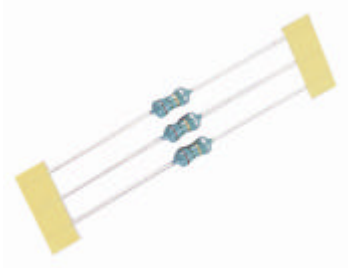
AL Series



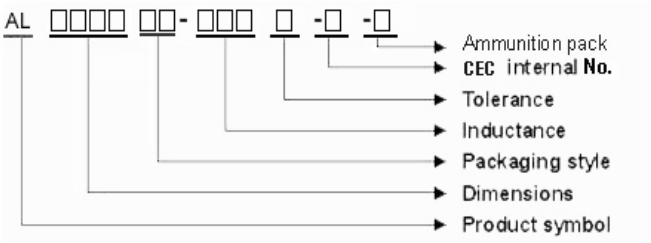
Features

- 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.

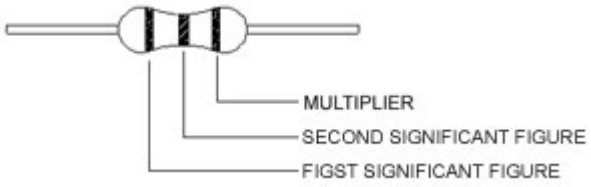
Product Identification



△: (**S:** bulk **ST:** Tapping pack **B:** bended legs **A:** AVI Type)
▽: Ammunition pack (**A:** 26.5, **B:** 52.4)

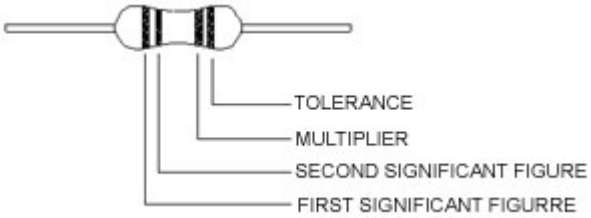
Color Cording

AL0204 Series



- Note: lead-free

AL0307/ 0410/ 0510 Series



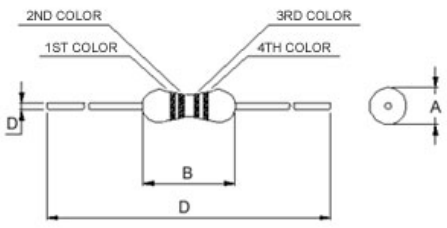
The Nominal Inductance is Marked.
By A Color Code As Listed In Table Belo

Color	Nominal Inductance (㎐)			
	First Figure	Second Figure	Magnification/*	Tolerance
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%

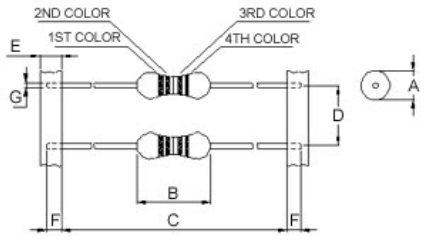
- L.Q: HP4285+HP42851A
- SRF: HP4287ASRF
- RDC: CHEN HWA502BC
- IDC: CHEN HWA CH1061+301A
- Tolerance: J = ±5%,K = ±10%, M = ± 20%

Shapes and Dimensions

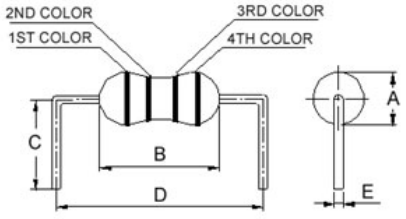
S



ST



B



Dimension in mm

	A	B	C			D			E			F			G		
			S	ST	B	S	ST	B	S	ST	B	S	ST	B	S	ST	B
AL0204	2.8^{+0}	4^{+0}	62±3	52.4±1.5	6±1	0.5Ø	5±0.5	10±1	-	6±1	0.5Ø	-	3.2^{+0}	-	-	0.5Ø	-
AL0307	3^{+0}	7^{+0}	62±3	52.4±1.5	6±1	0.5Ø	5±0.5	10±1	-	6±1	0.5Ø	-	3.2^{+0}	-	-	0.5Ø	-
AL0410	4^{+0}	10.5^{+0}	62±3	52.4±1.5	6±1	0.65Ø	5±0.5	12.5±1	-	6±1	0.65Ø	-	3.2^{+0}	-	-	0.65Ø	-
AL0510	4.5^{+0}	10.5^{+0}	62±3	52.4±1.5	6±1	0.65Ø	5±0.5	12.5±1	-	6±1	0.65Ø	-	3.2^{+0}	-	-	0.65Ø	-

AL0204 Series

Electrical Parameters

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

- Tolerance: J = ±5%, K = ±10%, M = ± 20%

AL0307 Series

Electrical Parameters

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

● Tolerance: J = ±5%, K = ±10%, M = ± 20%

AL0410 Series

Electrical Parameters

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

● Tolerance: K = ±10%, M = ± 20%

AL0510 Series

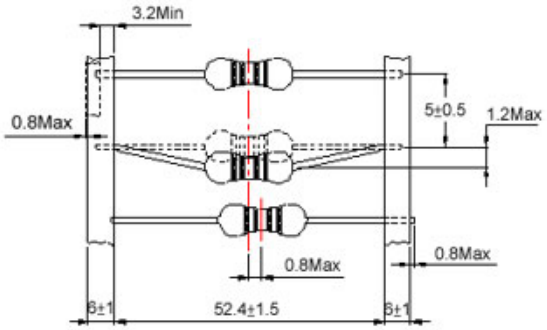
Electrical Parameters

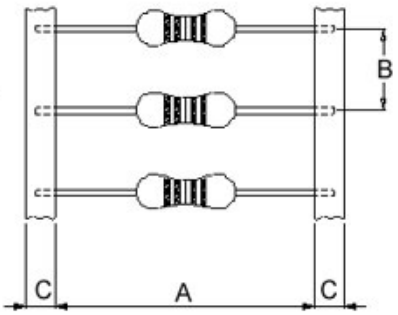
Part Number	Inductance (μH)	Test Frequency (MHz)	Standard Specification			
			Q Min	S.R.F (MHz) Min	D.C. Resistance (Ω) Max	IDC (mA)
AL0510 △ 471 □-N-▽	470	0.796	60	2.25	7.70	126
AL0510 △ 561 □-N-▽	560	0.796	60	2.10	8.50	120
AL0510 △ 681 □-N-▽	680	0.796	55	1.95	9.40	113
AL0510 △ 821 □-N-▽	820	0.796	55	1.85	10.5	100
AL0510 △ 102 □-N-▽	1000	0.796	50	1.70	12.0	100

Tolerance: K = ±10%, M = ± 20%

Packaging Specifications

Specification of Tape



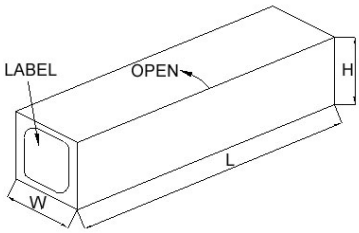


Dimension in mm

A	B	C
52.4±1.5	5±0.5	6±1.0

Specification of Ammunition Pack

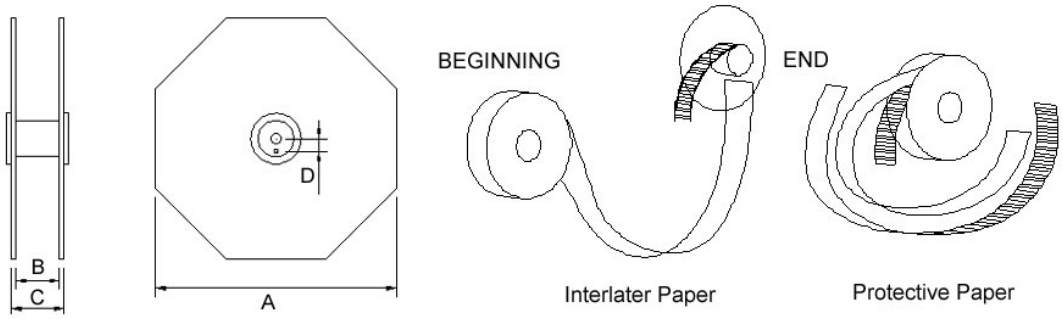
For inner tape: 52.4±1.5mm width



Dimension in mm

TYPE	A	B	C
AL0204	75	60	255
AL0307	75	60	255
AL0410	75	95	255
AL0510	75	85	255

Specification of Reel



Dimension in mm

A	B	C	D
285	66	72	15

Reel Packing

Part Number	Quantity Per Reel	Quantity Carton
AL 0204ST-Series-N	4000 PCS	20000 PCS
AL 0307ST -Series-N	4000 PCS	20000 PCS
AL 0410ST-Series-N	3000 PCS	15000 PCS
AL 0510ST-Series-N	2500 PCS	12500 PCS

Ammunition Packing

Part Number	Quantity Per Ammu	Quantity Carton
AL 0204ST-Series-N-B	3000 PCS	75000 PCS
AL 0307ST-Series-N-B	2000 PCS	50000 PCS
AL 0410ST-Series-N-B	2000 PCS	30000 PCS
AL 0510ST-Series-N-B	1000 PCS	20000 PCS

In Bulks

Part Number	Quantity Per Bag
AL 0204S-Series-N	500 PCS
AL 0307S-Series-N	500 PCS
AL 0410S-Series-N	500 PCS
AL 0510S-Series-N	500 PCS