

## AXIAL FIXED INDUCTORS / AL TYPE

### FEATURES

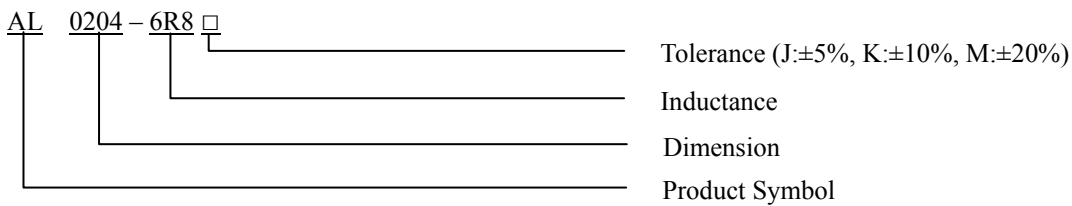
- ◆ Wide inductance range
- ◆ Ideal for auto insertion
- ◆ Conformal coated inductors
- ◆ Epoxy resin coating makes it high reliability
- ◆ Special magnetic core structure contributes to high Q and Self-Resonant Frequencies



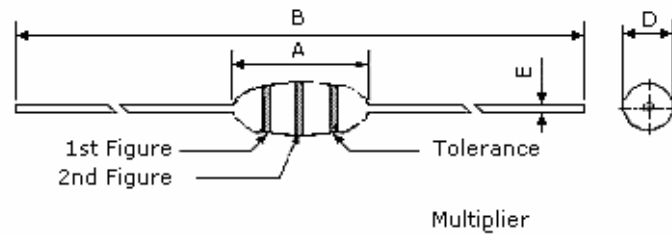
### APPLICATIONS

- ◆ RF coils
- ◆ Choke coils
- ◆ Peaking coils

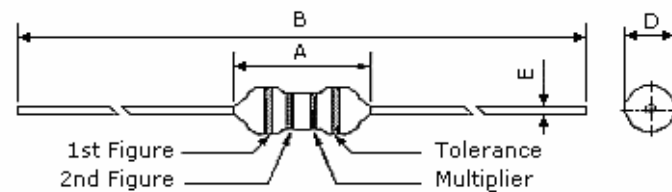
### ORDERING CODE



### SHAPES & DIMENSIONS (UNIT: mm)



**Fig. 1**



**Fig. 2**

Part No.	Fig.	A (Max)	B (±2.0)	D (Max)	E (±0.05)
AL 0204	1	4.0	62	3.0	0.55
AL 0307	2	8.0	62	3.0	0.55
AL 0410	2	11.0	62	4.0	0.65
AL 0510	2	12.0	62	5.0	0.65



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### ELECTRICAL CHARACTERISTICS FOR AL0204

Part No.	Inductance (uH)	Quality Factor (Min)	Test Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AL 0204-R10 M	0.10	50	25.2	250	0.030	700
AL 0204-R12 M	0.12	55	25.2	230	0.035	660
AL 0204-R15 M	0.15	55	25.2	200	0.040	620
AL 0204-R18 M	0.18	55	25.2	180	0.045	600
AL 0204-R22 M	0.22	55	25.2	160	0.050	400
AL 0204-R27 M	0.27	50	25.2	150	0.065	380
AL 0204-R33 M	0.33	50	25.2	150	0.075	370
AL 0204-R39 M	0.39	50	25.2	150	0.080	350
AL 0204-R47 M	0.47	60	25.2	150	0.085	330
AL 0204-R56 M	0.56	60	25.2	150	0.090	320
AL 0204-R68 M	0.68	50	25.2	120	0.10	310
AL 0204-R82 M	0.82	50	25.2	110	0.15	290
AL 0204-1R0 K	1.00	50	25.2	110	0.22	270
AL 0204-1R2 K	1.20	40	7.96	100	0.30	260
AL 0204-1R5 K	1.50	40	7.96	80	0.35	250
AL 0204-1R8 K	1.80	40	7.96	65	0.45	240
AL 0204-2R2 K	2.20	40	7.96	55	0.55	230
AL 0204-2R7 K	2.70	40	7.96	50	0.60	220
AL 0204-3R3 K	3.30	40	7.96	42	0.65	210
AL 0204-3R9 K	3.90	45	7.96	38	0.85	200
AL 0204-4R7 K	4.70	45	7.96	34	1.00	190
AL 0204-5R6 K	5.60	45	7.96	32	1.15	180
AL 0204-6R8 K	6.80	40	7.96	30	1.20	175
AL 0204-8R2 K	8.20	40	7.96	26	1.25	165
AL 0204-100 K	10	40	7.96	24	1.5	160
AL 0204-120 K	12	50	2.52	22	2.2	150
AL 0204-150 K	15	50	2.52	20	2.5	145
AL 0204-180 K	18	50	2.52	18	2.8	140
AL 0204-220 K	22	50	2.52	17	3.0	130
AL 0204-270 K	27	55	2.52	14	3.5	80
AL 0204-330 K	33	55	2.52	14	3.8	76
AL 0204-390 K	39	50	2.52	13	4.2	76
AL 0204-470 K	47	50	2.52	12	5.8	70
AL 0204-560 K	56	50	2.52	11	6.4	68
AL 0204-680 K	68	50	2.52	10	7.2	64
AL 0204-820 K	82	50	2.52	9.5	8.5	46
AL 0204-101 K	100	50	2.52	8.0	11	44
AL 0204-121 K	120	30	0.796	6.5	19	42
AL 0204-151 K	150	30	0.796	6.0	22	39
AL 0204-181 K	180	30	0.796	5.2	24	37
AL 0204-221 K	220	30	0.796	4.5	28	35
AL 0204-271 K	270	30	0.796	3.5	29	28
AL 0204-331 K	330	30	0.796	3.0	30	26
AL 0204-391 K	390	30	0.796	2.7	32	25
AL 0204-471 K	470	30	0.796	2.6	35	24
AL 0204-561 K	560	30	0.796	2.5	40	23
AL 0204-681 K	680	30	0.796	2.2	42	22
AL 0204-821 K	820	30	0.796	2.1	46	21
AL 0204-102 K	1000	30	0.796	2.0	52	20



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## AXIAL FIXED INDUCTORS / AL TYPE

### ELECTRICAL CHARACTERISTICS FOR AL0307

Part No.	Inductance (uH)	Quality Factor (Min)	Test Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AL 0307-R10 K	0.10	40	25.2	470	0.08	700
AL 0307-R12 K	0.12	40	25.2	450	0.08	700
AL 0307-R15 K	0.15	40	25.2	430	0.09	700
AL 0307-R18 K	0.18	40	25.2	410	0.10	700
AL 0307-R22 K	0.22	40	25.2	380	0.12	700
AL 0307-R27 K	0.27	40	25.2	360	0.15	680
AL 0307-R33 K	0.33	40	25.2	350	0.16	680
AL 0307-R39 K	0.39	40	25.2	320	0.18	680
AL 0307-R47 K	0.47	40	25.2	300	0.26	650
AL 0307-R56 K	0.56	40	25.2	280	0.38	500
AL 0307-R68 K	0.68	40	25.2	250	0.42	500
AL 0307-R82 K	0.82	40	25.2	200	0.55	450
AL 0307-1R0 K	1.00	65	25.2	180	0.12	700
AL 0307-1R2 K	1.20	50	7.96	165	0.18	740
AL 0307-1R5 K	1.50	50	7.96	150	0.20	700
AL 0307-1R8 K	1.80	70	7.96	125	0.23	655
AL 0307-2R2 K	2.20	50	7.96	85	0.25	630
AL 0307-2R7 K	2.70	60	7.96	95	0.28	595
AL 0307-3R3 K	3.30	60	7.96	75	0.30	575
AL 0307-3R9 K	3.90	60	7.96	65	0.32	555
AL 0307-4R7 K	4.70	50	7.96	50	0.35	530
AL 0307-5R6 K	5.60	50	7.96	40	0.40	500
AL 0307-6R8 K	6.80	50	7.96	30	0.45	470
AL 0307-8R2 K	8.20	50	7.96	28	0.55	425
AL 0307-100 K	10	50	7.96	22	0.72	370
AL 0307-120 K	12	50	2.52	20	0.80	350
AL 0307-150 K	15	50	2.52	16	0.88	335
AL 0307-180 K	18	50	2.52	15	1.00	315
AL 0307-220 K	22	60	2.52	13	1.20	285
AL 0307-270 K	27	60	2.52	11	1.35	270
AL 0307-330 K	33	50	2.52	10	1.50	255
AL 0307-390 K	39	50	2.52	9.50	1.70	240
AL 0307-470 K	47	60	2.52	8.50	2.30	205
AL 0307-560 K	56	60	2.52	7.50	2.60	195
AL 0307-680 K	68	60	2.52	6.50	3.20	185
AL 0307-820 K	82	55	2.52	6.00	3.50	175
AL 0307-101 K	100	60	2.52	5.50	3.80	165
AL 0307-121 K	120	75	0.796	5.40	3.80	160
AL 0307-151 K	150	75	0.796	4.75	4.40	150
AL 0307-181 K	180	75	0.796	4.35	5.00	140
AL 0307-221 K	220	75	0.796	4.00	5.70	130
AL 0307-271 K	270	70	0.796	3.70	6.50	120
AL 0307-331 K	330	70	0.796	3.40	9.50	100
AL 0307-391 K	390	70	0.796	2.80	10.5	95
AL 0307-471 K	470	70	0.796	2.60	12.5	90
AL 0307-561 K	560	70	0.796	2.40	14.5	85
AL 0307-681 K	680	70	0.796	2.00	18.0	75
AL 0307-821 K	820	60	0.796	1.60	23.7	65
AL 0307-102 K	1000	60	0.796	1.15	30.0	60



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## AXIAL FIXED INDUCTORS / AL TYPE

### ELECTRICAL CHARACTERISTICS FOR AL0410

Part No.	Inductance (uH)	Quality Factor (Min)	Test Freq. (MHz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
AL 0410-R10 M	0.10	50	25.2	470	0.04	900
AL 0410-R12 M	0.12	50	25.2	450	0.06	900
AL 0410-R15 M	0.15	50	25.2	430	0.07	890
AL 0410-R18 M	0.18	50	25.2	410	0.07	890
AL 0410-R22 M	0.22	50	25.2	380	0.08	880
AL 0410-R27 M	0.27	50	25.2	340	0.09	800
AL 0410-R33 M	0.33	50	25.2	300	0.10	750
AL 0410-R39 M	0.39	50	25.2	280	0.12	680
AL 0410-R47 M	0.47	50	25.2	250	0.16	650
AL 0410-R56 M	0.56	50	25.2	230	0.18	600
AL 0410-R68 M	0.68	50	25.2	210	0.22	550
AL 0410-R82 M	0.82	50	25.2	172	0.24	980
AL 0410-1R0 K	1.00	50	25.2	157	0.09	920
AL 0410-1R2 K	1.20	50	7.96	144	0.10	880
AL 0410-1R5 K	1.50	55	7.96	131	0.23	830
AL 0410-1R8 K	1.80	60	7.96	121	0.25	790
AL 0410-2R2 K	2.20	80	7.96	110	0.28	750
AL 0410-2R7 K	2.70	85	7.96	100	0.30	720
AL 0410-3R3 K	3.30	90	7.96	94	0.34	670
AL 0410-3R9 K	3.90	90	7.96	86	0.37	640
AL 0410-4R7 K	4.70	90	7.96	80	0.39	620
AL 0410-5R6 K	5.60	80	7.96	74	0.43	590
AL 0410-6R8 K	6.80	80	7.96	58	0.48	550
AL 0410-8R2 K	8.20	85	7.96	53	0.52	530
AL 0410-100 K	10	85	7.96	45	0.58	500
AL 0410-120 K	12	75	2.52	30	0.63	480
AL 0410-150 K	15	75	2.52	20	0.72	460
AL 0410-180 K	18	70	2.52	14	0.77	430
AL 0410-220 K	22	65	2.52	9.90	0.84	410
AL 0410-270 K	27	65	2.52	7.60	0.94	390
AL 0410-330 K	33	55	2.52	6.30	1.03	370
AL 0410-390 K	39	55	2.52	6.30	1.12	350
AL 0410-470 K	47	45	2.52	6.30	1.22	340
AL 0410-560 K	56	45	2.52	6.20	1.34	320
AL 0410-680 K	68	40	2.52	5.70	1.47	305
AL 0410-820 K	82	35	2.52	5.30	1.62	290
AL 0410-101 K	100	30	2.52	4.80	1.80	275
AL 0410-121 K	120	70	0.796	3.80	3.70	185
AL 0410-151 K	150	80	0.796	3.50	4.20	175
AL 0410-181 K	180	80	0.796	3.30	4.60	165
AL 0410-221 K	220	70	0.796	3.00	5.10	155
AL 0410-271 K	270	70	0.796	2.80	5.80	145
AL 0410-331 K	330	65	0.796	2.60	6.40	137
AL 0410-391 K	390	65	0.796	2.40	7.00	133
AL 0410-471 K	470	60	0.796	2.25	7.70	126
AL 0410-561 K	560	60	0.796	2.10	8.50	120
AL 0410-681 K	680	55	0.796	1.95	9.40	113
AL 0410-821 K	820	55	0.796	1.85	12.0	100
AL 0410-102 K	1000	50	0.796	1.40	17.0	100



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## AXIAL FIXED INDUCTORS / AL TYPE

### ELECTRICAL CHARACTERISTICS FOR AL0510

Part No.	Inductance (uH)	Quality Factor (Min)	Test Freq. (KHz)	Q Test Freq. (KHz)	DCR ( $\Omega$ ) Max	IDC (mA) Max
AL0510-102K	1000	80	1	252	8	360
AL 0510-122 K	1200	80	1	252	8	340
AL 0510-152 K	1500	80	1	252	9	320
AL 0510-182 K	1800	80	1	252	10	300
AL 0510-222 K	2200	80	1	252	11	280
AL 0510-272 K	2700	80	1	252	14	250
AL 0510-332 K	3300	80	1	252	18	230
AL 0510-392 K	3900	80	1	252	22	200
AL 0510-472 K	4700	80	1	252	26	190
AL 0510-562 K	5600	60	1	252	30	175
AL 0510-682 K	6800	60	1	252	34	150
AL 0510-822 K	8200	60	1	252	48	130
AL 0510-103 K	10000	60	1	252	62	120
AL 0510-123 K	12000	60	1	252	74	108
AL 0510-153 K	15000	60	1	252	88	100
AL 0510-183 K	18000	40	1	79.6	102	85
AL 0510-223 K	22000	40	1	79.6	150	75
AL 0510-273 K	27000	40	1	79.6	210	70
AL 0510-303 K	30000	40	1	79.6	240	65
AL 0510-333 K	33000	40	1	79.6	250	63
AL0510-393K	39000	40	1	79.6	270	60



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