

# MOX-MOX-ALPC SERIES

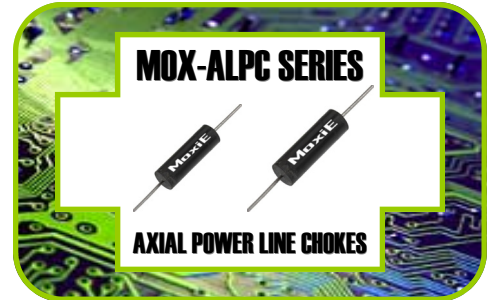
**MoxiE**<sup>®</sup>  
INDUCTOR CORPORATION

## AXIAL LEADED HIGH CURRENT POWER LINE CHOKES

MoxiE's ALPC series of radial leaded power line chokes offer a wide range of inductance values. These coils are perfect for RFI suppression, switching regulators, filters, power supplies and power amplifiers.

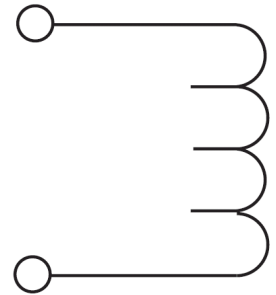
### FEATURES:

- Low cost.
- RoHS compliant.
- High current ratings.
- Quick-Turn lead-times.
- Ideal for use in switching regulated power supply applications.
- MoxiE Inductor Corporation custom designs available.



## PART NUMBERS & SCHEMATIC

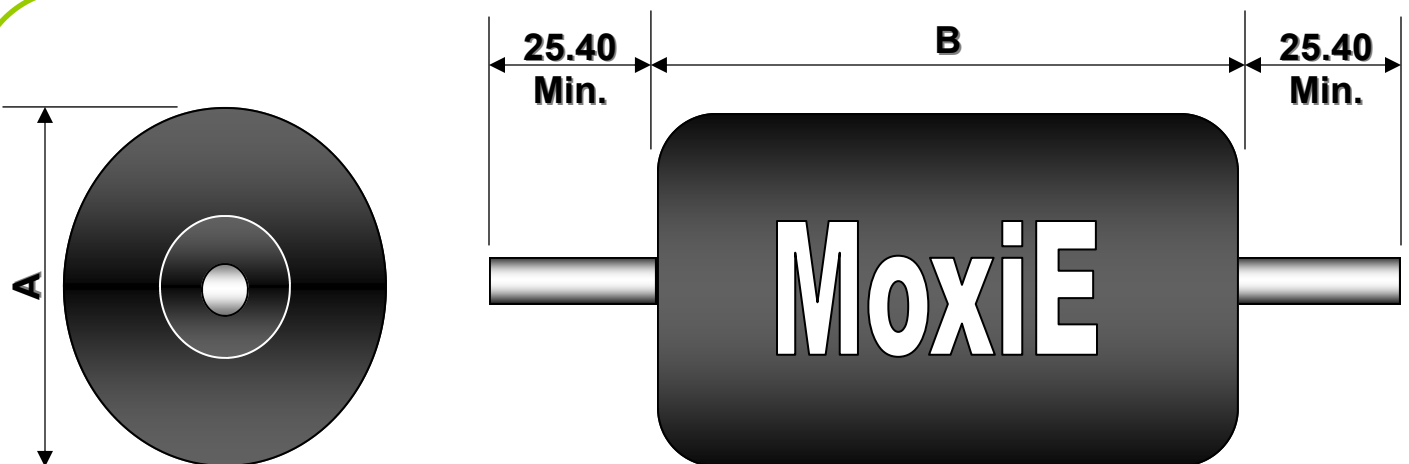
MoxiE Part Number	A (mm)	B (mm)	Wire Gauge*
MOX-ALPC1	13.97	25.40	#20 AWG
MOX-ALPC2	11.51	22.86	#20 AWG
MOX-ALPC3	6.60	17.78	#20 AWG
MOX-ALPC4	4.06	10.80	#24 AWG



\*Tinned copper wire



## MECHANICAL DIMENSIONS (mm)





## ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (μH)	DCR (Ω) Max.	Saturation Current	Rated Current (A)
MOX-ALPC1-3R9	3.9	.007	47.0	6.0
MOX-ALPC1-4R7	4.7	.008	42.0	6.0
MOX-ALPC1-5R6	5.6	.009	35.0	6.0
MOX-ALPC1-6R8	6.8	.010	29.0	6.0
MOX-ALPC1-8R2	8.2	.011	24.0	6.0
MOX-ALPC1-100	10	.012	19.0	6.0
MOX-ALPC1-120	12	.013	16.0	6.0
MOX-ALPC1-150	15	.014	14.8	6.0
MOX-ALPC1-180	18	.015	13.4	6.0
MOX-ALPC1-220	22	.016	12.4	6.0
MOX-ALPC1-270	27	.017	11.2	6.0
MOX-ALPC1-330	33	.021	10.2	6.0
MOX-ALPC1-390	39	.023	9.3	6.0
MOX-ALPC1-470	47	.025	8.7	6.0
MOX-ALPC1-560	56	.028	8.0	6.0
MOX-ALPC1-680	68	.039	7.0	4.7
MOX-ALPC1-820	82	.043	6.3	4.7
MOX-ALPC1-101	100	.055	5.7	3.8
MOX-ALPC1-121	120	.076	5.3	3.0
MOX-ALPC1-151	150	.084	4.7	3.0
MOX-ALPC1-181	180	.096	4.3	3.0
MOX-ALPC1-221	220	.108	4.0	3.0
MOX-ALPC1-271	270	.151	3.6	2.3
MOX-ALPC1-331	330	.168	3.2	2.3
MOX-ALPC1-391	390	.182	2.9	2.3
MOX-ALPC1-471	470	.202	2.6	2.3
MOX-ALPC1-561	560	.348	2.4	1.4
MOX-ALPC1-681	680	.470	2.2	1.2
MOX-ALPC1-821	820	.500	2.0	1.2
MOX-ALPC1-102	1000	.570	1.8	1.2
MOX-ALPC1-122	1200	.648	1.70	1.200
MOX-ALPC1-152	1500	.888	1.55	0.900
MOX-ALPC1-182	1800	1.16	1.40	0.750
MOX-ALPC1-222	2200	1.20	1.25	0.750
MOX-ALPC1-272	2700	1.44	1.10	0.750
MOX-ALPC1-332	3300	1.92	1.000	0.590
MOX-ALPC1-392	3900	2.16	0.900	0.590
MOX-ALPC1-472	4700	2.50	0.850	0.590
MOX-ALPC1-562	5600	3.20	0.780	0.450
MOX-ALPC1-682	6800	4.00	0.700	0.450
MOX-ALPC1-822	8200	5.20	0.650	0.350
MOX-ALPC1-103	10000	6.00	0.600	0.350
MOX-ALPC1-123	12000	8.00	0.540	0.270
MOX-ALPC1-153	15000	10.00	0.480	0.200
MOX-ALPC1-183	18000	11.00	0.460	0.200
MOX-ALPC1-223	22000	13.00	0.390	0.200
MOX-ALPC1-273	27000	15.00	0.355	0.200
MOX-ALPC1-333	33000	21.00	0.330	0.160
MOX-ALPC1-393	39000	23.20	0.300	0.160
MOX-ALPC1-473	47000	32.00	0.270	0.120
MOX-ALPC1-563	56000	35.00	0.175	0.120
MOX-ALPC1-683	68000	48.00	0.145	0.095
MOX-ALPC1-823	82000	54.30	0.120	0.095
MOX-ALPC1-104	100000	68.50	0.100	0.070
MOX-ALPC1-124	120000	75.00	0.080	0.070
MOX-ALPC1-154	150000	84.30	0.060	0.070



## ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (μH)	DCR (Ω) Max.	Saturation Current	Rated Current (A)
MOX-ALPC2-3R9	3.9	.007	15.5	4.0
MOX-ALPC2-4R7	4.7	.008	13.9	4.0
MOX-ALPC2-5R6	5.6	.011	12.6	4.0
MOX-ALPC2-6R8	6.8	.011	11.6	4.0
MOX-ALPC2-8R2	8.2	.013	9.89	4.0
MOX-ALPC2-100	10	.017	8.70	4.0
MOX-ALPC2-120	12	.019	8.21	4.0
MOX-ALPC2-150	15	.022	7.34	4.0
MOX-ALPC2-180	18	.023	6.64	4.0
MOX-ALPC2-220	22	.026	6.07	4.0
MOX-ALPC2-270	27	.027	5.36	4.0
MOX-ALPC2-330	33	.032	4.82	4.0
MOX-ALPC2-390	39	.033	4.36	4.0
MOX-ALPC2-470	47	.035	3.98	4.0
MOX-ALPC2-560	56	.037	3.66	3.2
MOX-ALPC2-680	68	.047	3.31	2.5
MOX-ALPC2-820	82	.060	3.10	2.0
MOX-ALPC2-101	100	.090	2.79	1.6
MOX-ALPC2-121	120	.113	2.54	1.6
MOX-ALPC2-151	150	.129	2.22	1.6
MOX-ALPC2-181	180	.150	1.98	1.6
MOX-ALPC2-221	220	.162	1.89	1.6
MOX-ALPC2-271	270	.208	1.63	1.6
MOX-ALPC2-331	330	.212	1.51	1.6
MOX-ALPC2-391	390	.281	1.39	1.6
MOX-ALPC2-471	470	.380	1.24	1.2
MOX-ALPC2-561	560	.420	1.17	1.0
MOX-ALPC2-681	680	.548	1.05	1.0
MOX-ALPC2-821	820	.655	.97	0.8
MOX-ALPC2-102	1000	.844	.87	0.8
MOX-ALPC2-122	1200	1.04	.79	0.6
MOX-ALPC2-152	1500	1.18	.70	0.6
MOX-ALPC2-182	1800	1.56	.64	0.6
MOX-ALPC2-222	2200	2.00	.58	0.5
MOX-ALPC2-272	2700	2.06	.53	0.4
MOX-ALPC2-332	3300	2.53	.47	0.4
MOX-ALPC2-392	3900	2.75	.43	0.4
MOX-ALPC2-472	4700	3.19	.39	0.4
MOX-ALPC2-562	5600	5.92	.359	0.315
MOX-ALPC2-682	6800	5.69	.322	0.250
MOX-ALPC2-822	8200	6.32	.293	0.250
MOX-ALPC2-103	10000	7.30	.266	0.250
MOX-ALPC2-123	12000	9.21	.241	0.200
MOX-ALPC2-153	15000	10.50	.214	0.200
MOX-ALPC2-183	18000	14.80	.198	0.158
MOX-ALPC2-223	22000	21.80	.180	0.125
MOX-ALPC2-273	27000	22.70	.162	0.125
MOX-ALPC2-333	33000	25.70	.146	0.125
MOX-ALPC2-393	39000	31.80	.135	0.100
MOX-ALPC2-473	47000	36.10	.122	0.100
MOX-ALPC2-563	56000	40.90	.112	0.100
MOX-ALPC2-683	68000	57.30	.101	0.082
MOX-ALPC2-823	82000	79.30	.090	0.065
MOX-ALPC2-104	100000	89.70	.081	0.065



## ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (μH)	DCR (Ω) Max.	Saturation Current	Rated Current (A)
MOX-ALPC3-3R9	3.9	.019	7.3	1.28
MOX-ALPC3-4R7	4.7	.022	6.3	1.28
MOX-ALPC3-5R6	5.6	.024	5.6	1.28
MOX-ALPC3-6R8	6.8	.026	5.3	1.28
MOX-ALPC3-8R2	8.2	.028	4.5	1.28
MOX-ALPC3-100	10	.033	4.1	1.28
MOX-ALPC3-120	12	.037	3.6	1.28
MOX-ALPC3-150	15	.040	3.3	1.28
MOX-ALPC3-180	18	.044	3.0	1.28
MOX-ALPC3-220	22	.050	2.7	1.28
MOX-ALPC3-270	27	.058	2.5	1.280
MOX-ALPC3-330	33	.075	2.2	1.008
MOX-ALPC3-390	39	.094	2.0	.804
MOX-ALPC3-470	47	.109	1.8	.804
MOX-ALPC3-560	56	.140	1.7	.804
MOX-ALPC3-680	68	.145	1.5	.804
MOX-ALPC3-820	82	.152	1.4	.804
MOX-ALPC3-101	100	.218	1.2	.632
MOX-ALPC3-121	120	.283	1.1	.508
MOX-ALPC3-151	150	.340	1.0	.508
MOX-ALPC3-181	180	.362	.95	.508
MOX-ALPC3-221	220	.430	.86	.508
MOX-ALPC3-271	270	.557	.77	.400
MOX-ALPC3-331	330	.665	.70	.400
MOX-ALPC3-391	390	.772	.64	.400
MOX-ALPC3-471	470	1.15	.59	.315
MOX-ALPC3-561	560	1.27	.54	.315
MOX-ALPC3-681	680	1.61	.49	.250
MOX-ALPC3-821	820	1.96	.44	.200
MOX-ALPC3-102	1000	2.30	.40	.200
MOX-ALPC3-122	1200	2.65	.35	.200
MOX-ALPC3-152	1500	3.45	.33	.158
MOX-ALPC3-182	1800	4.03	.29	.158
MOX-ALPC3-222	2200	4.48	.27	.158
MOX-ALPC3-272	2700	5.90	.24	.125
MOX-ALPC3-332	3300	6.56	.220	.125
MOX-ALPC3-392	3900	8.63	.200	.100
MOX-ALPC3-472	4700	10.50	.180	.100
MOX-ALPC3-562	5600	13.90	.166	.082
MOX-ALPC3-682	6800	16.30	.151	.082
MOX-ALPC3-822	8200	20.80	.136	.065
MOX-ALPC3-103	10000	26.40	.125	.050
MOX-ALPC3-123	12000	29.90	.114	.050
MOX-ALPC3-153	15000	42.50	.098	.039
MOX-ALPC3-183	18000	48.30	.091	.039



## ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (μH)	DCR (Ω) Max.	Saturation Current	Rated Current (mA)
MOX-ALPC4-1R0	1.0	.018	3000	3300
MOX-ALPC4-1R2	1.2	.019	2700	3200
MOX-ALPC4-1R5	1.5	.020	2500	3100
MOX-ALPC4-1R8	1.8	.023	2100	2900
MOX-ALPC4-2R2	2.2	.031	2000	2600
MOX-ALPC4-2R7	2.7	.033	1900	2500
MOX-ALPC4-3R3	3.3	.054	1700	1900
MOX-ALPC4-3R9	3.9	.060	1500	1800
MOX-ALPC4-4R7	4.7	.068	1400	1700
MOX-ALPC4-5R6	5.6	.074	1300	1600
MOX-ALPC4-6R8	6.8	.080	1200	1600
MOX-ALPC4-8R2	8.2	.087	1100	1500
MOX-ALPC4-100	10	.095	970	1500
MOX-ALPC4-120	12	.110	880	1400
MOX-ALPC4-150	15	.121	790	1200
MOX-ALPC4-180	18	.160	710	1100
MOX-ALPC4-220	22	.190	640	1000
MOX-ALPC4-270	27	.220	580	950
MOX-ALPC4-330	33	.350	530	910
MOX-ALPC4-390	39	.260	480	880
MOX-ALPC4-470	47	.430	430	760
MOX-ALPC4-560	56	.470	400	650
MOX-ALPC4-680	68	.530	370	610
MOX-ALPC4-820	82	.600	330	580
MOX-ALPC4-101	100	.670	300	550
MOX-ALPC4-121	120	.900	270	470
MOX-ALPC4-151	150	1.20	250	410
MOX-ALPC4-181	180	1.40	220	380
MOX-ALPC4-221	220	1.90	200	320
MOX-ALPC4-271	270	2.10	180	310
MOX-ALPC4-331	330	2.40	170	290
MOX-ALPC4-391	390	3.0	150	260
MOX-ALPC4-471	470	3.80	140	240
MOX-ALPC4-561	560	4.70	130	210
MOX-ALPC4-681	680	6.40	110	180
MOX-ALPC4-821	820	7.1	100	170
MOX-ALPC4-102	1000	7.9	95	160
MOX-ALPC4-122	1200	9.0	87	150
MOX-ALPC4-152	1500	12.0	78	130
MOX-ALPC4-182	1800	14.0	71	120
MOX-ALPC4-222	2200	19.0	64	100
MOX-ALPC4-272	2700	25.0	58	90
MOX-ALPC4-332	3300	29.0	52	83
MOX-ALPC4-392	3900	34.0	48	77
MOX-ALPC4-472	4700	42.55	44	74
MOX-ALPC4-562	5600	50.0	40	63
MOX-ALPC4-682	6800	58.0	36	59
MOX-ALPC4-822	8200	68.0	33	54
MOX-ALPC4-103	10000	75.0	30	52



## ENGINEERING DATA

- Epoxy coated cores.
- Inductance  $\pm 15\%$  measured at 1KHz.
- Saturation lowers inductance by approximately 5%.
- 1000VAC RMS Hi-Pot.
- RoHS compliant.
- Operating temperature range  $-55^{\circ}\text{C}$  to  $+130^{\circ}\text{C}$ .
- All electrical specifications are at  $25^{\circ}\text{C}$ .
- For applications exceeding 24 volts please verify with physical sample in circuit.
- MoxiE Inductor Corporation specifications are subject to change without notice.
- MoxiE Inductor Corporation custom designed products are subject to United States Copyright and or patent protection(s).