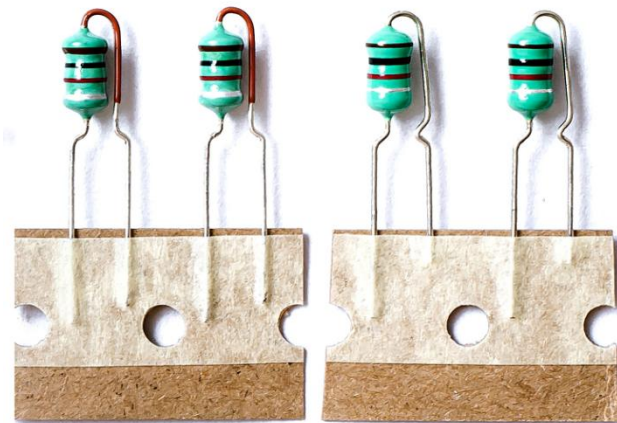


2 产品特性 Product features



① 感量范围宽，尺寸小，重量轻。

Design to be compact, small and light-weight, wide range of inductance.

② 特殊磁芯材质，高 Q 值及高饱和电流。

Special core material, high Q value and high saturation current.

③ 外层用环氧树脂处理，结构坚固，成本低廉。

The outer layer is treated with epoxy resin, which has a strong structure and low cost.

④ 成型方式种类多，并可加套管或绝缘漆。

There are many types of molding methods, and casing or insulating paint can be added.

⑤ 无铅产品，符合 RoHS 指令。

Lead free product, RoHS compliant.

⑥ 适用于家电，音响控制板，安防设备，照明，玩具，通讯设备，电源控制器等。

Widely used in home appliances, audio control panels, security equipment, lighting, toys, communication equipment, power controllers, etc.

⑦ 工作温度：-25℃ ~ +85℃（包含线圈发热）。

Operating temperature : -25℃ ~ +85℃ (Including coil's temperature rise).

3 色码表示 Color Coding

标称电感值用色码编码表示如下表所示 The nominal inductance is marked. Color code listed in table below.				
颜色 Color	第一条 1 the significant	第二条 2 nd significant	倍数 Multiplier	容差 Tolerance
Black 黑	0		×1	±20%(M)
Brown 棕	1		×10	±1% (F)
Red 红	2		×100	±2% (G)
Orange 橙	3		×1000	——
Yellow 黄	4		×10000	——
Green 绿	5		——	——
Blue 蓝	6		——	——
Violet 紫	7		——	——
Gray 灰	8		——	——
White 白	9		——	——
Gold 金	——		×0.1	±5% (J)
Silver 银	——		×0.01	±10% (K)

4 料号定义 Part Number Definition

AL 0510 - 102 K
 ① ② ③ ④

- ① 产品系列 Product Symbol
- ② 产品尺寸 Dimensions
- ③ 电感量 Inductance (102=1mH)
- ④ 公差范围 Inductance Tolerance (K=±10%)

规格 型号 Part No.	L (μH)	饱和电流 Isat(mA)							直流电阻 DCR(Ω) Max						
		0307	0410	0508	0510	0512	0514	0612	0307	0410	0508	0510	0512	0514	0612
100K	10	1000	1300	1500	1700	2200	2400	2700	0.31	0.19	0.10	0.08	0.07	0.08	0.06
120K	12	950	1200	1400	1550	2050	2200	2450	0.35	0.20	0.12	0.09	0.08	0.08	0.07
150K	15	850	1000	1200	1400	1800	1950	2200	0.40	0.24	0.14	0.11	0.11	0.10	0.08
180K	18	780	970	1100	1250	1650	1800	2000	0.60	0.29	0.18	0.13	0.12	0.12	0.11
220K	22	700	870	1000	1150	1500	1600	1800	0.67	0.37	0.20	0.17	0.13	0.13	0.12
270K	27	640	790	900	1000	1350	1450	1600	0.76	0.42	0.24	0.18	0.17	0.16	0.13
330K	33	570	710	820	940	1200	1300	1450	0.85	0.53	0.30	0.24	0.22	0.19	0.14
390K	39	530	650	750	870	1100	1200	1350	0.94	0.59	0.34	0.26	0.24	0.22	0.19
470K	47	480	600	690	790	1000	1100	1200	1.3	0.74	0.41	0.30	0.31	0.28	0.22
560K	56	440	550	630	720	950	1000	1100	1.4	0.83	0.49	0.35	0.35	0.30	0.26
680K	68	400	500	570	660	860	920	1000	1.9	1.1	0.61	0.43	0.38	0.40	0.30
820K	82	360	450	520	600	780	840	940	2.2	1.2	0.68	0.53	0.47	0.43	0.38
101K	100	330	410	470	540	710	760	850	4.1	1.6	0.86	0.72	0.58	0.53	0.43
121K	120	300	370	430	500	650	690	780	4.6	1.8	1.1	0.80	0.71	0.65	0.55
151K	150	270	330	390	440	580	620	700	5.2	2.4	1.3	0.92	0.89	0.80	0.64
181K	180	245	300	350	400	530	570	630	5.6	2.6	1.6	1.1	1.1	1.0	0.80
221K	220	220	280	320	360	480	510	570	6.4	3.7	2.0	1.4	1.4	1.2	0.95
271K	270	200	250	290	330	430	460	520	7.2	4.2	2.3	1.8	1.6	1.4	1.2
331K	330	180	230	260	300	390	420	470	11.0	4.7	3.0	2.0	1.9	1.8	1.4
391K	390	165	210	240	270	360	380	430	12.5	6.6	3.2	2.6	2.4	2.2	1.7
471K	470	150	190	220	250	330	350	390	14.0	7.3	4.2	3.0	2.8	2.4	1.9
561K	560	140	170	200	230	300	320	360	15.0	8.0	4.7	3.7	3.5	3.0	2.4
681K	680	125	160	180	210	270	290	330	24.5	12.0	6.4	4.2	3.8	4.0	3.0
821K	820	115	140	165	190	250	270	300	27.0	13.5	7.1	5.5	5.0	4.3	3.4
102K	1000	100	130	150	170	220	240	270	30.0	15.0	9.7	6.2	6.6	5.6	4.3
152K	1500		105	120	140	180	200	220		26.5	15.5	9.5	10.0	8.5	6.4
222K	2200		85	100	115	150	160	180		33.0	25.5	14.5	12.5	13.0	9.0
332K	3300			80	95	120	130	150			45.0	23.0	25.0	20.0	16.5
472K	4700			70	80	100	110	125			55.0	38.0	31.0	31.0	24.5
103K	10000				55	70	75	85				81.0	87.0	63.0	63.0

(1)电感量的公差:Tolerance of Inductance N=±30%,M=±20%,K=±10%,J=±5%

(2)电感的测试条件:1KHz,0.3V. Inductance is tested at 1KHz,0.3V.

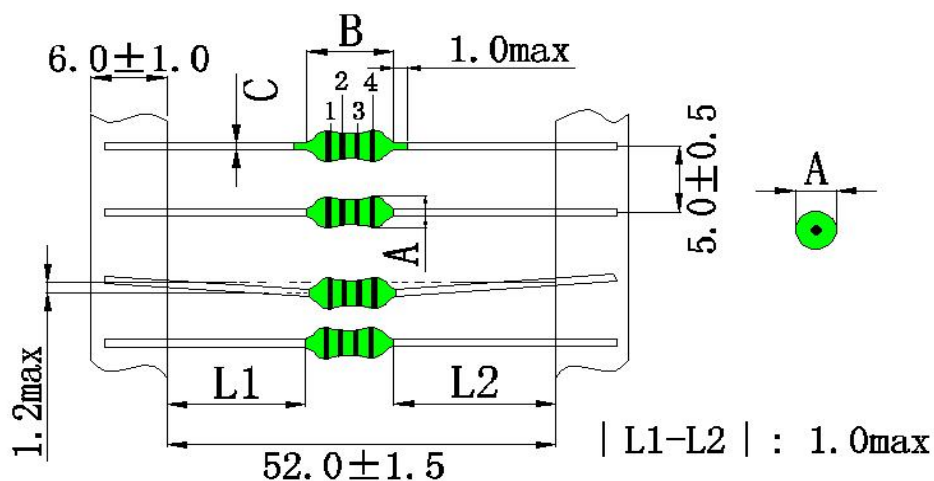
(3)所有的测试资料是在25℃的环境温度下测试. All test data is referenced to 25℃ ambient.

(4)使用温度范围-25℃到+85℃ . Operating Temperature Range-25℃ to +85℃ .

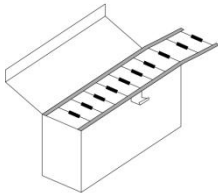
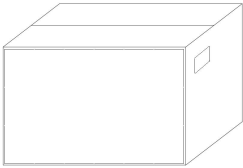
(5)饱和电流: 电感值下降其初始值的10%所加载的实际直流电流值.

Saturation current: the value of DC current when the inductance decrease 10% of its initial value.

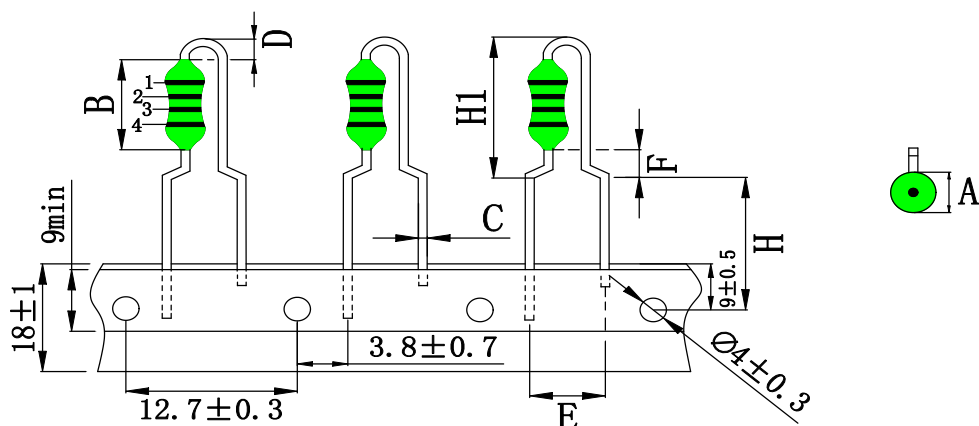
6 外形尺寸和包装 Dimensions and packaging



样式 Style	系列 Type	A	B	C
T52 常规编带	AL0307	3.0 Max	7.0 Max	0.5±0.1
	AL0410	4.0 Max	10.0 Max	0.55±0.1
	AL0508	5.0 Max	8.0 Max	0.6±0.1
	AL0510	5.0 Max	10.0 Max	0.6±0.1
	AL0512	5.0 Max	12.0 Max	0.6±0.1
	AL0514	5.0 Max	14.0 Max	0.6±0.1
	AL0612	6.0 Max	12.0 Max	0.65±0.1

内盒 inner box 25.5*7.5*9.3cm	系列 Type	数量 Quantity	外箱 Outer box 40*27*30cm	系列 Type	数量 Quantity
	AL0307	3000PCS		AL0307	45000PCS
	AL0410	2000PCS		AL0410	30000PCS
	AL0508	1000PCS		AL0508	15000PCS
	AL0510	1000PCS		AL0510	15000PCS
	AL0512	1000PCS		AL0512	15000PCS
	AL0514	1000PCS		AL0514	15000PCS
	AL0612	500PCS		AL0612	7500PCS

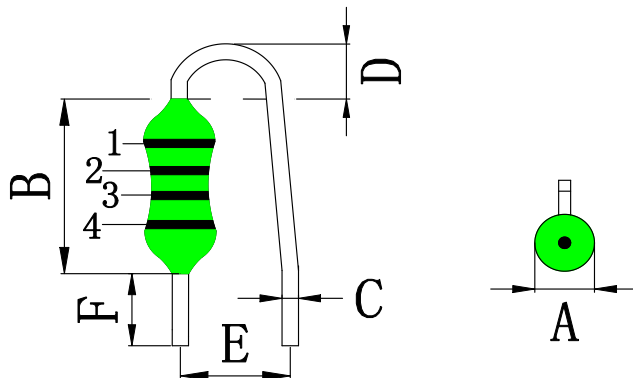
6 外形尺寸和包装 Dimensions and packaging



样式 Style	系列 Type	A	B	C	D	E Typ	F ±0.5	H ±1.0	H1 Typ
TGZ 外 K 脚编带	AL0307	3.0 Max	7.0 Max	0.5±0.1	1.5-3.5	5.0	3.0	17.0	11.0
	AL0410	4.0 Max	10.0 Max	0.55±0.1	1.5-3.5	5.0	3.0	17.0	13.0
	AL0508	5.0 Max	8.0 Max	0.6±0.1	1.5-3.5	5.0	3.0	17.0	11.5
	AL0510	5.0 Max	10.0 Max	0.6±0.1	1.5-3.5	5.0	3.0	17.0	13.0
	AL0512	5.0 Max	12.0 Max	0.6±0.1	1.5-3.5	5.0	3.0	17.0	15.5
	AL0514	5.0 Max	14.0 Max	0.6±0.1	1.5-3.5	5.0	3.0	17.0	17.5
	AL0612	6.0 Max	12.0 Max	0.65±0.1	1.5-3.5	5.0	3.0	17.0	16.0

内盒 inner box 33.2*23.5*5cm	系列 Type	数量 Quantity	外箱 Outer box 50*34.5*27cm	系列 Type	数量 Quantity
	AL0307	3500PCS		AL0307	35000PCS
	AL0410	3000PCS		AL0410	30000PCS
	AL0508	2500PCS		AL0508	25000PCS
	AL0510	2500PCS		AL0510	25000PCS
	AL0512	2500PCS		AL0512	25000PCS
	AL0514	2500PCS		AL0514	25000PCS
	AL0612	2000PCS		AL0612	20000PCS

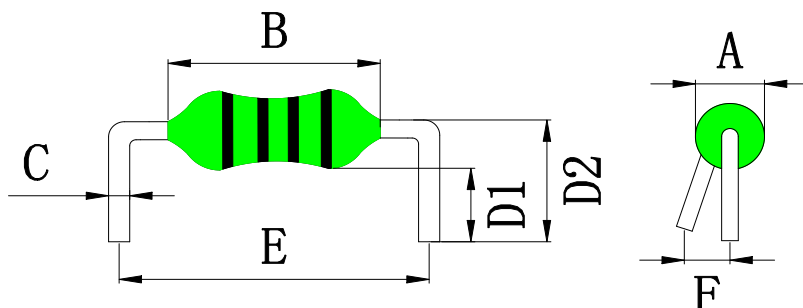
6 外形尺寸和包装 Dimensions and packaging



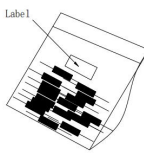
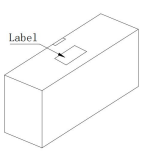
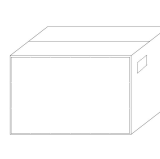
样式 Style	系列 Type	A	B	C	D	E Typ	F Typ
BGF 立式散装	AL0307	3.0 Max	7.0 Max	0.5±0.1	1.5-3.5	5.0	3.5
	AL0410	4.0 Max	10.0 Max	0.55±0.1	1.5-3.5	5.0	3.5
	AL0508	5.0 Max	8.0 Max	0.6±0.1	1.5-3.5	5.0	3.5
	AL0510	5.0 Max	10.0 Max	0.6±0.1	1.5-3.5	5.0	3.5
	AL0512	5.0 Max	12.0 Max	0.6±0.1	1.5-3.5	5.0	3.5
	AL0514	5.0 Max	14.0 Max	0.6±0.1	1.5-3.5	5.0	3.5
	AL0612	6.0 Max	12.0 Max	0.65±0.1	1.5-3.5	5.0	3.5

胶袋 plastic bag 170*135*0.1 mm	系列 Type	数量 Quantity PCS	内盒 inner box 25.5*7.5*9.3 cm	系列 Type	数量 Quantity PCS	外箱 Outer box 40.2*27*21.2 cm	系列 Type	数量 Quantity PCS
	AL0307	1000		AL0307	7000		AL0307	70000
	AL0410	1000		AL0410	4000		AL0410	40000
	AL0508	1000		AL0508	4000		AL0508	40000
	AL0510	1000		AL0510	4000		AL0510	40000
	AL0512	1000		AL0512	4000		AL0512	40000
	AL0514	500		AL0514	2000		AL0514	20000
	AL0612	500		AL0612	2000		AL0612	20000

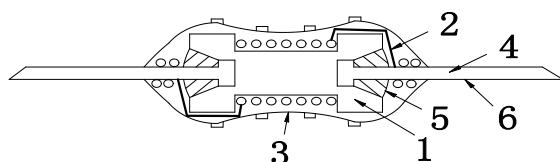
6 外形尺寸和包装 Dimensions and packaging



样式 Style	系列 Type	A	B	C	D1 Typ	D2 Typ	E Typ	F Max
BLU 卧式散装	AL0307	3.0 Max	7.0 Max	0.5±0.1	3.5	5.0	10~15	1.7
	AL0410	4.0 Max	10.0 Max	0.55±0.1	3.5	5.5	12.5~20	1.7
	AL0508	5.0 Max	8.0 Max	0.6±0.1	3.5	6.0	11~20	1.7
	AL0510	5.0 Max	10.0 Max	0.6±0.1	3.5	6.0	12.5~20	1.7
	AL0512	5.0 Max	12.0 Max	0.6±0.1	3.5	6.0	15~20	1.7
	AL0514	5.0 Max	14.0 Max	0.6±0.1	3.5	6.0	17.5~25	1.7
	AL0612	6.0 Max	12.0 Max	0.65±0.1	3.5	6.5	15~20	1.7

胶袋 plastic bag 170*135*0.1 mm	系列 Type	数量 Quantity PCS	内盒 inner box 25.5*7.5*9.3 cm	系列 Type	数量 Quantity PCS	外箱 Outer box 40.2*27*21.2 cm	系列 Type	数量 Quantity PCS
	AL0307	1000		AL0307	7000		AL0307	70000
	AL0410	1000		AL0410	4000		AL0410	40000
	AL0508	1000		AL0508	4000		AL0508	40000
	AL0510	1000		AL0510	4000		AL0510	40000
	AL0512	1000		AL0512	4000		AL0512	40000
	AL0514	500		AL0514	2000		AL0514	20000
	AL0612	500		AL0612	2000		AL0612	20000

7 材料清单 Bill of Materials



序号 N0.	名称 ITEM	材料描述 Material description	制造商 MANUFACTURER	温度/阻燃等级 TEMP.RATING FLAME CLASS	UL NO.
1	磁芯 CORE	NiZn Ferrite core	JIACHENG		
2	漆包线 WIRE	2UEW	JINTIAN	155℃	E227047
3	包封料 COATING	NC-G /LF-01+GH08	HOUDA/QIFU		
4	引脚 PIN	TC	HAOBAI		
5	接脚胶 EPOXY	DZ-6	JINGDINGSHENG		
6	无铅锡 SOLDER	Sn:99.3%/Cu:0.7%	SONGBEN		

8 质量要求 Quality requirements

① 绕线需平整、均匀、紧密，线材不得刮伤受损。

The winding must be smooth, even and tight, and the wire must not be scratched or damaged.

② 引脚沾锡需均匀，光亮，本体无明显外观缺陷。

The pins must be tinned evenly and brightly, and the body must have no obvious appearance defects.

③ 产品生产中必须全数进行电气性能检测。

Electrical performance testing must be carried out on all products during production.

④产品出货前按批次，必须根据承认书按国家行业标准进行抽样检验。

Before the products are shipped, they must be sampled and inspected in batches according to the national industry standards based on the letter of approval.

9 包装 Package

① 包装箱上标明产品型号、名称、数量、出厂日期。

The product model, name, quantity and production date are marked on the packaging box.

② 不同生产周期的同一产品不得放入同一包装箱内。

The same product from different production cycles must not be placed in the same packaging box

③ 货物运达客户方后，包装箱封条应完好，箱体无破损、开裂等现象。

After the goods arrive at the customer, the seal of the packaging box should be intact, and the box should not be damaged or cracked.

④ 开箱后，箱内包装材料无破损。产品应分层、间隔包装，不满一箱应加垫填充物。

After unpacking, the packaging materials in the box should not be damaged. Products should be packed in layers and intervals, and padding should be added if the box is less than one.

10 储存条件/注意的事项 Storage conditions/Note things

① 存储条件：温度-10~40℃ 相对湿度：30~70%。

Storage conditions: temperature -10~40℃, relative humidity: 30~70%.

② 产品在 12 个月内使用(注意:产品一经拆开包装,须尽快使用)。

Products should be used within 12 months.(Note that the product should be used as soon as possible once it is folded) .

③ 禁止将产品保管在腐蚀性物质中，如硫磺，氯气或酸，否则将引起端头氧化，导致降低焊接性。

Do not store the product in corrosive substances such as sulfur, chlorine or acid, otherwise it will cause oxidation of the end and reduce weldability.

④ 为了避免受潮气，灰尘等物质的影响，产品应保管于货架上。

In order to avoid being affected by moisture, dust and other substances, the products should be kept on the shelves.

⑤ 产品保管在库房中，应避免热冲击，振动以及直接光照等。

The products are stored in the warehouse and should be protected from thermal shock, vibration and direct sunlight.

⑥ 当本公司的产品使用在一般电子设备以外的领域时，由此所引发的设备失效我司将不承担任何法律责任。

In case of using the product for the purpose other than general electronics devices, we shall not be held liable for any dysfunctions in or damage to the equipment with which the product is used.

⑦ 本承诺书只保证我司产品作为一个单体时的质量情况，当我司产品被安装到贵司产品上时，请贵司对使用在贵司电路上的产品情况进行了有效评价和确认。

Our specification limits the quality of the component as a single unit. Please ensure the component is thoroughly evaluated in your application circuit.