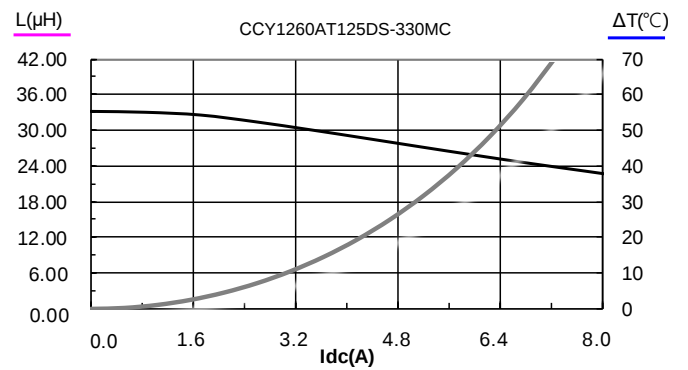
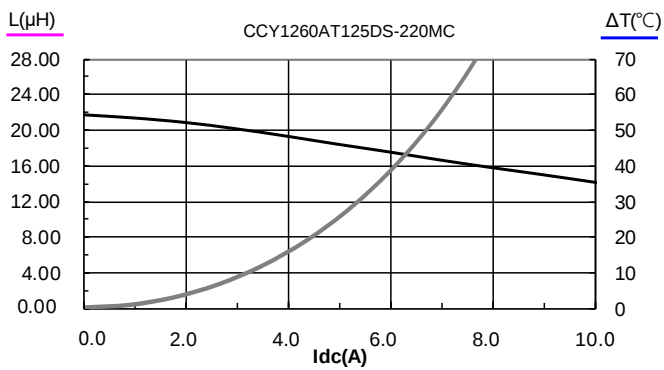
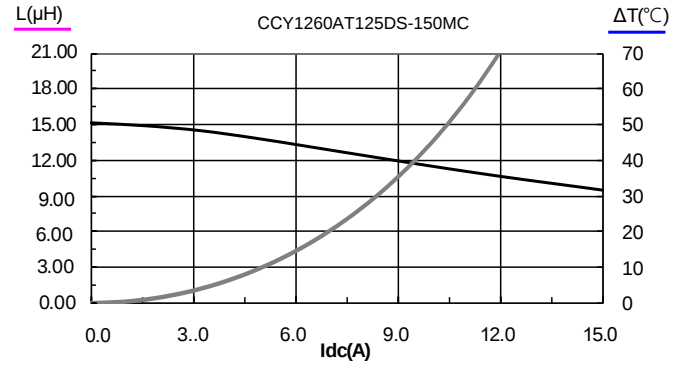
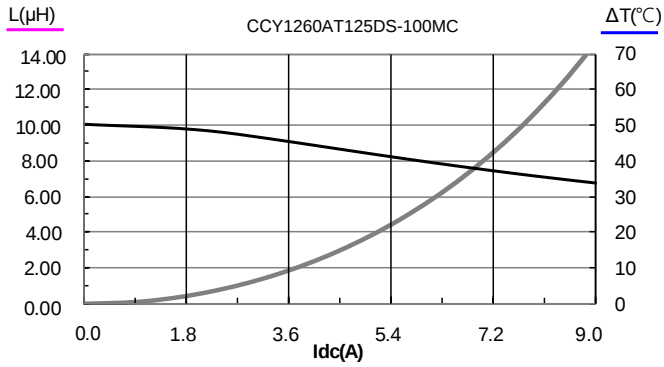
■ All data is tested based on 25℃ ambient temperature.

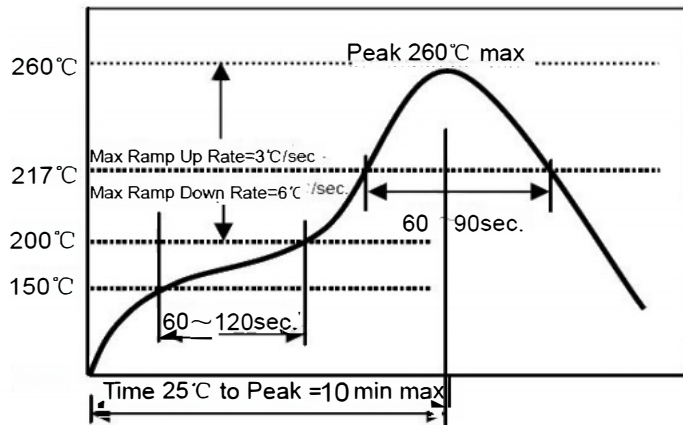
- 1 Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.
- 2 Temperature rise current :the actual value of DC current when the temperature rise is $\Delta T 40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).
- 3 Inductance measure condition at 100kHz, 0.1V.

Special remind:Circuit design,component placement,PCB size and thickness,cooling system and etc.all will affect the product temperature.Please verify the product temperature in the final application.

Saturation Current vs Temperature Rise Current Curve







Re-flowing Profile

Preheat condition: 150 ~200°C/60~120sec

Allowed time above 217°C: 80~90sec.

Max temp: 260°C

Max time at max temp: 5 sec.

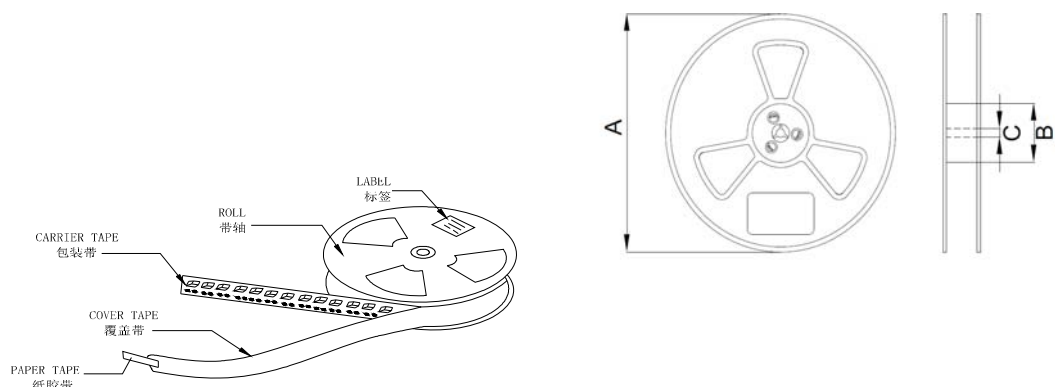
Solder paste: Sn/3.0Ag/0.5Cu

Allowed Reflow time: 2x

Reflow is reined to standard IPC/JEDEC/JSTD 020D.

回流焊参照标准IPC/JEDEC/JSTD 020D

- Remark:
- All test data is reference to 25°C ambient.
 - Test Condition: 1MHz, 0.1Vrms
 - Isat: Max. Value, DC current at which the inductance drops less than 30% from its value without current;
 - Typ. Value, DC current at which the inductance drops 30% from its value without current.
 - Irms: For Max. Value, $\Delta T < 40^\circ\text{C}$; for Typ. Value, ΔT is approximate 40°C .
 - Operat between temperature range -40°C to $+125^\circ\text{C}$ (Including self-temperature rise)
 - Absolute maximum voltage: DC 70V



Product Serie	Quantity Reel	InnerCarton Quantity
CCY1260AT125/DS	400pcs	(400×2)=800pcs

Type	Reel Dimension (mm)			Quantity (Pcs/Reel)
	A	B	C	
CCY0420AT125/DS	330	100	13	3000
CCY0530AT125/DS	330	100	13	2000
CCY0630AT125/DS	330	100	13	2000
CCY0650AT125/DS	330	100	13	1500
CCY1040AT125/DS	330	100	13	1000
CCY1050AT125/DS	330	100	13	1000
CCY1250AT125/DS	330	100	13	400
CCY1260AT125/DS	330	100	13	400
CCY1770AT125/DS	330	100	13	300