

## AL Series



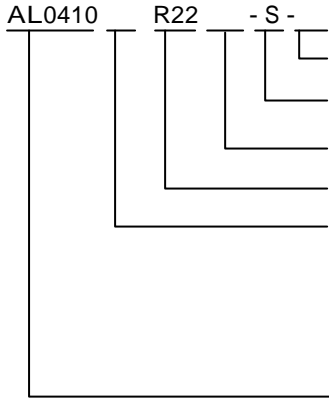
### Features

- Design to be compact, small and light-weight
- Wide range of inductance
- Contribute to be high Q and self-resonant frequencies
- Tapping type that is convenient for automatic insertion
- Coating epoxy resin that ensure the humidity resistance to be long life

### Applications

For VCRs, color TVs, CRTs, stereo, car radios and radio transceivers, telephone answering, disk drivers, personal computers and industrial, electronics products, etc.

### Product Identification

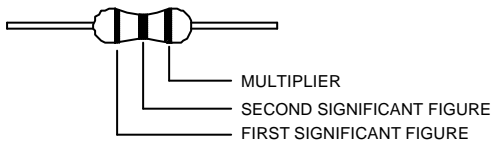


AL0410: Product Symbol (AL0204.AL0307,AL0410,AL0510)  
 R22: Inductance  
 - S -: Tapping pack  
 S: bulk  
 ST: Tapping pack  
 B: bended legs  
 A: AVI Type  
 AT: AVI Tapping Type  
 PT: PANA Tapping Type  
 Tolerance (J: ±5%, K: ±10%, M: ±20%)  
 CLS Standard  
 Ammunition pack (A:26.5, B:52.4)

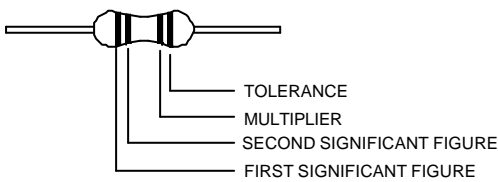
△: (S: bulk ST: Tapping pack B: bended legs A: AVI Type AT: AVI Tapping Type PT: PANA Tapping Type)  
 □: Tolerance (J: ±5%, K: ±10%, M: ±20%)  
 ▽: Ammunition pack (A: 26.5, B: 52.4)

### Color Cording

#### AL0204 Series



#### AL0307/ 0410/ 0510 Series



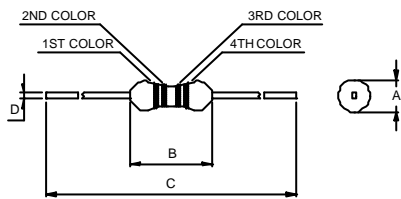
The Nominal Inductance is Marked.

By A Color Code As Listed In Table Belo

Color	Nominal Inductance (mH)			Tolerance
	First Figure	Second Figure	Magnification/*	
Black	0		1	±20%
Brown	1		10	-
Red	2		100	-
Orange	3		1000	-
Yellow	4		-	-
Green	5		-	-
Blue	6		-	-
Purple	7		-	-
Gray	8		-	-
White	9		-	-
Gold	-		0.1	±5%
Silver	-		0.01	±10%

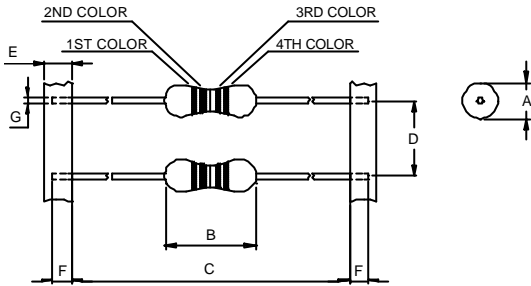
- CHILISIN has released lead-free products which are RoHS compliant, and the part number of lead-free products will be added "-N" after original one as identification.  
Ex: AL0204 △ R22 □-S-▽-N.
- L.Q: HP4285+HP42851A
- SRF: HP4287ASRF
- RDC: CHEN HWA502BC
- IDC: CHEN HWA CH1061+301A

Shapes and Dimensions



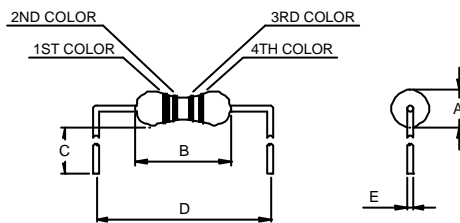
Dimension in mm

	AL0204S	AL0307S	AL0410S	AL0510S
A	2.3 <sup>+0</sup>	3 <sup>+0</sup>	4 <sup>+0</sup>	4.5 <sup>+0</sup>
B	4 <sup>+0</sup>	7 <sup>+0</sup>	10.5 <sup>+0</sup>	10.5 <sup>+0</sup>
C	62±3			
D	0.5Ø	0.5Ø	0.65Ø	



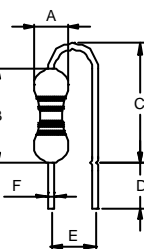
Dimension in mm

	AL0204ST	AL0307ST	AL0410ST	AL0510ST
A	2.3 <sup>+0</sup>	3 <sup>+0</sup>	4 <sup>+0</sup>	4.5 <sup>+0</sup>
B	4 <sup>+0</sup>	7 <sup>+0</sup>	10.5 <sup>+0</sup>	10.5 <sup>+0</sup>
C	52.4±1.5			
D	5±0.5			
E	6±1			
F	3.2 <sup>-0</sup>			
G	0.5Ø	0.5Ø	0.65Ø	



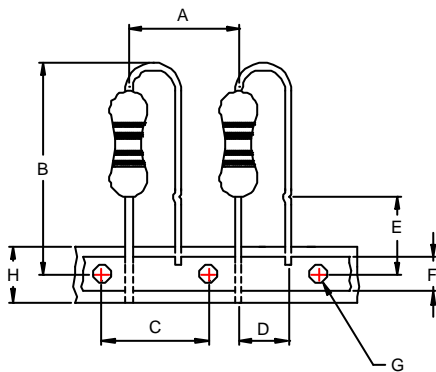
Dimension in mm

	AL0204B	AL0307B	AL0410B	AL0510B
A	2.3 <sup>+0</sup>	3 <sup>+0</sup>	4 <sup>+0</sup>	4.5 <sup>+0</sup>
B	4 <sup>+0</sup>	7 <sup>+0</sup>	10.5 <sup>+0</sup>	10.5 <sup>+0</sup>
C	6±1			
D	10±1		12.5±1	
E	0.5Ø	0.5Ø	0.65Ø	



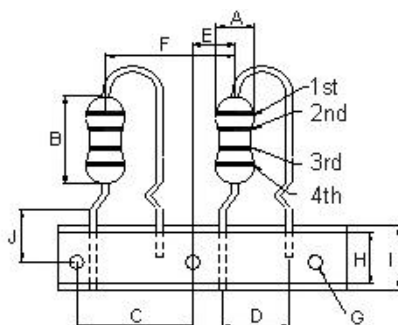
Dimension in mm

PART	AL0204A	AL0307A	AL0410A	AL0510A
A	2.3 <sup>+0</sup>	3 <sup>+0</sup>	4 <sup>+0</sup>	4.5 <sup>+0</sup>
B	4 <sup>+0</sup>	7 <sup>+0</sup>	10.5 <sup>+0</sup>	10.5 <sup>+0</sup>
C	14 <sup>+0</sup>			
D	6±1			
E	5±1.5			
F	0.5Ø	0.5Ø	0.65Ø	



Dimension in mm

	AL0204AT	AL0307AT	AL0410AT	AL0510AT
A	12.7±1			
B	32 <sup>+0</sup>			
C	12.7±0.3			
D	4.8~5.8			
E	16±1			
F	12.5 <sup>-0</sup>			
G	4±0.3			
H	17.5~19			



Dimension in mm

	AL0204PT	AL0307PT	AL0410PT	AL0510PT
A	2.3 <sup>+0</sup>	3 <sup>+0</sup>	4 <sup>+0</sup>	4.5 <sup>+0</sup>
B	4 <sup>+0</sup>	7 <sup>+0</sup>	10.5 <sup>+0</sup>	10.5 <sup>+0</sup>
C	12.7±0.3			
D	4.8~5.8			
E	5.85±1.0			
F	12.7±1.0			
G	4±0.3			
H	13Min.			
I	16±1			

**AL0204 Series**

**Electrical Parameters**

Item	Inductance L (mH)	Test Frequency (MHz)	Standard Specification			
			Q Min.	S.R.F Min. (MHz)	D.C. Resistance Max. (W)	IDC (mA)
AL0204 $\Delta$ R22 $\square$ -S- $\nabla$	0.22	25.2	35	150	0.40	400
AL0204 $\Delta$ R27 $\square$ -S- $\nabla$	0.27	25.2	35	150	0.43	380
AL0204 $\Delta$ R33 $\square$ -S- $\nabla$	0.33	25.2	35	150	0.48	370
AL0204 $\Delta$ R39 $\square$ -S- $\nabla$	0.39	25.2	35	150	0.51	350
AL0204 $\Delta$ R47 $\square$ -S- $\nabla$	0.47	25.2	35	150	0.56	330
AL0204 $\Delta$ R56 $\square$ -S- $\nabla$	0.56	25.2	35	150	0.61	320
AL0204 $\Delta$ R68 $\square$ -S- $\nabla$	0.68	25.2	35	150	0.67	310
AL0204 $\Delta$ R82 $\square$ -S- $\nabla$	0.82	25.2	35	150	0.74	290
AL0204 $\Delta$ 1R0 $\square$ -S- $\nabla$	1.00	25.2	35	120	0.80	270
AL0204 $\Delta$ 1R2 $\square$ -S- $\nabla$	1.20	7.96	40	110	0.90	260
AL0204 $\Delta$ 1R5 $\square$ -S- $\nabla$	1.50	7.96	40	80	1.0	250
AL0204 $\Delta$ 1R8 $\square$ -S- $\nabla$	1.80	7.96	40	60	1.1	240
AL0204 $\Delta$ 2R2 $\square$ -S- $\nabla$	2.20	7.96	40	45	1.2	230
AL0204 $\Delta$ 2R7 $\square$ -S- $\nabla$	2.70	7.96	40	40	1.3	220
AL0204 $\Delta$ 3R3 $\square$ -S- $\nabla$	3.30	7.96	40	38	1.4	210
AL0204 $\Delta$ 3R9 $\square$ -S- $\nabla$	3.90	7.96	40	35	1.6	200
AL0204 $\Delta$ 4R7 $\square$ -S- $\nabla$	4.70	7.96	40	32	1.7	190
AL0204 $\Delta$ 5R6 $\square$ -S- $\nabla$	5.60	7.96	40	30	1.9	180
AL0204 $\Delta$ 6R8 $\square$ -S- $\nabla$	6.80	7.96	40	28	2.0	175
AL0204 $\Delta$ 8R2 $\square$ -S- $\nabla$	8.20	7.96	40	26	2.2	165
AL0204 $\Delta$ 100 $\square$ -S- $\nabla$	10	7.96	40	24	2.5	160
AL0204 $\Delta$ 120 $\square$ -S- $\nabla$	12	2.52	40	22	2.5	150
AL0204 $\Delta$ 150 $\square$ -S- $\nabla$	15	2.52	40	20	2.8	145
AL0204 $\Delta$ 180 $\square$ -S- $\nabla$	18	2.52	40	18	3.1	140
AL0204 $\Delta$ 220 $\square$ -S- $\nabla$	22	2.52	40	17	3.4	130
AL0204 $\Delta$ 270 $\square$ -S- $\nabla$	27	2.52	40	16	4.3	80
AL0204 $\Delta$ 330 $\square$ -S- $\nabla$	33	2.52	40	14	4.7	76
AL0204 $\Delta$ 390 $\square$ -S- $\nabla$	39	2.52	40	13	5.2	74
AL0204 $\Delta$ 470 $\square$ -S- $\nabla$	47	2.52	40	12	5.8	70
AL0204 $\Delta$ 560 $\square$ -S- $\nabla$	56	2.52	40	11	6.4	68
AL0204 $\Delta$ 680 $\square$ -S- $\nabla$	68	2.52	40	10	7.2	64
AL0204 $\Delta$ 820 $\square$ -S- $\nabla$	82	2.52	40	9.5	11	46
AL0204 $\Delta$ 101 $\square$ -S- $\nabla$	100	0.796	40	9.0	12	44
AL0204 $\Delta$ 121 $\square$ -S- $\nabla$	120	0.796	40	8.0	13	42
AL0204 $\Delta$ 151 $\square$ -S- $\nabla$	150	0.796	40	6.0	16	39
AL0204 $\Delta$ 181 $\square$ -S- $\nabla$	180	0.796	40	5.5	18	37
AL0204 $\Delta$ 221 $\square$ -S- $\nabla$	220	0.796	40	5.0	20	35

● Tolerance: J:  $\pm 5\%$ , K:  $\pm 10\%$ , M:  $\pm 20\%$

**AL0307 Series**

**Electrical Parameters**

Item	Inductance L (mH)	Test Frequency (MHz)	Standard Specification			
			Q Min.	S.R.F Min. (MHz)	D.C. Resistance Max. (W)	IDC (mA)
AL0307 $\Delta$ R22 $\square$ -S- $\nabla$	0.22	25.2	45	150	0.20	400
AL0307 $\Delta$ R27 $\square$ -S- $\nabla$	0.27	25.2	45	150	0.22	380
AL0307 $\Delta$ R33 $\square$ -S- $\nabla$	0.33	25.2	45	150	0.24	370
AL0307 $\Delta$ R39 $\square$ -S- $\nabla$	0.39	25.2	50	150	0.26	350
AL0307 $\Delta$ R47 $\square$ -S- $\nabla$	0.47	25.2	45	150	0.28	330
AL0307 $\Delta$ R56 $\square$ -S- $\nabla$	0.56	25.2	50	150	0.31	320
AL0307 $\Delta$ R68 $\square$ -S- $\nabla$	0.68	25.2	50	150	0.34	310
AL0307 $\Delta$ R82 $\square$ -S- $\nabla$	0.82	25.2	55	150	0.37	290
AL0307 $\Delta$ 1R0 $\square$ -S- $\nabla$	1.00	25.2	60	150	0.40	270
AL0307 $\Delta$ 1R2 $\square$ -S- $\nabla$	1.20	7.96	40	165	0.18	740
AL0307 $\Delta$ 1R5 $\square$ -S- $\nabla$	1.50	7.96	45	150	0.20	700
AL0307 $\Delta$ 1R8 $\square$ -S- $\nabla$	1.80	7.96	50	125	0.23	655
AL0307 $\Delta$ 2R2 $\square$ -S- $\nabla$	2.20	7.96	50	110	0.25	630
AL0307 $\Delta$ 2R7 $\square$ -S- $\nabla$	2.70	7.96	50	95	0.28	595
AL0307 $\Delta$ 3R3 $\square$ -S- $\nabla$	3.30	7.96	50	70	0.30	575
AL0307 $\Delta$ 3R9 $\square$ -S- $\nabla$	3.90	7.96	45	65	0.32	555
AL0307 $\Delta$ 4R7 $\square$ -S- $\nabla$	4.70	7.96	45	50	0.35	530
AL0307 $\Delta$ 5R6 $\square$ -S- $\nabla$	5.60	7.96	45	40	0.40	500
AL0307 $\Delta$ 6R8 $\square$ -S- $\nabla$	6.80	7.96	40	30	0.45	470
AL0307 $\Delta$ 8R2 $\square$ -S- $\nabla$	8.20	7.96	40	28	0.55	425
AL0307 $\Delta$ 100 $\square$ -S- $\nabla$	10	7.96	40	22	0.72	370
AL0307 $\Delta$ 120 $\square$ -S- $\nabla$	12	2.52	45	20	0.80	350
AL0307 $\Delta$ 150 $\square$ -S- $\nabla$	15	2.52	50	16	0.88	335
AL0307 $\Delta$ 180 $\square$ -S- $\nabla$	18	2.52	50	15	1.00	315
AL0307 $\Delta$ 220 $\square$ -S- $\nabla$	22	2.52	50	13	1.20	285
AL0307 $\Delta$ 270 $\square$ -S- $\nabla$	27	2.52	50	11	1.35	270
AL0307 $\Delta$ 330 $\square$ -S- $\nabla$	33	2.52	50	10	1.50	255
AL0307 $\Delta$ 390 $\square$ -S- $\nabla$	39	2.52	50	9.5	1.70	240
AL0307 $\Delta$ 470 $\square$ -S- $\nabla$	47	2.52	60	8.5	2.30	205
AL0307 $\Delta$ 560 $\square$ -S- $\nabla$	56	2.52	60	7.5	2.60	195
AL0307 $\Delta$ 680 $\square$ -S- $\nabla$	68	2.52	60	6.5	2.90	185
AL0307 $\Delta$ 820 $\square$ -S- $\nabla$	82	2.52	60	6.0	3.20	175
AL0307 $\Delta$ 101 $\square$ -S- $\nabla$	100	0.796	60	5.5	3.50	165
AL0307 $\Delta$ 121 $\square$ -S- $\nabla$	120	0.796	60	5.4	3.80	160
AL0307 $\Delta$ 151 $\square$ -S- $\nabla$	150	0.796	60	4.75	4.40	150
AL0307 $\Delta$ 181 $\square$ -S- $\nabla$	180	0.796	60	4.35	5.00	140
AL0307 $\Delta$ 221 $\square$ -S- $\nabla$	220	0.796	60	4.00	5.70	130
AL0307 $\Delta$ 271 $\square$ -S- $\nabla$	270	0.796	60	3.70	6.50	120
AL0307 $\Delta$ 331 $\square$ -S- $\nabla$	330	0.796	60	3.40	9.50	100
AL0307 $\Delta$ 391 $\square$ -S- $\nabla$	390	0.796	60	2.80	10.50	95
AL0307 $\Delta$ 471 $\square$ -S- $\nabla$	470	0.796	60	2.55	11.60	90
AL0307 $\Delta$ 561 $\square$ -S- $\nabla$	560	0.796	60	2.35	13.00	85
AL0307 $\Delta$ 681 $\square$ -S- $\nabla$	680	0.796	60	2.00	18.00	75
AL0307 $\Delta$ 821 $\square$ -S- $\nabla$	820	0.796	60	1.50	23.00	65
AL0307 $\Delta$ 102 $\square$ -S- $\nabla$	1000	0.796	60	1.20	26.00	60

● Tolerance: J:  $\pm 5\%$ , K:  $\pm 10\%$ , M:  $\pm 20\%$

**AL0410 Series**

**Electrical Parameters**

Item	Inductance L (mH)	Test Frequency (MHz)	Standard Specification			
			Q Min.	S.R.F Min. (MHz)	D.C. Resistance Max. (W)	IDC (mA)
AL0410 $\Delta$ R22 $\square$ -S- $\nabla$	0.22	25.2	25	380	0.21	880
AL0410 $\Delta$ R27 $\square$ -S- $\nabla$	0.27	25.2	25	340	0.24	800
AL0410 $\Delta$ R33 $\square$ -S- $\nabla$	0.33	25.2	25	300	0.28	750
AL0410 $\Delta$ R39 $\square$ -S- $\nabla$	0.39	25.2	25	280	0.32	680
AL0410 $\Delta$ R47 $\square$ -S- $\nabla$	0.47	25.2	25	250	0.36	650
AL0410 $\Delta$ R56 $\square$ -S- $\nabla$	0.56	25.2	25	230	0.41	600
AL0410 $\Delta$ R68 $\square$ -S- $\nabla$	0.68	25.2	25	210	0.47	550
AL0410 $\Delta$ R82 $\square$ -S- $\nabla$	0.82	25.2	45	172	0.17	980
AL0410 $\Delta$ 1R0 $\square$ -S- $\nabla$	1.00	25.2	45	157	0.19	920
AL0410 $\Delta$ 1R2 $\square$ -S- $\nabla$	1.20	7.96	50	144	0.21	880
AL0410 $\Delta$ 1R5 $\square$ -S- $\nabla$	1.50	7.96	50	131	0.23	830
AL0410 $\Delta$ 1R8 $\square$ -S- $\nabla$	1.80	7.96	55	121	0.25	790
AL0410 $\Delta$ 2R2 $\square$ -S- $\nabla$	2.20	7.96	55	110	0.28	750
AL0410 $\Delta$ 2R7 $\square$ -S- $\nabla$	2.70	7.96	60	100	0.30	720
AL0410 $\Delta$ 3R3 $\square$ -S- $\nabla$	3.30	7.96	65	94	0.34	670
AL0410 $\Delta$ 3R9 $\square$ -S- $\nabla$	3.90	7.96	65	86	0.37	640
AL0410 $\Delta$ 4R7 $\square$ -S- $\nabla$	4.70	7.96	70	80	0.39	620
AL0410 $\Delta$ 5R6 $\square$ -S- $\nabla$	5.60	7.96	70	74	0.43	590
AL0410 $\Delta$ 6R8 $\square$ -S- $\nabla$	6.80	7.96	75	68	0.48	550
AL0410 $\Delta$ 8R2 $\square$ -S- $\nabla$	8.20	7.96	80	53	0.52	530
AL0410 $\Delta$ 100 $\square$ -S- $\nabla$	10	7.96	85	45	0.58	500
AL0410 $\Delta$ 120 $\square$ -S- $\nabla$	12	2.52	75	34	0.63	480
AL0410 $\Delta$ 150 $\square$ -S- $\nabla$	15	2.52	70	20	0.72	460
AL0410 $\Delta$ 180 $\square$ -S- $\nabla$	18	2.52	65	14	0.77	430
AL0410 $\Delta$ 220 $\square$ -S- $\nabla$	22	2.52	60	9.9	0.84	410
AL0410 $\Delta$ 270 $\square$ -S- $\nabla$	27	2.52	55	7.6	0.94	390
AL0410 $\Delta$ 330 $\square$ -S- $\nabla$	33	2.52	55	6.3	1.03	370
AL0410 $\Delta$ 390 $\square$ -S- $\nabla$	39	2.52	50	6.3	1.12	350
AL0410 $\Delta$ 470 $\square$ -S- $\nabla$	47	2.52	45	6.3	1.22	340
AL0410 $\Delta$ 560 $\square$ -S- $\nabla$	56	2.52	40	6.2	1.34	320
AL0410 $\Delta$ 680 $\square$ -S- $\nabla$	68	2.52	40	5.7	1.47	305
AL0410 $\Delta$ 820 $\square$ -S- $\nabla$	82	2.52	35	5.3	1.62	290
AL0410 $\Delta$ 101 $\square$ -S- $\nabla$	100	0.796	30	4.8	1.80	275
AL0410 $\Delta$ 121 $\square$ -S- $\nabla$	120	0.796	70	3.8	3.70	185
AL0410 $\Delta$ 151 $\square$ -S- $\nabla$	150	0.796	70	3.5	4.20	175
AL0410 $\Delta$ 181 $\square$ -S- $\nabla$	180	0.796	70	3.3	4.60	165
AL0410 $\Delta$ 221 $\square$ -S- $\nabla$	220	0.796	70	3.0	5.10	155
AL0410 $\Delta$ 271 $\square$ -S- $\nabla$	270	0.796	65	2.8	5.80	145
AL0410 $\Delta$ 331 $\square$ -S- $\nabla$	330	0.796	65	2.6	6.40	137
AL0410 $\Delta$ 391 $\square$ -S- $\nabla$	390	0.796	65	2.4	7.00	133

Tolerance: K:  $\pm 10\%$ , M:  $\pm 20\%$

**AL0510 Series**

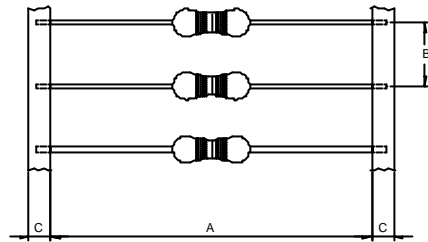
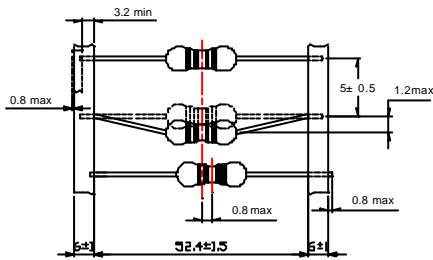
**Electrical Parameters**

Item	Inductance L (mH)	Test Frequency (MHz)	Standard Specification			
			Q Min.	S.R.F Min. (MHz)	D.C. Resistance Max. (W)	IDC (mA)
AL0510 $\Delta$ 471 $\square$ -S- $\nabla$	470	0.796	60	2.25	7.70	126
AL0510 $\Delta$ 561 $\square$ -S- $\nabla$	560	0.796	60	2.10	8.50	120
AL0510 $\Delta$ 681 $\square$ -S- $\nabla$	680	0.796	55	1.95	9.40	113
AL0510 $\Delta$ 821 $\square$ -S- $\nabla$	820	0.796	55	1.85	10.5	100
AL0510 $\Delta$ 102 $\square$ -S- $\nabla$	1000	0.796	50	1.70	12.0	100

Tolerance: K:  $\pm 10\%$ , M:  $\pm 20\%$

**Packaging Specifications**

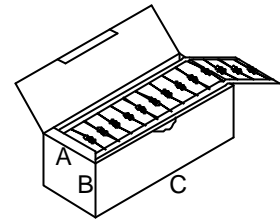
**Specification of Tape & Reel**



Dimension in mm

TYPE	A	B	C
▽=A	26.0~27.5	5±0.5	6±1.0
▽=B	52.4±1.5	5±0.5	6±1.0

**Specification of Ammunition Pack**

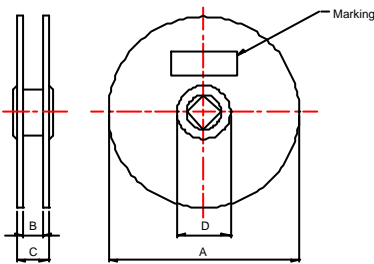


▽=A (for inner tape: 26.5<sub>-0.5</sub><sup>+1</sup> mm width)

▽=B (for inner tape: 52.4±1.5 mm width)

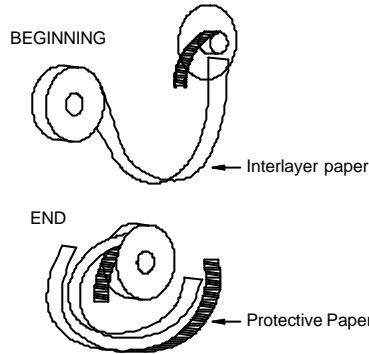
Dimension in mm

Type	A	B	C
▽=A	50	70	255
▽=B	75	100	255



Dimension in mm

A	B	C	D
285	70	75	15



**Reel Packing**

Part No	Quantity Per Reel	Quantity Carton
AL 0204ST-Series-S	5000 PCS	20000 PCS
AL 0307ST-Series-S	5000 PCS	20000 PCS
AL 0410ST-Series-S	2500 PCS	20000 PCS
AL 0510ST-Series-S	2500 PCS	20000 PCS

**Ammunition Packing**

Part No	Quantity Per Reel	Quantity Carton
AL 0204ST-Series-S-A	2000 PCS	72000 PCS
AL 0204ST-Series-S-B	4000 PCS	48000 PCS
AL 0307ST-Series-S-A	2000 PCS	48000 PCS
AL 0307ST-Series-S-B	4000 PCS	48000 PCS
AL 0410ST-Series-S-A	2000 PCS	24000 PCS
AL 0410ST-Series-S-B	2500 PCS	30000 PCS
AL 0510ST-Series-S-A	2000 PCS	24000 PCS
AL 0510ST-Series-S-B	2000 PCS	24000 PCS

**In Bulks**

Part No	Quantity Per Bag
AL 0204S-Series-S	500 PCS
AL 0307S-Series-S	500 PCS
AL 0410S-Series-S	500 PCS
AL 0510S-Series-S	500 PCS.