

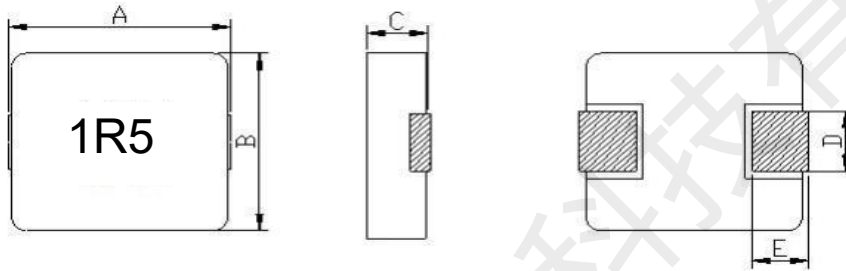
## 1.Features

- ①. High performance (Isat) realize by metal dust core.
- ②. Low profile: Thickness max.2.0~5.0mm.
- ③. Low loss and low resistance.
- ④. Capable of corresponding high frequency 1MHz~5MHz.
- ⑤ Ultra low buzz noise, due to composite construction.
- ⑥. The products contain no lead and also support lead-free soldering.

## 2.Applications area

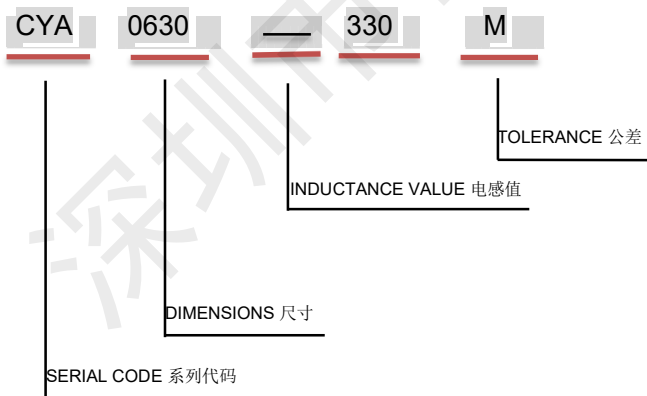
Ideally used in NB/Desktop/server/Graphic card, LCD TV/Projector, etc as DC-DC Converter.

## 3. Externl Dimensions (unit: mm)



UNIT: mm  
 A:6.6±0.2  
 B:7.2±0.2  
 C:3.0MAX  
 D:1.5±0.5  
 E:3.0±0.2

## 4. Product Code



Code 代码	Tolerance 公差
J	±5%
K	±10%
L	±15%
M	±20%
P	±25%
N	±30%

- 电感值Inductance Value  
 (1R0:1.0uH; 100: 10uH; 101:100uH)



## 5. Electrical Characteristics

### CYA0630 Series

#### Electrical Characteristics

C.Y PART NO	L0(uH) Inductance (uH) @ (0A)	Rdc (mΩ) @25°C		Heat Rating Current DC Amps. Idc (A)	Saturation Current DC Amps. Isat (A)	TEST FREQ (KHZ)
		Typ.	Max.			
CYA0630-R10M	0.10±20%	1.5	1.7	32.5	60.0	100KHZ/1.0v
CYA0630-R15M	0.15±20%	1.9	2.5	30.0	40.0	100KHZ/1.0v
CYA0630-R20M	0.20±20%	2.4	3.0	21.0	34.0	100KHZ/1.0v
CYA0630-R22M	0.22±20%	2.5	3.0	21.0	34.0	100KHZ/1.0v
CYA0630-R33M	0.33±20%	3.0	3.5	21.0	25.0	100KHZ/1.0v
CYA0630-R36M	0.36±20%	3.3	3.9	16.0	22.0	100KHZ/1.0v
CYA0630-R47M	0.47±20%	3.5	4.1	18.0	20.0	100KHZ/1.0v
CYA0630-R56M	0.56±20%	4.3	4.9	15.0	18.0	100KHZ/1.0v
CYA0630-R68M	0.68±20%	5.0	5.7	14.0	17.0	100KHZ/1.0v
CYA0630-R82M	0.82±20%	6.0	6.9	12.0	16.0	100KHZ/1.0v
CYA0630-1R0M	1.00±20%	7.0	7.5	12.0	15.0	100KHZ/1.0v
CYA0630-1R5M	1.50±20%	10.6	12.1	9.0	14.0	100KHZ/1.0v
CYA0630-2R2M	2.20±20%	15.5	17.5	7.0	10.0	100KHZ/1.0v
CYA0630-3R3M	3.30±20%	23.0	26.0	6.5	9.5	100KHZ/1.0v
CYA0630-4R7M	4.70±20%	34.5	38.0	5.0	6.5	100KHZ/1.0v
CYA0630-5R6M	5.60±20%	36.0	42.0	5.0	6.3	100KHZ/1.0v
CYA0630-6R8M	6.80±20%	50.0	54.0	4.5	6.0	100KHZ/1.0v
CYA0630-8R2M	8.20±20%	58.5	65.0	4.0	6.0	100KHZ/1.0v
CYA0630-100M	10.00±20%	71.0	76.0	4.0	5.5	100KHZ/1.0v
CYA0630-120M	12.00±20%	85.0	98.0	3.0	4.5	100KHZ/1.0v
CYA0630-150M	15.00±20%	98.0	115.0	3.0	3.8	100KHZ/1.0v
CYA0630-220M	22.00±20%	165.0	189.0	1.5	3.1	100KHZ/1.0v
CYA0630-330M	33.00±20%	225.0	257.0	1.0	2.9	100KHZ/1.0v
CYA0630-470M	47.00±20%	297.0	327.0	0.8	2.2	100KHZ/1.0v

## • Notes

- 1.All test data is reference to 25°C ambient.
- 2.Idc: DC current (A) that will cause an approximate  $\Delta T$  of 40°C
3. Isat : DC current (A) that will cause L0 to drop approximately 30%
- 4.Operating Temperature Range -55°C to +125°C
- 5.The part temperature (ambient + temp rise ) should not exceed 125 °C under worse case operating conditions. Circuit design, component. PWB trace size and thickness airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the den application.
- 6.The rated current as listde is either the saturation current or the heating current depending on which value is lower.

## 6.Minimum Packaging and storage

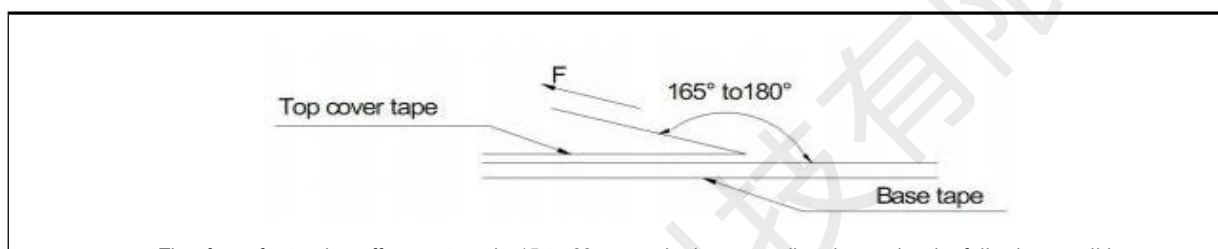
### • 包装Packing

Tape Dimension											
Type	Reel Dimensions (mm)				Tape Dimensions (mm)						
	A	N	W	C	W	P8	P04	A0	B0	H	T
CYA0420	330 +2/-0	100 +2/-0	12.4 +2/-0	13.2 ±0.2	12±0.3	±0.1	±0.1	4.4±0.1	4.9±0.1	2.3±0.05	0.35±0.05
CYA0530	330 +2/-0	100 +2/-0	12.4 +2/-0	13.2 ±0.2	12±0.3	8±0.1	4±0.1	5.4±0.1	5.9±0.1	3.3±0.05	0.35±0.05
CYA0618	330 +2/-0	100 +2/-0	16.4 +2/-0	13.2 ±0.2	16±0.3	12±0.1	4±0.1	6.9±0.1	7.5±0.1	2.1±0.05	0.35±0.05
CYA0624	330 +2/-0	100 +2/-0	16.4 +2/-0	13.2 ±0.2	16±0.3	12±0.1	4±0.1	6.9±0.1	7.5±0.1	2.7±0.05	0.35±0.05
CYA0630	330 +2/-0	100 +2/-0	16.4 +2/-0	13.2 ±0.2	16±0.3	12±0.1	4±0.1	6.9±0.1	7.5±0.1	3.3±0.05	0.35±0.05
CYA0650	330 +2/-0	100 +2/-0	16.4 +2/-0	13.2 ±0.2	16±0.3	12±0.1	4±0.1	6.9±0.1	7.5±0.1	5.2±0.1	0.4±0.05
CYA1040	330 +2/-0	100 +2/-0	24.4 +2/-0	13.2 ±0.2	24±0.3	16±0.1	4±0.1	10.4±0.1	11.5±0.1	4.3±0.1	0.35±0.05
CYA1250	330 +2/-0	100 +2/-0	24.4 +2/-0	13.2 ±0.2	24±0.3	16±0.1	4±0.1	13.2±0.1	14.4±0.1	5.3±0.1	0.4±0.05
CYA1260	330 +2/-0	100 +2/-0	24.4 +2/-0	13.2 ±0.2	24±0.3	16±0.1	4±0.1	13.2±0.1	14.4±0.1	6.3±0.1	0.5±0.05

• **Tape Carrier Packaging:**

Type	Standard Quantity (pcs/reel)	Type	Standard Quantity (pcs/reel)
CYA0420	3000	CYA1250	400
CYA5030	2000	CYA1265	400
CYA6030	1000		
CYA1040	1000		

• **Tearing Off Force**



The force for tearing off cover tape is 15 to 60 grams in the arrow direction under the following conditions

Room Temp. ( ) $^\circ\text{C}$	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

• **Application Notice**

Storage Conditions To maintain the solderability of terminal electrodes:

1. Temperature and humidity conditions: Less than  $30^\circ\text{C}$  and 70% RH.
2. Recommended products should be used within 6 months from the time of delivery.
3. The packaging material should be kept where no chlorine or sulfur exists in the air.

Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components. Bulk handling should ensure that abrasion and mechanical shock are minimized.