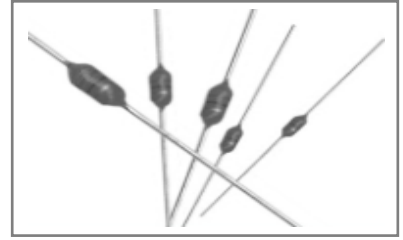


LGA
LGA Type Color Code Inductors



Feature

- * Miniature size, High sensitivity, tape and reel packaging suitable for auto-placement.
- * Epoxy resin coating creates excellent performance in humidity resistance, mechanical strength and heat resistance.
- * Standard size, various lead configuration.

Application

- * 554658C Au QD Type



LGA	LGA LGA Type Color Code Inductors

B:

Nominal Body Size Code		
Type	Dmax (mm)	Lmax (mm)
0204	2.3	4.2
0307	2.8	7.0
0410	4.0	10.5
0510	5.0	10.5
0512	5.0	12.0

C:

Nominal Inductance(μ H)
First two digits are signify cant and the thirddigit is number of zeros . For example: 101=100 μ H 5R6=5.6 μ H R22=0.22 μ H

D:

Tolerance	
J	$\pm 5\%$
K	$\pm 10\%$
M	$\pm 20\%$

E

Packaging Style		
Tape	P	Ammo
	T	Reel
Bulk	F	Axial
	L	Straight lead formed
	V	Bent lead formed
	VK	K Bentlead K formed

F

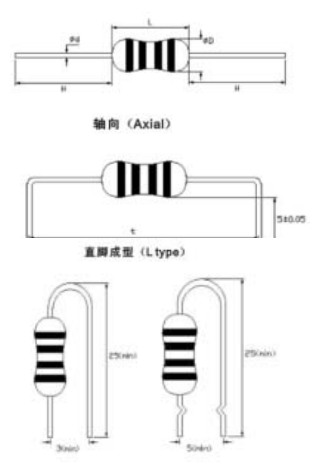
Lead configuration		
Tape&rell	26	26mm Tape width:
	52	52mm Tape width:
	13	Vertical forming tape
Formed lead	05	5.0mm Formed lead pitch:
	07	7.5mm Formed lead pitch:
	10	10.0mm Formed lead pitch:
	12	12mm Formed lead pitch:
	15	15mm Formed lead pitch:
	17	17mm Formed lead pitch:
	20	20mm Formed lead pitch:

G

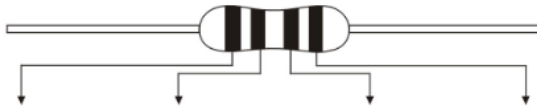
Remark	
E	Green Product
Blank	Lead Contalned

Size code,

Type	Dimensions(mm)				
	D	L	t	D	H
LGA0204	2.3	4.2	Customized according to requirements	0.5± 0.05	20
LGA0307	2.8	7.0			
LGA0410	4.0	10.5		0.6± 0.05	
LGA0510	5.0	10.5			
LGA0512	5.0	12.5			



Marking of Color Code



	Nominal Inductance			Tolerance
	1st color zone	2nd color zone	3rd color zone	4th color zone
	1st digit	2nd digit	3rd digit	
Black	0	0	$\times 10^0$	$M \pm 20\%$
Brown	1	1	$\times 10^1$	
Red	2	2	$\times 10^2$	
Orange	3	3	$\times 10^3$	
Yellow	4	4	$\times 10^4$	
Green	5	5	$\times 10^5$	
Blue	6	6		
Purple	7	7		
Gray	8	8		
White	9	9		
Gold	—	—	$\times 10^{-1}$	$J \pm 5\%$
Silver	—	—	$\times 10^{-2}$	$K \pm 10\%$

* For example

$$22\mu\text{H} \pm 5\% \quad + + +$$

 If nominal inductance & tolerance is $22\mu\text{H}$, $\pm 5\%$, respectively, red+red+black+gold should be marked

LGA0204

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

Electrical Characteristics&Test Conditions

LGA0204

LGA0204 Type Inductors Electrical Characteristics&Test Conditions

LGA0204 Type	Inductance μH	Tolerance	Q min	RDC max	Test frequency MHz	SRF MHz min	Rated current IDC mA max
LGA0204-R22	0.22	M $\pm 20\%$	35	0.40	25.2	150	400
LGA0204-R27	0.27			380			
LGA0204-R33	0.33			370			
LGA0204-R39	0.39			350			
LGA0204-R47	0.47			330			
LGA0204-R56	0.56			320			
LGA0204-R68	0.68			310			
LGA0204-R82	0.82			290			
LGA0204-1R0	1.0			270			
LGA0204-1R2	1.2			260			
LGA0204-1R5	1.5	K $\pm 10\%$	40	1.0	7.96	80	250
LGA0204-1R8	1.8			60		240	
LGA0204-2R2	2.2			45		230	
LGA0204-2R7	2.7			40		220	
LGA0204-3R3	3.3			38		210	
LGA0204-3R9	3.9			35		200	
LGA0204-4R7	4.7			32		190	
LGA0204-5R6	5.6			30		180	
LGA0204-6R8	6.8			28		175	
LGA0204-8R2	8.2			26		165	
LGA0204-100	10	24	160				
LGA0204-120	12	J $\pm 5\%$	40	2.5	2.52	22	150
LGA0204-150	15			20		145	
LGA0204-180	18			18		140	
LGA0204-220	22			17		130	
LGA0204-270	27			16		80	
LGA0204-330	33			14		76	
LGA0204-390	39			13		74	
LGA0204-470	47			12		70	
LGA0204-560	56			11		68	
LGA0204-680	68			10		64	
LGA0204-820	82	9.5	46				
LGA0204-101	100	9.0	44				
LGA0204-121	120	8.0	42				
LGA0204-151	150	0.796	16.0	6.0	39		
LGA0204-181	180		18.0	5.5	37		
LGA0204-221	220		20.0	5.0	35		

LGA0307
LGA0307 Type Inductors Electrical Characteristics & Test Conditions

LGA0307 Type	Inductance μH	Tolerance	Q min	RDC max	Test frequency MHz	SRF MHz min	Rated current IDC mA max		
LGA0307-R22	0.22	M $\pm 20\%$	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		K $\pm 10\%$	50	0.80	7.96	144	270	
LGA0307-1R2	1.2				0.90			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	J $\pm 5\%$		50	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		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		0.796	50	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				

LGA0410
LGA0410 Type Inductors Electrical Characteristics & Test Conditions

LGA0410 Type	Inductance μH	Tolerance	Q min	RDC max	Test frequency MHz	SRF MHz min	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		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	65	0.58	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	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	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		

LGA0510

LGA0510 Type Inductors Electrical

LGA0510 Type	Inductance μH	Tolerance	Q min
LGA0510-2R2	2.2		40
LGA0510-5R6	5.6		
LGA0510-100	10		
LGA0510-150	15		
LGA0510-330	33		
LGA0510-470	47		
LGA0510-820	82		
LGA0510-101	100		
LGA0510-151	150		
LGA0510-221	220		
	270	M $\pm 20\%$	60

K
 $\pm 10\%$

J
 $\pm 5\%$

LGA0512
LGA0512 Type Inductors Electrical Characteristics & Test Conditions

LGA0510 Type	Inductance μH	Tolerance	Q min	RDC max	Test frequency MHz	SRF MHz min	Rated current IDC mA max
LGA0510-103	10000	M $\pm 20\%$	20	105.0	0.0796	0.35	25
LGA0510-123	12000			110.0		0.32	23
LGA0510-153	15000			115.0		0.30	20
LGA0510-183	18000			120.0		0.30	20
LGA0510-203	20000	K $\pm 10\%$		125.0		0.30	20
LGA0510-223	22000			130.0		0.30	20
LGA0510-253	25000			135.0		0.30	20
LGA0510-263	26000			140.0		0.30	20
LGA0510-273	27000	J $\pm 5\%$		145.0		0.30	20
LGA0510-823	82000			150.0		0.25	15

Reliability Test Method

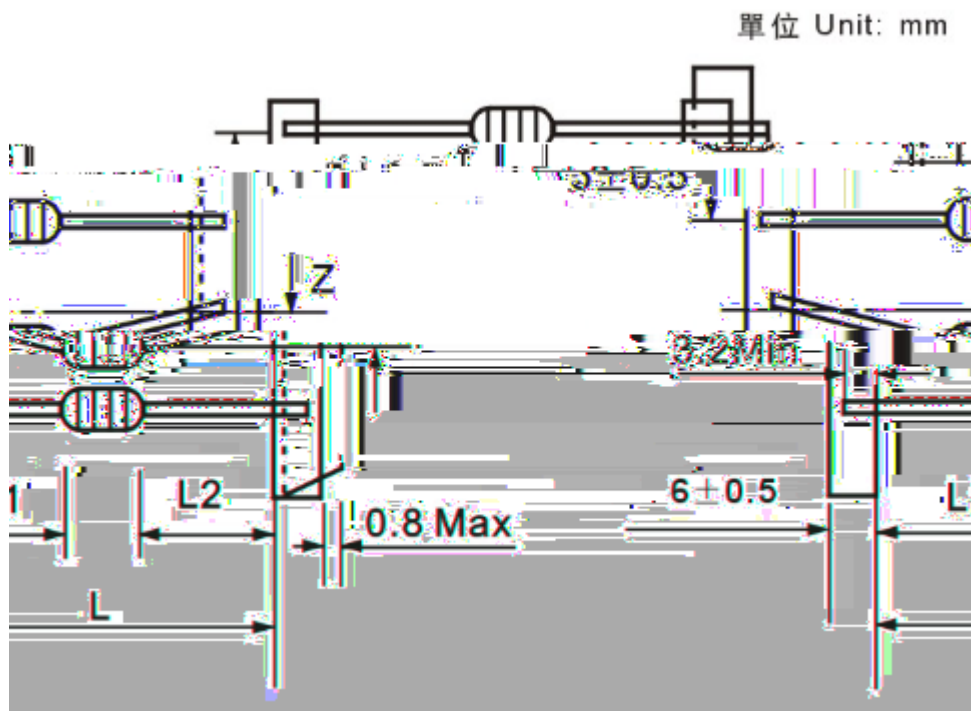
Group	Test items	Site

2		Salt spray test	<div style="display: flex; justify-content: space-around;"> 5min 2h </div> <p>Neutral salt spray, test solution is 5% sodium chloride solution, continuous spray for 24h, after the test, deionized water is washed for 5min and dried, and observation is conducted after recovery for 2h at room temperature</p>	<p>After the test, the outer surface of inductor core pin shall be free of rust</p>
	2.6	Terminal tensile strength	tensimeter	<p>LGA0204≥1.8Kg LGA0307≥2.3Kg LGA0410≥2.8Kg LGA0510≥3.0Kg</p>

	2.12	Low temperature resistance	-25 ± 2 Temperature test degree: -25 ± 2 1000 h Test time: 1000 h 24 h \pm 2 h Recovery time: 24 h \pm 2 h	
	2.13	Vibration	10HZ-50HZ Frequency range: 10HZ-50HZ 1.5mm Full amplitude: 1.5mm 20 Duration: 20 scanning cycles	

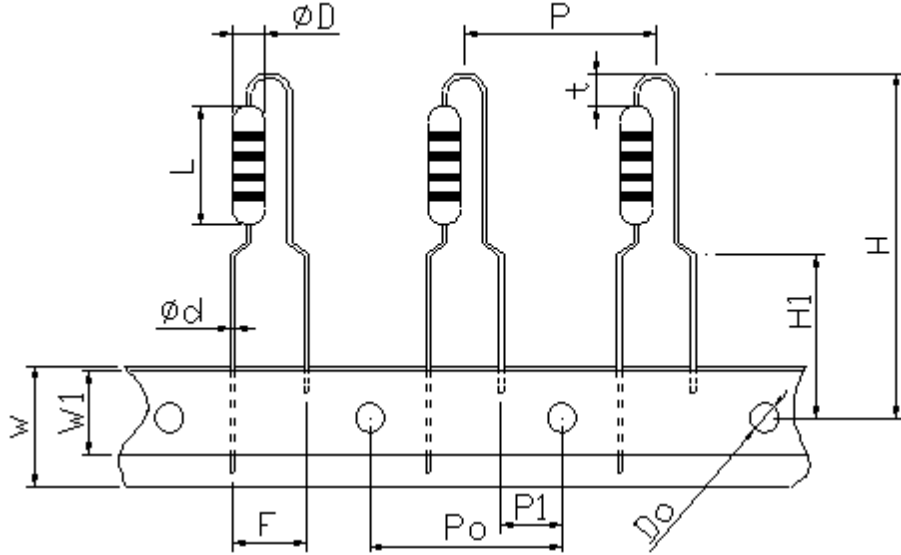
Packaging Style

*
Taping Dimensions



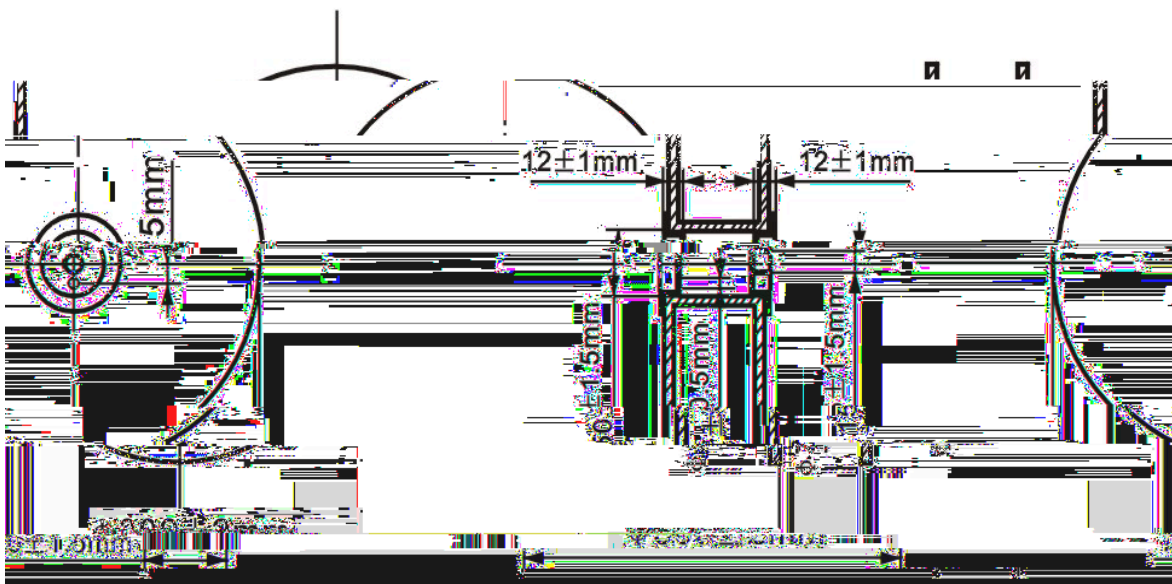
Tape style	L	Z	L1-L2
:26	26 \pm 1.0	0.8Max	1.0Max
:52	52 \pm 1.0	1.2Max	

*
Horizontal and vertical braiding size



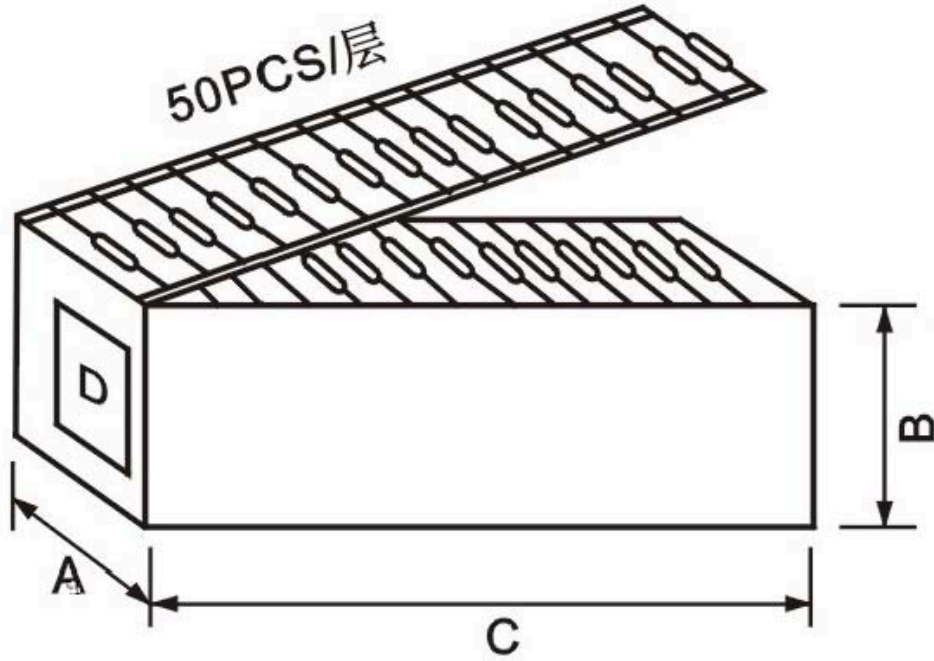
SYMBOL↕	DIMENSION↕		SYMBOL↕	DIMENSION↕
P↕	12.7±1.0↕	↕	H↕	30.0(Max)↕
P0↕	12.7±0.3↕		H1↕	16~18↕
P1↕	3.85±0.7↕		W↕	18±1.0↕
F↕	5.0±0.5↕		W1↕	8.0(Min)↕
Do↕	4.0±0.2↕		t↕	2.0Min↕
L↕	10.5 MAX↕		∅d↕	0.58±0.05↕
∅D↕	4.0 MAX↕		↕	↕

*
Tape & Reel Packaging Dimensions



*

Ammo Packaging Dimensions



*

Packaging Quantity

Unit: pcs

	Packaging style			
LGA0204	3000	1000	5000	/
LGA0307	2000	1000	4000	4000
LGA0410	2000	1000	3000	3000
LGA0510	1000	1000	2500	2500
LGA0512	1000	1000	2500	2500