

## ■ LGA 型色码电感器

### Wire Wound Chip Ceramic Inductors

#### ◆特征 Feature

\* 体积小，感量大，适合自动安装的卷（编）带包装

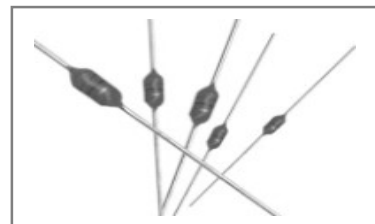
Miniature size, High sensitivity, tape and reel packaging suitable for auto-placement

\*环氧树脂封装，从而具有优良的防潮性能、机械强度及耐热性；

Epoxy resin coating creates excellent performance in humidity resistance, mechanical strength and heat resistance.

\*工业生产标准尺寸及多种脚型产品.

Standard size, various lead configuration.



#### ◆应用 Application

\*一般用途品.

General purpose goods

#### ◆型号表示法 Part Number

LGA	0307	-	220	K	P	52	E	-000
①	②		③	④	⑤	⑥	⑦	⑧

①

产品类别 Product Type	
代号 Code	类别 Type
LGA	LGA 型色码电感器 LGA Type Color Code Inductors

③

标称电感量 Nominal Inductance(μ H)
前两位数字为有效数字，后一位数字表示零的个数 First two digits are signify cant and the thirddigit is number of zeros .例如： For example: 101=100μH 5R6=5.6μH R22=0.22μH

⑤

包装方式 Packaging Style		
编带 Tape	P	盒带包装 Ammo
	T	卷带包装 Reel
散包装 Bulk	F	直脚轴向 Axial
	L	直脚成型 Straight lead formed
	V	弯脚成型 Bent lead formed
	VK	弯脚 K 型 Bentlead K formed

②

本体尺寸代码 Nominal Body Size Code		
类型 Type	外径 Dmax (mm)	体长 Lmax (mm)
0204	2.3	4.2
0307	2.8	7.0
0410	4.0	10.5
0510	5.0	10.5

④

感量偏差 Tolerance
J: ±5% K: ±10% M: ±20%

⑥

引脚形式 Lead configuration		
编带 Tape&rell	26	编带内距：26mm Tape width:26mm
	52	编带内距：52mm Tape width:26mm
	13	立式成型编带 Vertical forming tape 引脚脚距：5.0mm Formed lead pitch:5.0mm
引脚成型 Formed lead	05	引脚脚距：5.0mm Formed lead pitch:5.0 mm
	07	引脚脚距：7.5mm Formed lead pitch:7.5mm
	10	引脚脚距：10.0mm Formed lead pitch:10.0mm
	12	引脚脚距：12mm Formed lead pitch:12mm
	15	引脚脚距：15mm Formed lead pitch:15mm
	17	引脚脚距：17mm Formed lead pitch:17mm
	20	引脚脚距：20mm Formed lead pitch:20mm

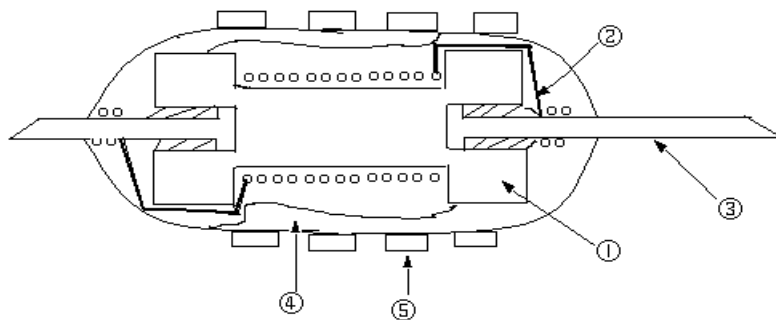
⑦

环保备注 Remark	
E	环保产品 Green Product
空白 Blank	含铅 Lead Contained

⑧

标准代码 Standard code	
空缺-标准品 Vacant-Standard product	
标示-定制品 Indicate-custom product	

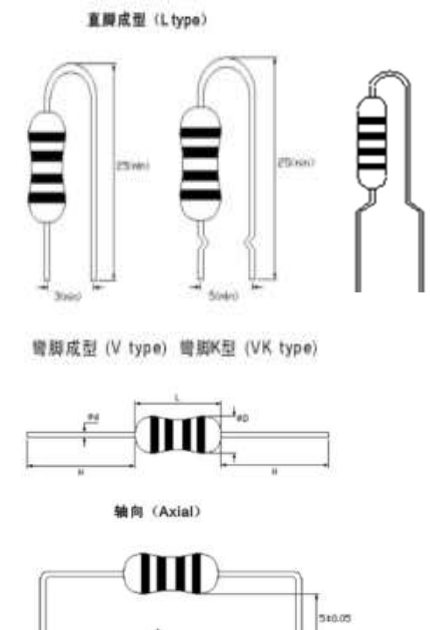
### ◆产品结构 Product Structure



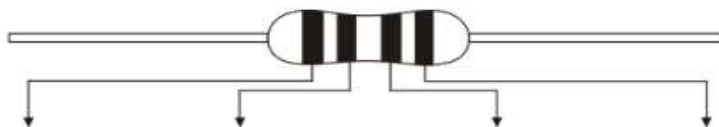
序号 No.	部位 Component	材料 Material
1	磁芯 Core	镍锌铁氧体 Ni-Zn Ferrite
2	漆包线 wire	铜 Cu
3	引脚 Leading	镀锡铜脚 Tinned copper wire
4	涂覆层 Epoxy resin	树脂 Epoxy resin
5	色码 Color code	环氧漆 Epoxy paint

### ◆规格尺寸 Dimension

单位 Unit: mm

Size	ΦD (Max)	L (Max)	t	Φd	H (Max)	直脚成型 (L type) 弯脚成型 (V type) 弯脚K型 (VK type) 轴向 (Axial)
LGA0204	2.3	4.2	按要求定制 Customized according to requirements	0.5±0.05	20	 <p>The drawings show: 1) L-type leads with dimensions 25mm, 30mm, and 50mm. 2) V-type and VK-type leads with dimensions 25mm, 30mm, and 50mm. 3) Axial view with dimensions 5±0.05 and 5±0.05.</p>
LGA0307	2.8	7.0		0.5±0.05		
LGA0410	4.0	10.5		0.60±0.05		
LGA0510	5.0	10.5		0.60±0.05		

### ◆色环标记代码 Marking of Color Code



	标称电感量 Nominal Inductance			感量偏差 Tolerance
	第一色环 1st color zone	第二色环 2nd color zone	第三色环 3rd color zone	第四色环 4color zone
	第一数字 1st digit	第二数字 2nd digit	第三数字 3rd digit	
黑Black	0	0	×100	M±20%
棕Brown	1	1	×101	
红Red	2	2	×102	
橙Orange	3	3	×103	
黄Yellow	4	4	×104	
绿Green	5	5	×105	
蓝Blue	6	6		
紫Purple	7	7		
灰Gray	8	8		
白White	9	9		
金Gold	—	—	×10-1	J±5%
银Silver	—	—	×10-2	K±10%

\*例如：For example

Size LGA0307~ LGA0510标称电感量及偏差为22uH,±5%的电感器其色码为：红+红+黑+金；

If nominal inductance & tolerance is 22uH,±5%, respectively red+red+black+gold should be marked;

标称电感量及偏差为1.0uH,±10%的电感器其色码为：棕+黑+金+银；

If nominal inductance & tolerance is 1.0uH,±10%, respectively brown+black+gold+silver should be marked;

标称电感量及偏差为0.22uH,±20%的电感器其色码为：红+红+银+黑。

If nominal inductance & tolerance is 0.22uH,±20%, respectively red+red+silver+black should be marked;

Size LGA0204由于体长较小只标注前三条代表标称电感量的色码

only the first three color zones are marked on the body of LGA0204,due to the small body size;

标称电感量为22uH的电感器其色码为：红+红+黑；

If nominal inductance is 22uH, respectively red+red+black should be marked;

标称电感量为1.0uH的电感器其色码为：棕+黑+金；

If nominal inductance is 1.0uH, respectively brown+black+gold should be marked;

标称电感量为0.22uH的电感器其色码为：红+红+银。

If nominal inductance is 0.22uH, respectively red+red+silver should be marked;

### ◆工作温度范围 Operating Temperature Range

\*工作温度范围(包括自身发热):(-25~+105)°C。

\*Operating Temperature Range(Including self-heating):(-25~+105)°C.

### ◆电性能参数 Electrical Characteristics

\* 测试条件 Testing conditions

电感量/Q 值 Inductance/ Q: HP4285A、HM9481 电桥或等同测量仪器, 测试电压 1V。HP4285A or HM9481 bridge or equivalent measuring instrument, test voltage 1V.

直流电阻 Rdc: HP4338B、HM2791 或等同测量仪器。HP4338B、HM2791 or equivalent measuring instrument.

规格尺寸 Dimension	电感量 Inductance (μH)	误 差 Tolerance	Q (min)	直流电阻 RDC (Ω) max	测试频率 Test frequency (MHz)	自谐频率 SRF (MHz) min	额定电流 Rated current IDC (mA) max
LGA0204-R22	0.22	M: ±20%	35	0.40	25.2	150	400
LGA0204-R27	0.27			0.43			380
LGA0204-R33	0.33			0.48			370
LGA0204-R39	0.39			0.51			350
LGA0204-R47	0.47			0.56			330
LGA0204-R56	0.56			0.61			320
LGA0204-R68	0.68			0.67			310
LGA0204-R82	0.82			0.74			290
LGA0204-1R0	1.0			0.80			270
LGA0204-1R2	1.2	K: ±10%	40	0.90	7.96	110	260
LGA0204-1R5	1.5			1.0		80	250
LGA0204-1R8	1.8			1.1		60	240
LGA0204-2R2	2.2			1.2		45	230
LGA0204-2R7	2.7			1.3		40	220
LGA0204-3R3	3.3			1.4		38	210
LGA0204-3R9	3.9			1.6		35	200
LGA0204-4R7	4.7			1.7		32	190
LGA0204-5R6	5.6			1.9		30	180
LGA0204-6R8	6.8	2.0		28	175		
LGA0204-8R2	8.2	2.2		26	165		
LGA0204-100	10	2.5		24	160		
LGA0204-120	12	2.5		22	150		
LGA0204-150	15	2.8		20	145		
LGA0204-180	18	3.1		18	140		
LGA0204-220	22	3.4		17	130		
LGA0204-270	27	4.3		16	80		
LGA0204-330	33	4.7		14	76		
LGA0204-390	39	5.2		13	74		
LGA0204-470	47	5.8		12	70		
LGA0204-560	56	6.4		11	68		
LGA0204-680	68	7.2		10	64		
LGA0204-820	82	11.0		9.5	46		
LGA0204-101	100	12.0		9.0	44		
LGA0204-121	120	13.0		8.0	42		
LGA0204-151	150	16.0		6.0	39		
LGA0204-181	180	18.0		5.5	37		
LGA0204-221	220	20.0		5.0	35		

规格尺寸 Dimension	电感量 Inductance (μH)	误 差 Tolerance	Q (min)	直流电阻 RDC (Ω) max	测试频率 Test frequency (MHz)	自谐频率 SRF (MHz) min	额定电流 Rated current IDC (mA) max
LGA0307-R22	0.22	M: ±20%	35	0.40	25.2	150	400
LGA0307-R27	0.27			0.43			380
LGA0307-R33	0.33			0.48			370
LGA0307-R39	0.39			0.51			350
LGA0307-R47	0.47		40	0.56			330
LGA0307-R56	0.56			0.61			320
LGA0307-R68	0.68			0.67			310
LGA0307-R82	0.82			0.74			290
LGA0307-1R0	1.0			0.80			270
LGA0307-1R2	1.2		50	0.90	7.96	144	260
LGA0307-1R5	1.5			1.0		131	250
LGA0307-1R8	1.8			1.1		121	240
LGA0307-2R2	2.2			1.2		110	230
LGA0307-2R7	2.7			1.3		100	220
LGA0307-3R3	3.3			1.4		94	210
LGA0307-3R9	3.9			1.6		65	200
LGA0307-4R7	4.7			1.7		56	190
LGA0307-5R6	5.6			1.9		48	180
LGA0307-6R8	6.8			2.0		37	175
LGA0307-8R2	8.2			2.2		25	165
LGA0307-100	10	2.5		21		160	
LGA0307-120	12	K: ±10%		2.5	2.52	19	150
LGA0307-150	15			2.8		17	145
LGA0307-180	18			3.1		13	140
LGA0307-220	22			3.4		9.6	130
LGA0307-270	27			3.8		7.2	125
LGA0307-330	33			4.1		6.3	120
LGA0307-390	39			4.5		6.3	115
LGA0307-470	47			4.9		6.3	110
LGA0307-560	56	J: ±5%	5.3	6.2		105	
LGA0307-680	68		5.8	5.7		100	
LGA0307-820	82		6.3	5.3		95	
LGA0307-101	100		7.0	4.8		90	
LGA0307-121	120		13.0	0.796	3.8	90	
LGA0307-151	150		15.0		3.5	85	
LGA0307-181	180		16.0		3.3	80	
LGA0307-221	220		17.0		3.0	75	
LGA0307-271	270		19.0		2.8	65	
LGA0307-331	330		20.0		2.6	60	
LGA0307-391	390		22.0		2.4	55	
LGA0307-471	470		24.0		2.25	55	
LGA0307-561	560	26.0	2.10		50		
LGA0307-681	680	28.0	1.95		45		
LGA0307-821	820	30.0	1.85		40		
LGA0307-102	1000		33.0			1.40	40

规格尺寸 Dimension	电感量 Inductance ( $\mu$ H)	误差 Tolerance	Q (min)	直流电阻 RDC ( $\Omega$ ) max	测试频率 Test frequency (MHz)	自谐频率 SRF (MHz) min	额定电流 Rated current IDC (mA) max
LGA0410-R22	0.22	M: $\pm 20\%$	45	0.10	25.2	300	1400
LGA0410-R27	0.27		45	0.11		270	1320
LGA0410-R33	0.33		45	0.12		250	1280
LGA0410-R39	0.39		45	0.13		230	1200
LGA0410-R47	0.47		45	0.14		220	1150
LGA0410-R56	0.56		45	0.15		200	1122
LGA0410-R68	0.68		45	0.16		190	1030
LGA0410-R82	0.82		45	0.17		172	980
LGA0410-1R0	1.0		45	0.19		157	920
LGA0410-1R2	1.2		50	0.21	7.96	144	880
LGA0410-1R5	1.5		50	0.23		131	830
LGA0410-1R8	1.8		55	0.25		121	790
LGA0410-2R2	2.2		55	0.28		110	750
LGA0410-2R7	2.7		60	0.30		100	720
LGA0410-3R3	3.3		65	0.34		94	670
LGA0410-3R9	3.9		65	0.37		65	640
LGA0410-4R7	4.7		70	0.39		56	620
LGA0410-5R6	5.6		70	0.43		48	590
LGA0410-6R8	6.8		75	0.48		37	550
LGA0410-8R2	8.2		80	0.52		25	530
LGA0410-100	10	K: $\pm 10\%$	65	0.58	2.52	21	500
LGA0410-120	12		50	0.63		19	480
LGA0410-150	15		50	0.72		17	460
LGA0410-180	18		50	0.77		13	430
LGA0410-220	22		50	0.84		9.6	410
LGA0410-270	27		55	0.94		7.2	390
LGA0410-330	33		55	1.03		6.3	370
LGA0410-390	39		50	1.12		6.3	350
LGA0410-470	47		45	1.22		6.3	340
LGA0410-560	56	J: $\pm 5\%$	40	1.34		6.2	320
LGA0410-680	68		40	1.47		5.7	305
LGA0410-820	82		35	1.62		5.3	290
LGA0410-101	100		30	1.80		4.8	275
LGA0410-121	120		55	3.70	0.796	3.8	185
LGA0410-151	150		45	4.20		3.5	175
LGA0410-181	180		50	4.60		3.3	165
LGA0410-221	220		55	5.10		3.0	155
LGA0410-271	270		65	5.80		2.8	145
LGA0410-331	330		65	6.40		2.6	137
LGA0410-391	390		65	7.00		2.4	133
LGA0410-471	470		60	7.70		2.25	126
LGA0410-561	560		60	8.50		2.10	120
LGA0410-681	680		55	9.40		1.95	113
LGA0410-821	820		55	10.50		1.85	105
LGA0410-102	1000		50	14.00		1.40	100

规格尺寸 Dimension	电感量 Inductance ( $\mu$ H)	误 差 Toleran ce	Q ( min )	直流电阻 RDC ( $\Omega$ ) max	测试频率 Test frequency (MHz)	自谐频率 SRF (MHz) min	额定电流 Rated current IDC (mA) max
LGA0510-2R2	2.2	M: $\pm 20\%$	40	0.28	7.96	7.8	175
LGA0510-5R6	5.6			0.43		6.5	170
LGA0510-100	10			0.58	2.52	5.5	165
LGA0510-150	15			0.72		4.5	160
LGA0510-330	33			1.03		4.2	156
LGA0510-470	47			1.22		4.0	152
LGA0510-820	82			1.62		3.8	148
LGA0510-101	100			1.80	0.796	3.5	145
LGA0510-151	150		4.80	3.0		140	
LGA0510-221	220		5.10	2.8		135	
LGA0510-271	270	5.80	2.5	133			
LGA0510-301	300	6.80	2.2	130			
LGA0510-471	470	7.70	1.9	126			
LGA0510-501	500	8.10	1.8	123			
LGA0510-561	560	K: $\pm 10\%$	50	8.50		0.252	1.8
LGA0510-681	680		55	9.00	1.5		113
LGA0510-821	820		45	10.5	1.2		105
LGA0510-102	1000			14.0	1.0		100
LGA0510-122	1200		40	16.9	0.95		95
LGA0510-152	1500			21.6	0.90		90
LGA0510-182	1800			24.0	0.85		85
LGA0510-202	2000			30.0	0.80		83
LGA0510-222	2200			34.7	0.80		80
LGA0510-272	2700			40.0	0.75		75
LGA0510-302	3000	45.0		0.75	73		
LGA0510-312	3100	50.0		0.70	70		
LGA0510-332	3300	59.5		0.70	62		
LGA0510-392	3900	66.0		0.65	59		
LGA0510-472	4700	74.0		0.60	55		
LGA0510-562	5600	J: $\pm 5\%$	30	80.0	0.252	0.50	40
LGA0510-682	6800			85.0		0.45	35
LGA0510-822	8200			95.0		0.40	30

\*额定电流：电感值变化 10%、温升 40℃ 以内的最大直流电流。

Rated current: Applied maximum DC current with inductance variation of 10% and surface temperature rise within 40 °C

\*介质耐压：在外封和引线间施加直流电压 500V，持续 60 秒。外观无可见损伤、引线不断

Dielectric withstand voltage: Apply a DC voltage of 500V between the outer and the lead for 60 seconds. No visible damage and no lead wires broken.

\*可根据客户需求做定制产品。Note: Customized products can be made according to customer needs.

**◆可靠性测试方法 Reliability Test Method**

序号 No.	项目 Item	要求 Requirements	试验条件及方法 Test methods and remarks
1	绝缘电阻 Insulation resistance	$IR \geq 100M\Omega$	在外包封和引线间施加直流电压 500V, 持续 60 秒。 Apply 500VDC between outer coating and terminal for 60sec.
2	标记耐溶剂性 Resistance to solvent	标志无可见损伤 There shall be no evidence of damage	溶剂温度: $25 \pm 5^{\circ}\text{C}$ Solvent temperature: $25 \pm 5^{\circ}\text{C}$ 将棉球和样品浸在溶剂中 1min, 在样品有标志部位用棉球擦 3 次。 There shall be put the cotton ball and sample steep in dissolvent 1min, at sample's notation area brush 10 times, repeat 3 times
3	引出端强度 Terminal strength	外观无可见损伤、引线不断 There shall be no evidence of damage during the test and the lead no breakage.	LGA0204 $\geq 1.8$ Kg LGA0307 $\geq 2.3$ Kg LGA0410 $\geq 2.8$ Kg LGA0510 $\geq 3.0$ Kg
4	可焊性 Solder ability	引线的表面圆周覆盖率不小于 95% Leads shall be at least 95% areas covered with a new solder coating.	在 $245 \pm 5^{\circ}\text{C}$ 熔融的焊锡中浸置 $3.0s \pm 0.5s$ Dip pads in flux and dip in solder pot at $235 \pm 5^{\circ}\text{C}$ for $3.0 s \pm 0.5$ seconds.
5	耐焊接热 Resistance to soldering heat	1.外观无明显损伤 2.电感量变化率: $-5\% \leq \Delta L/L \leq 5\%$ 3.Q 值变化率: $-20\% \leq \Delta Q/Q \leq 20\%$ 1.No visible mechanical damage. 2. Inductance change: $-5\% \leq \Delta L/L \leq 5\%$ 3.Q change: $20\% \leq \Delta Q/Q \leq 20\%$	焊锡温度: $260 \pm 5^{\circ}\text{C}$ 浸锡时间: $10 \pm 1s$ 恢复时间: 1~2 小时 Tin review: $260 \pm 5^{\circ}\text{C}$ Duration: $10 \pm 1s$ Recovery: 1~2hours
6	耐低温 Low Temperature Resistance e	1.外观无明显损伤 2.电感量变化率: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q 值变化率: $-30\% \leq \Delta Q/Q \leq 30\%$ 1.No visible mechanical damage. 2. Inductance change: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q change: $30\% \leq \Delta Q/Q \leq 30\%$	元件置于温度 $-25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 的环境中存放 96h, 试验完成后, 取出元件置于常温、常湿环境中放置 $24h \pm 2h$ 。Place the components under $-25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ conditions for 96h measure at $24h \pm 2h$ after test conclusion.
7	耐高温 High Temperature Resistance	1.外观无明显损伤 2.电感量变化率: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q 值变化率: $-30\% \leq \Delta Q/Q \leq 30\%$ 1.No visible mechanical damage. 2. Inductance change: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q change: $30\% \leq \Delta Q/Q \leq 30\%$	元件置于温度 $105^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 的环境中存放 96 h, 试验完成后, 取出元件置于常温、常湿环境中放置 $24h \pm 2h$ 。Place the components under $105^{\circ}\text{C} \pm 2^{\circ}\text{C}$ conditions for 96h, measure at $24h \pm 2h$ after test conclusion.

8	恒定湿热 Static Humidity	1.外观无明显损伤 2.电感量变化率: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q 值变化率: $-30\% \leq \Delta Q/Q \leq 30\%$ 1.No visible mechanical damage. 2. Inductance change: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q change: $30\% \leq \Delta Q/Q \leq 30\%$	元件置于恒温、恒湿的试验箱中, 按以下条件试验: 温度: $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 相对湿度: 90%~95% RH 试验时间: 500 h $\pm$ 2 h 试验完成后, 取出元件置于常温、常湿环境中放置 24 h $\pm$ 2 h。 Place the components in box with constant temp and humidity conditions: Temp: $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Relative Humidity: 90%~95% RH Duration: 500 h $\pm$ 2 h measure at 24 h $\pm$ 2 h after test conclusion.
9	温度循环 Temperature Cycling	1.外观无明显损伤 2.电感量变化率: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q 值变化率: $-30\% \leq \Delta Q/Q \leq 30\%$ 1.No visible mechanical damage. 2. Inductance change: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q change: $30\% \leq \Delta Q/Q \leq 30\%$	-25 $^{\circ}\text{C}$ 环境 30min $\leftrightarrow$ +105 $^{\circ}\text{C}$ 环境 30min, 循环 32 次, 转换时间 < 5min, 循环结束后常温下放置 24h $\pm$ 2h。 Cycling 32 times from -40 $^{\circ}\text{C}$ of 30min $\leftrightarrow$ +105 $^{\circ}\text{C}$ of 30min, transition time < 5min, then place at room temperature for 24h $\pm$ 2h.
10	高温负载 (工作寿命) Hi-Temp (Operation life)	1.外观无明显损伤 2.电感量变化率: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q 值变化率: $-30\% \leq \Delta Q/Q \leq 30\%$ 1.No visible mechanical damage. 2. Inductance change: $-10\% \leq \Delta L/L \leq 10\%$ 3.Q change: $30\% \leq \Delta Q/Q \leq 30\%$	元件置于老化试验箱中, 按以下条件试验: 温度: $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 施加额定的直流电流 试验时间: 1000 h 试验完成后, 取出元件置于常温、常湿环境中放置 24 h $\pm$ 2 h。 Place the components in the aging box: Temp: $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Apply current Duration: 1000 h measure at 24 h $\pm$ 2 h after test conclusion.
11	振动 Vibration	1.外观无异常 2.电气性能符合要求 1. No visible damage 2. Electrical performance meets the requirements	振幅 1.5mm, 频率 10Hz ~ 55Hz ~ 10Hz (1 min.), 每个方向(X、Y、Z)保持 2 小时。 Frequency 10Hz to 55Hz to 10Hz in a period of 1 minute. for 2h in each of three(X、Y、Z) axes.
12	跌落 Drop	1.外观无异常 2.电气性能符合要求 1. visible damage 2. Electrical performance meets the requirements	条件: 1m 高度自由落下, 3 次水泥地。 Condition: Drop from 1mH to cement floor(3 times)

备注: 1. 如无特别指定时, 电性能测试应在常温、常湿中恢复 1~2 小时, 然后立即测试。

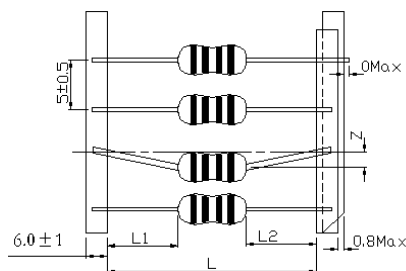
2. 若测试结果有争议时, 仲裁试验结果用标准大气条件为: 温度:  $25 \pm 1^{\circ}\text{C}$ , 相对湿度 48%~52%。

Note: 1. In the event of no special requirement, the measurement shall be conducted immediately after a recovery of 1~2 hours under the standard condition.

2. In the event of any dispute, the standard condition for arbitration shall be as follows:  $25 \pm 1^{\circ}\text{C}$  of temperature, 48%~52% RH .

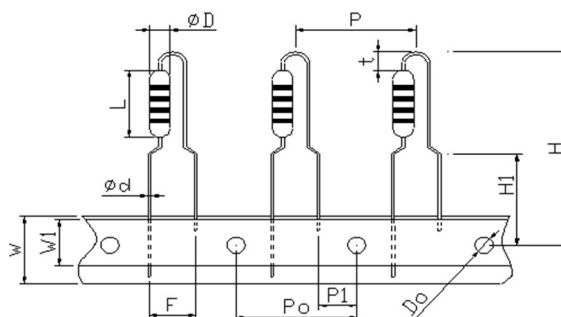
# ◆包装 Packaging

\*编带尺寸 Taping dimensions (单位 UNIT: mm)



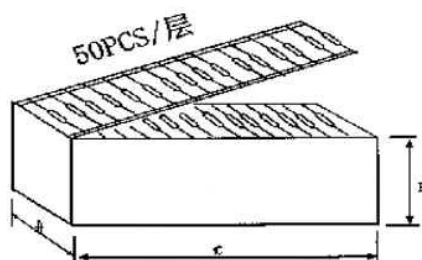
编带方式 Tape style	L	Z	L1-L2
编带内距:26 Tape width	26±1.0	0.8 Max	1.0 Max
编带内距:52 Tape width	52 <sup>+2.0</sup> <sub>-1.0</sub>	1.2 Max	

\*成型编带包装 Forming and Taping Pack

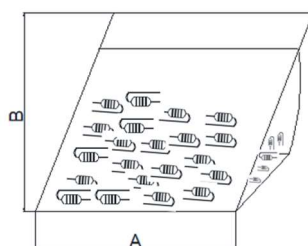


SYMBOL	DIMENSION	SYMBOL	DIMENSION
P	12.7±1.0	H	30.5(Max)
P0	12.7±0.3	H1	15.5 (Min)
P1	3.85±0.7	W	18±1.0
F	5.0±0.5	W1	8.0(Min)
Do	4.0±0.2	t	2.0Min
L	7.0/10.5 /10.5MAX	Φd	0.60±0.05
ΦD	2.8/4.0/5.0MAX		

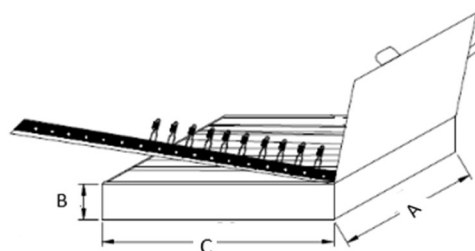
\*直脚编带盒装（产品默认包装方式）Ammunition Pack（Package Defaults）



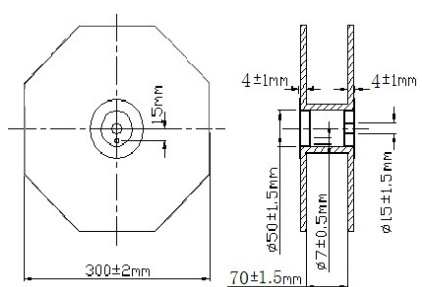
\*散装 Bulk



\*成型编带尺寸 Forming and Taping dimensions



\*卷带包装尺寸 Tape & reel packaging dimensions



编带类型 Tape type	尺寸 Dimensions (±5mm)		
	A	B	C
LGA0204-P52	75	60	255
LGA0307-P52	75	60	255
LGA0410 -P52	75	93	255
LGA0510 -P52	75	73	265
P26	45	105	255
P13	215	45	340
散装 Bulk	150	160	/

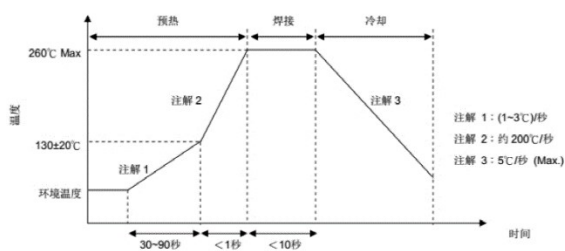
\*包装数量 (单位: 粒) Packaging number (Unit: Pcs )

类型 Size	包装方式 & 每盒数量 Packaging style & Per Box			
	盒带包装 Ammo	散包装 Bulk	卷带包装 Tape & reel	成型编带包装 Forming and Taping Pack
LGA0204	3000	1000	/	/
LGA0307	2000	1000	4000	4000
LGA0410	2000	1000	3000	3000
LGA0510	1000	1000	2500	2500

### ◆推荐焊接条件 Recommended Soldering Conditions

\*本产品建议使用波峰焊接法。Applicable soldering process to the products is reflow soldering.

\* 焊接曲线 Soldering Profile



\* 烙铁焊接 Soldering Iron

使用烙铁进行返修时要求在 150°C 下预热至少 1 分钟, 不能直接用焊头接触磁体, 返修焊接条件如下:

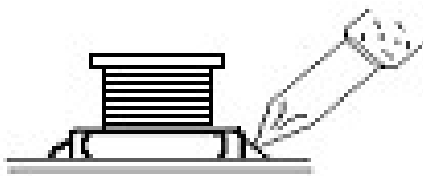
Reworking with Soldering Iron must preheating at 150°C for 1 minute is required, and do not directly touch the core with the tip of the soldering iron. The reworking soldering conditions are as follows:

烙铁头温度: Temperature of soldering iron tip: 350°C;

烙铁输出功率: Soldering iron power output: 30W max.

烙铁头直径: ≤1.0mm Diameter of soldering iron end: 1.0mm max.

焊接时间: Soldering time: within 3 sec.



## ◆贮存方法 Storage Methods

### \*存储期限 Storage Period

为保证端子电极的焊接特性和包装材料处于良好状态，请于本公司发货后 6 个月内使用本产品。同时，由于端子电极的焊接特性会随时间发生变化，如果贮存时间超过 6 个月，请首先确认其焊接特性后再安装使用。

To maintain the solderability of terminal electrodes and to keep the packing material in good condition, product should be used within 6 months from the time of delivery. And the solderability of products electrodes may decrease as time passes, so in case of storage over 6 months, solderability shall be checked before actual usage.

### \*存储条件 Storage Conditions

存放货物的仓库应满足以下条件: The warehouse must meet with the following condition:

温度(Temperature): Inductors (product with taping): (+5~+35)°C;

相对湿度(Humidity): (30~70)%RH.

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。Don't keep products in corrosive gases such as sulfur, chlorine gas or acid, or it may cause oxidization of Electrodes resulting in poor solder ability.

\* 为了避免受潮气、灰尘等物质的影响，产品应保管于货架上。

Products should be stored on the palette for the prevention of the influence from humidity, dust and so on.

\* 产品保管在库房中，应避免热冲击、振动以及直接光照等等。

Products should be stored in the warehouse without heat shock, vibration, direct sunlight and so on.

\* 产品应密封包装。

Products should be stored under the airtight packaged condition.

## ◆使用注意事项 Precautions For Use

\* 本公司产品适用于 AV 设备、OA 设备、家电、信息服务等一般电子设备中。

Our products are designed and promoted for use in general electronic devices such as audio-video equipment, office automation equipment, home appliance and information service.

\* 当本公司的产品使用在一般电子设备以外的领域时，对于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.

\* 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.

\* 不要对产品施加过大的振动或机械冲击；

Do not apply excessive vibration or mechanical shock to products.

\* 为防止断线，请不要使用锋利的物体接触线圈，如镊子

Do not touch wire with sharp objects such as tweezers to prevent wire breakage.

在产品贴装时不要使用过大的压力，避免磁芯断裂。

Do not apply excessive stress to products mounted on boards to prevent core breakage

[illegible]

Note: The above content is the specification of products. Fenghua reserves the right to modify this content without prior notice, and any product changes will be notified to customers via PCN.