

ALDF Series

Features

- Utilizing a miniaturized winding structure.
- These products provide low DC resistance and high current.
- Precision inductance tolerance is available.

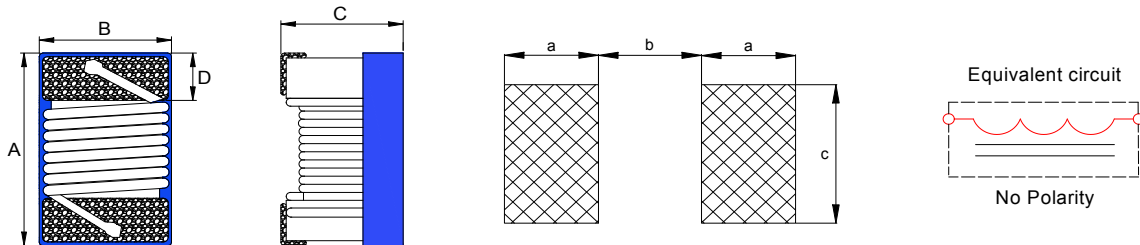
Applications

- Personal computer, Hard disk drives.
- xDSL modem and Cable modem.
- Digital camera and other electronic equipment.

Test Equipment and Conditions

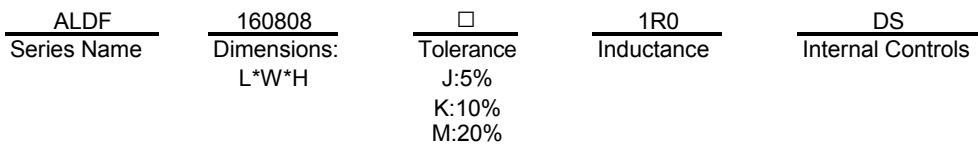
- L,Q : Agilent/HP E4991A+ Agilent/HP16197A.
- SRF : Agilent/HP E4991A+ Agilent/HP 16197A.
- Rdc : DIGITAL MILLIOHM METER Chroma 16502 or equivalent.
- Irms : DC current(A) that will cause an approximate ΔT of 40°C.
- Operating temperature range from -40°C to 85°C (Including self - temperature rise).

External Dimensions (Unit:m/m)



TYPE	METRIC	A	B	C	D	a	b	c	Q'Ty/Reel
ALDF100505-DS	0402	1.19Max	0.7Max	0.66Max	0.23Ref	0.36Ref	0.46Ref	0.66Ref	10000
ALDF160808-DS	0603	1.80Max	1.32Max	1.20Max	0.33Ref	0.64Ref	0.64Ref	1.02Ref	4000
ALDF201212-DS	0805	2.40Max	1.75Max	1.52Max	0.44Ref	1.02Ref	0.76Ref	1.78Ref	2000
ALDF292520-DS	1008	2.92Max	2.7Max	2.23Max	0.50Ref	1.02Ref	1.27Ref	2.54Ref	2000
ALDF362924-DS	1210	3.60Max	2.9Max	2.40Max	0.50Ref	1.02Ref	1.78Ref	2.54Ref	2000

2. Part Number Code



ALDF-DS Series

Part Number	Inductance (uH)	Test Freq. (MHz)	SRF (MHz)Min.	RDC (Ω)Max.	I _{rms} (mA)Max.
ALDF100505□20NDS	0.020	7.9	2600	0.05	1600
ALDF100505□22NDS	0.022	7.9	2500	0.065	1300
ALDF100505□33NDS	0.033	7.9	2300	0.06	1400
ALDF100505□36NDS	0.036	7.9	2300	0.075	1300
ALDF100505□39NDS	0.039	7.9	2200	0.115	830
ALDF100505□51NDS	0.051	7.9	1930	0.07	1100
ALDF100505□56NDS	0.056	7.9	1900	0.095	1000
ALDF100505□72NDS	0.072	7.9	1650	0.1	1000
ALDF100505□78NDS	0.078	7.9	1600	0.13	970
ALDF100505□R10DS	0.10	7.9	1400	0.16	900
ALDF100505□R11DS	0.11	7.9	1000	0.2	850
ALDF100505□R14DS	0.14	7.9	1220	0.26	630
ALDF100505□R18DS	0.18	7.9	1150	0.28	560
ALDF100505□R20DS	0.20	7.9	1000	0.44	400
ALDF100505□R22DS	0.22	7.9	1150	0.53	380
ALDF100505□R25DS	0.25	7.9	900	0.36	520
ALDF100505□R27DS	0.27	7.9	860	0.9	360
ALDF100505□R30DS	0.30	7.9	860	0.41	420
ALDF100505□R33DS	0.33	7.9	820	0.56	350
ALDF100505□R36DS	0.36	7.9	810	0.575	300
ALDF100505□R39DS	0.39	7.9	760	1.0	300
ALDF100505□R42DS	0.42	7.9	700	0.7	340
ALDF100505□R47DS	0.47	7.9	650	0.73	310
ALDF100505□R56DS	0.56	7.9	600	1.2	200
ALDF100505□R82DS	0.82	7.9	385	5.85	90
ALDF100505□1R0DS	1.00	7.9	200	6.5	50

ALDF-DS Series

Part Number	Inductance (uH)	Test Freq. (MHz)	Q min.	SRF (MHz)Min.	RDC (Ω)Max.	Irms (mA)Max.
ALDF160808 □47NDS	0.047	7.9	12	1700	0.098	1500
ALDF160808 □R10DS	0.10	7.9	12	1150	0.13	1000
ALDF160808 □R15DS	0.15	7.9	12	950	0.15	1000
ALDF160808 □R18DS	0.18	7.9	12	950	0.2	1000
ALDF160808 □R20DS	0.20	7.9	12	1030	0.2	740
ALDF160808 □R22DS	0.22	7.9	12	775	0.3	700
ALDF160808 □R27DS	0.27	7.9	12	775	0.3	700
ALDF160808 □R33DS	0.33	7.9	12	725	0.32	600
ALDF160808 □R39DS	0.39	7.9	12	620	0.51	500
ALDF160808 □R44DS	0.44	7.9	12	620	0.65	400
ALDF160808 □R47DS	0.47	7.9	12	600	0.62	420
ALDF160808 □R51DS	0.51	7.9	12	600	0.65	400
ALDF160808 □R56DS	0.56	7.9	12	600	0.65	400
ALDF160808 □R65DS	0.65	7.9	12	510	0.52	430
ALDF160808 □R68DS	0.68	7.9	12	500	1.0	380
ALDF160808 □R75DS	0.75	7.9	12	500	1.3	350
ALDF160808 □R82DS	0.82	7.9	12	500	1.3	350
ALDF160808 □1R0DS	1.0	7.9	12	400	1.5	330
ALDF160808 □1R2DS	1.2	7.9	12	380	1.7	320
ALDF160808 □1R5DS	1.5	7.9	12	300	1.9	310
ALDF160808 □1R8DS	1.8	7.9	12	180	2.2	300
ALDF160808 □2R0DS	2.0	7.9	12	180	2.3	280
ALDF160808 □2R2DS	2.2	7.9	12	180	2.3	280
ALDF160808 □2R7DS	2.7	7.9	12	150	2.6	250
ALDF160808 □3R3DS	3.3	7.9	12	150	2.9	230
ALDF160808 □3R9DS	3.9	7.9	12	120	3.2	210
ALDF160808 □4R7DS	4.7	7.9	12	100	4.0	200
ALDF160808 □5R1DS	5.1	7.9	12	32	2.6	240
ALDF160808 □5R6DS	5.6	7.9	12	32	2.6	240
ALDF160808 □6R8DS	6.8	7.9	12	31	3.9	200
ALDF160808 □8R2DS	8.2	7.9	12	26	4.2	190
ALDF160808 □100DS	10	2.5	10	25	4.8	180

ALDF-DS Series

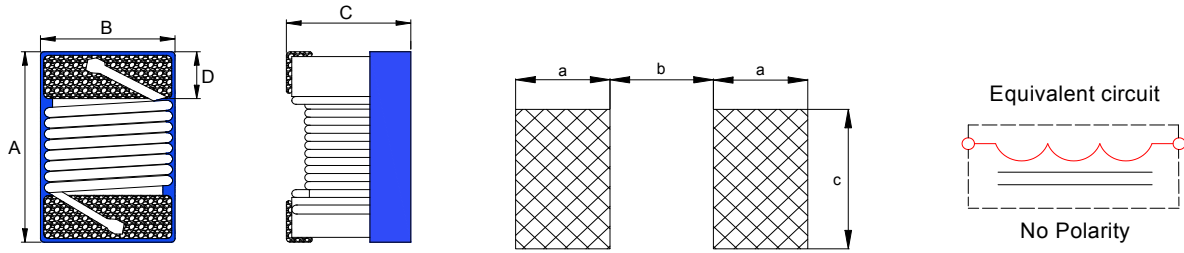
Part Number	Inductance (uH)	Test Freq. (MHz)	Q min.	SRF (MHz)Min.	RDC (Ω)Max.	Irms (mA)Max.
ALDF160808 □150DS	15	2.5	10	23	8.5	170
ALDF160808 □180DS	18	2.5	10	22	10.0	160
ALDF160808 □220DS	22	2.5	10	10	12.0	100
ALDF201212 □R10DS	0.10	7.9	19	340	0.69	500
ALDF201212 □R15DS	0.15	7.9	19	480	0.3	600
ALDF201212 □R22DS	0.22	7.9	19	480	0.4	600
ALDF201212 □R33DS	0.33	7.9	19	500	0.31	720
ALDF201212 □R39DS	0.39	7.9	19	500	0.31	720
ALDF201212 □R47DS	0.47	7.9	19	500	0.31	720
ALDF201212 □R68DS	0.68	7.9	19	400	0.46	590
ALDF201212 □R88DS	0.88	7.9	12	360	1.0	520
ALDF201212 □R91DS	0.91	7.9	12	360	1.0	500
ALDF201212 □1R0DS	1.0	7.9	12	360	1.0	430
ALDF201212 □1R2DS	1.2	7.9	12	350	1.15	410
ALDF201212 □1R5DS	1.5	7.9	12	300	1.2	400
ALDF201212 □1R8DS	1.8	7.9	12	300	1.35	380
ALDF201212 □2R2DS	2.2	7.9	12	170	1.5	350
ALDF201212 □2R7DS	2.7	7.9	12	100	1.7	320
ALDF201212 □3R3DS	3.3	7.9	12	90	1.8	300
ALDF201212 □3R9DS	3.9	7.9	12	90	1.95	280
ALDF201212 □4R7DS	4.7	7.9	12	85	2.05	250
ALDF201212 □5R6DS	5.6	7.9	12	70	2.3	240
ALDF201212 □6R8DS	6.8	7.9	12	55	2.6	220
ALDF201212 □8R0DS	8.0	7.9	12	50	3.0	180
ALDF201212 □8R2DS	8.2	7.9	12	50	3.0	180
ALDF201212 □100DS	10	2.5	10	30	3.2	150
ALDF201212 □120DS	12	2.5	10	17	3.5	100
ALDF201212 □150DS	15	2.5	10	16	4.2	100
ALDF201212 □220DS	22	2.5	10	14	6.0	80
ALDF201212 □390DS	39	2.5	10	14	10.0	60
ALDF201212 □470DS	47	2.5	10	14	13.8	55
ALDF201212 □560DS	56	2.5	10	8	14.0	30

ALDF-DS Series

Part Number	Inductance (uH)	Test Freq. (MHz)	Q min.	SRF (MHz)Min.	RDC (Ω)Max.	Irms (mA)Max.
ALDF201212 □ 101DS	100	1	8	5	25.0	30
ALDF292520 □ R56DS	0.56	7.9	12	230	0.62	700
ALDF292520 □ R68DS	0.68	7.9	12	230	0.62	700
ALDF292520 □ R82DS	0.82	7.9	12	230	0.62	700
ALDF292520 □ 1R0DS	1.0	7.9	18	230	0.62	700
ALDF292520 □ 1R2DS	1.2	7.9	18	210	0.68	650
ALDF292520 □ 1R5DS	1.5	7.9	18	190	0.76	630
ALDF292520 □ 1R8DS	1.8	7.9	18	170	0.84	600
ALDF292520 □ 2R2DS	2.2	7.9	18	150	1.10	520
ALDF292520 □ 2R7DS	2.7	7.9	18	135	1.28	490
ALDF292520 □ 3R3DS	3.3	7.9	18	120	1.46	450
ALDF292520 □ 3R9DS	3.9	7.9	18	105	1.56	420
ALDF292520 □ 4R7DS	4.7	7.9	18	90	2.00	400
ALDF292520 □ 5R6DS	5.6	7.9	15	80	1.8	380
ALDF292520 □ 6R8DS	6.8	7.9	15	70	2.00	360
ALDF292520 □ 8R2DS	8.2	7.9	15	65	2.65	330
ALDF292520 □ 100DS	10	2.5	12	60	2.95	300
ALDF292520 □ 180DS	18	2.5	12	26	4.00	160
ALDF292520 □ 220DS	22	2.5	12	22	6.14	270
ALDF292520 □ 300DS	30	2.5	10	12	6.80	200
ALDF292520 □ 330DS	33	2.5	10	12	7.00	200
ALDF292520 □ 390DS	39	2.5	10	16	10.00	170
ALDF292520 □ 470DS	47	2.5	10	10	10.70	160
ALDF292520 □ 560DS	56	2.5	10	8	12.00	170
ALDF292520 □ 680DS	68	2.5	10	6	13.50	145
ALDF292520 □ 820DS	82	2.5	8	6	20.00	100
ALDF362924 □ R56DS	0.56	25	20	180	0.55	450
ALDF362924 □ 1R0DS	1.0	25	45	340	1.85	820
ALDF362924 □ 1R5DS	1.5	7.9	20	200	0.40	450
ALDF362924 □ 1R8DS	1.8	7.9	20	195	0.80	450
ALDF362924 □ 2R2DS	2.2	7.9	20	175	0.80	450
ALDF362924 □ 4R7DS	4.7	7.9	18	60	1.30	350
ALDF362924 □ 5R6DS	5.6	2.5	18	50	2.00	320

ALDF-DS Series

Part Number	Inductance (uH)	Test Freq. (MHz)	Q min.	SRF (MHz)Min.	RDC (Ω)Max.	I _{rms} (mA)Max.
ALDF362924 □100DS	10	2.5	15	30	1.00	300
ALDF362924 □150DS	15	2.5	15	22	2.00	225
ALDF362924 □180DS	18	2.5	15	22	2.05	215
ALDF362924 □220DS	22	2.5	15	20	2.40	210
ALDF362924 □330DS	33	2.5	15	15	2.90	160
ALDF362924 □470DS	47	2.5	15	10	5.20	140
ALDF362924 □560DS	56	2.5	8	8	5.60	125
ALDF362924 □680DS	68	1	6	10	13.0	100
ALDF362924 □820DS	82	1	6	10	13.0	100
ALDF362924 □101DS	100	1	6	10	13.0	100
ALDF362924 □121DS	120	1	6	10	13.0	100
ALDF362924 □151DS	150	1	10	4	20.0	80
ALDF362924 □181DS	180	1	8	3	14.5	70
ALDF362924 □201DS	200	1	8	3	30.0	65
ALDF362924 □221DS	220	1	8	3	30.0	65
ALDF362924 □271DS	270	1	8	2	33.0	60
ALDF362924 □331DS	330	1	8	2	35.0	55
ALDF362924 □471DS	470	1	8	2	42.0	40
ALDF362924 □561DS	560	1	8	2	60.0	10
ALDF362924 □621DS	620	1	8	2	85.0	10

External Dimensions (Unit:m/m)


TYPE	METRIC	A	B	C	D	a	b	c	Q'Ty/Reel
ALDF160808-D	0603	1.80Max	1.25Max	1.20Max	0.33Ref	0.64Ref	0.64Ref	1.02Ref	4000
ALDF201212-D	0805	2.40Max	1.73Max	1.52Max	0.44Ref	1.02Ref	0.76Ref	1.78Ref	2000

ALDF-D Series

Part Number	Inductance (uH)	Test Freq. (MHz)	Q min.	SRF (MHz)Min.	RDC (Ω)Max.	Irms (mA)Max.
ALDF160808K1R0D	1.0	7.9	12	390	0.41	800
ALDF160808K1R5D	1.5	7.9	12	160	0.52	650
ALDF160808K1R8D	1.8	7.9	12	121	0.56	550
ALDF160808K2R2D	2.2	7.9	12	50	0.50	600
ALDF160808K3R3D	3.3	7.9	12	66	0.91	420
ALDF160808K4R7D	4.7	7.9	12	51	0.97	400
ALDF160808K5R6D	5.6	7.9	12	47	1.43	380
ALDF160808K6R8D	6.8	7.9	12	43	1.95	340
ALDF160808K8R2D	8.2	7.9	12	40	2.18	300
ALDF160808K100D	10	2.5	14	36	2.40	280
ALDF160808K150D	15	2.5	12	29	3.38	200
ALDF160808K220D	22	2.5	12	24	4.69	200
ALDF160808K270D	27	2.5	12	20	6.76	140
ALDF160808K330D	33	2.5	12	10	8.58	100
ALDF160808K470D	47	2.5	10	5	12	100
ALDF201212KR47D	0.47	7.9	14	850	0.10	1400
ALDF201212K1R0D	1.0	7.9	14	208	0.169	1100
ALDF201212K1R5D	1.5	7.9	14	130	0.22	880
ALDF201212K1R8D	1.8	7.9	14	112	0.26	860
ALDF201212K2R2D	2.2	7.9	12	80	0.312	740
ALDF201212K3R3D	3.3	7.9	12	50	0.36	620
ALDF201212K4R7D	4.7	7.9	14	51	0.559	520

ALDF-D Series

Part Number	Inductance (uH)	Test Freq. (MHz)	Q min.	SRF (MHz)Min.	RDC (Ω)Max.	Irms (mA)Max.
ALDF201212K5R6D	5.6	8	12	42	0.65	480
ALDF201212K6R8D	6.8	7.9	14	35	0.88	420
ALDF201212K8R2D	8.2	7.9	13	33	0.94	400
ALDF201212K100D	10	2.5	14	25	1.17	290
ALDF201212K150D	15	2.5	15	28	1.82	300
ALDF201212K180D	18	2.5	15	27	2.01	280
ALDF201212K220D	22	2.5	15	20	2.288	240
ALDF201212K270D	27	2.5	15	17	2.6	220
ALDF201212K330D	33	2.5	15	17	3.055	200
ALDF201212K470D	47	2.5	14	15	4.42	160
ALDF201212K101D	100	1.0	10	5	9.75	100
ALDF201212K111D	110	1.0	10	5	9.75	100