



type 500

screw terminal
can style

The 500 range of computer grade aluminium electrolytic capacitors is designed for long life applications which require high ripple current, low E.S.R. and high CV product at 85°C continuous operation. The 500X range covers the higher capacitance values and the 500R has minimum E.S.R. ratings. Life tests are either 1500 hours at 85°C with rated d.c. voltage and full rated ripple current or 2000 hours at 85°C with rated d.c. voltage and 85% of rated ripple current. Standard tolerances are +75, -10% and +50, -10%.

$$\text{Leakage current} = .006 \text{ CV} + 4 \mu\text{A} \quad \text{CV} \leq 250,000 \mu\text{F-V}$$

$$= 3 \sqrt{\text{CV}} (\mu\text{A}) \quad \text{CV} > 250,000 \mu\text{F-V}$$

For more detailed information request Bulletin 2236E.

Type 500X High Capacitance Ratings

Capacitance μF	Case Code	Max. ESR (ohms) 120Hz	Ripple Current (rms amps) 120Hz, 85°C	Capacitance μF	Case Code	Max. ESR (ohms) 120Hz	Ripple Current (rms amps) 120Hz, 85°C
5 VDC — 6.3 VDC SURGE				20 VDC — 30 VDC SURGE			
20,000	AA	.120	3.00	7,000	AA	.140	2.6
37,000	AB	.060	4.00	12,000	AB	.072	4.0
53,000	AC	.041	6.00	18,000	AC	.050	5.4
61,000	AD	.035	6.30	21,000	AD	.042	5.7
69,000	AE	.031	6.90	24,000	AE	.040	6.1
72,000	BB	.042	5.50	24,000	BB	.048	5.1
77,000	AF	.028	7.60	27,000	AF	.035	6.8
110,000	BC	.025	8.10	36,000	BC	.029	7.5
120,000	CB	.023	7.40	41,000	CB	.029	6.6
125,000	BD	.022	8.70	43,000	BD	.026	8.0
145,000	BE	.020	9.70	48,000	BE	.023	9.6
160,000	BF	.018	10.00	55,000	BF	.020	10.1
178,000	CC	.014	11.00	62,000	CC	.017	9.9
210,000	CD	.012	12.00	72,000	CD	.015	10.5
240,000	CE	.011	13.00	82,000	CE	.013	12.0
270,000	CF	.010	14.50	93,000	CF	.011	13.6
270,000	DC	.012	12.50	93,000	DC	.014	11.6
315,000	DD	.011	13.70	110,000	DD	.012	13.2
360,000	DE	.010	15.00	120,000	DE	.011	14.3
400,000	DF	.009	16.00	140,000	DF	.010	15.5
10 VDC — 15 VDC SURGE				25 VDC — 35 VDC SURGE			
13,000	AA	.120	3.0	5,900	AA	.140	2.8
25,000	AB	.065	4.2	10,000	AB	.074	3.9
37,000	AC	.048	5.5	15,000	AC	.051	5.4
42,000	AD	.040	6.0	18,000	AD	.045	5.6
48,000	AE	.036	6.5	20,000	AE	.043	5.9
50,000	BB	.045	5.3	20,000	BB	.052	4.9
53,000	AF	.032	7.2	23,000	AF	.037	6.6
75,000	BC	.027	7.8	31,000	BC	.030	7.4
82,000	CB	.025	7.0	35,000	CB	.030	6.5
86,000	BD	.023	8.5	36,000	BD	.027	7.9
100,000	BE	.021	9.4	41,000	BE	.024	8.8
112,000	BF	.019	10.4	46,000	BF	.021	9.8
120,000	CC	.015	10.5	52,000	CC	.018	9.5
140,000	CD	.014	11.3	61,000	CD	.016	10.6
160,000	CE	.011	13.0	70,000	CE	.014	11.6
180,000	CF	.010	14.5	79,000	CF	.012	13.2
180,000	DC	.013	12.0	79,000	DC	.014	11.6
220,000	DD	.012	13.2	92,000	DD	.013	12.6
250,000	DE	.011	14.3	105,000	DE	.012	13.7
280,000	DF	.010	15.5	120,000	DF	.011	14.7
15 VDC — 20 VDC SURGE				30 VDC — 40 VDC SURGE			
9,500	AA	.130	2.9	5,200	AA	.150	2.7
17,000	AB	.068	4.1	9,300	AB	.078	3.8
25,000	AC	.049	5.5	13,000	AC	.054	5.2
29,000	AD	.041	5.8	15,000	AD	.049	5.4
32,000	AE	.038	6.3	17,000	AE	.044	5.8
33,000	BB	.047	5.2	18,000	BB	.055	4.7
37,000	AF	.033	7.0	19,000	AF	.039	6.5
50,000	BC	.028	7.7	28,000	BC	.031	7.3
57,000	CB	.027	6.8	30,000	CB	.030	6.5
59,000	BD	.024	8.4	33,000	BD	.027	7.9
67,000	BE	.022	9.2	37,000	BE	.024	8.8
76,000	BF	.019	10.4	42,000	BF	.022	9.7
85,000	CC	.016	10.5	45,000	CC	.018	9.6
100,000	CD	.015	11.0	52,000	CD	.016	10.5
114,000	CE	.012	12.5	60,000	CE	.014	11.6
127,000	CF	.011	13.8	67,000	CF	.012	13.2
127,000	DC	.013	12.0	69,000	DC	.015	11.2
150,000	DD	.012	13.2	80,000	DD	.013	13.1
174,000	DE	.011	14.3	90,000	DE	.012	13.7
190,000	DF	.010	15.5	103,000	DF	.011	14.4



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The 500 range of computer grade aluminium electrolytic capacitors is designed for long life applications which require high ripple current, low E.S.R. and high CV product at 85°C continuous operation. The 500X range covers the higher capacitance values and the 500R has minimum E.S.R. ratings. Life tests are either 1500 hours at 85°C with rated d.c. voltage and full rated ripple current or 2000 hours at 85°C with rated d.c. voltage and 85% of rated ripple current. Standard tolerances are +75, -10% and +50, -10%.

$$\begin{aligned} \text{Leakage current} &= .006 CV + 4 \mu A & CV \leq 250,000 \mu F-V \\ &= 3 \sqrt{CV} (\mu A) & CV > 250,000 \mu F-V \end{aligned}$$

For more detailed information request Bulletin 2236E.

Type 500X High Capacitance Ratings

Capacitance μF	Case Code	Max. ESR (ohms) 120Hz	Ripple Current (rms amps) 120Hz, 85°C	Capacitance μF	Case Code	Max. ESR (ohms) 120Hz	Ripple Current (rms amps) 120Hz, 85°C
5 VDC — 6.3 VDC SURGE				20 VDC — 30 VDC SURGE			
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37,000	AB	.060	4.00	12,000	AB	.072	4.0
53,000	AC	.041	6.00	18,000	AC	.050	5.4
61,000	AD	.035	6.30	21,000	AD	.042	5.7
69,000	AE	.031	6.90	24,000	AE	.040	6.1
72,000	BB	.042	5.50	24,000	BB	.048	5.1
77,000	AF	.028	7.60	27,000	AF	.035	6.8
110,000	BC	.025	8.10	36,000	BC	.029	7.5
120,000	CB	.023	7.40	41,000	CB	.029	6.6
125,000	BD	.022	8.70	43,000	BD	.026	8.0
145,000	BE	.020	9.70	48,000	BE	.023	9.6
160,000	BF	.018	10.00	55,000	BF	.020	10.1
178,000	CC	.014	11.00	62,000	CC	.017	9.9
210,000	CD	.012	12.00	72,000	CD	.015	10.5
240,000	CE	.011	13.00	82,000	CE	.013	12.0
270,000	CF	.010	14.50	93,000	CF	.011	13.6
270,000	DC	.012	12.50	93,000	DC	.014	11.6
315,000	DD	.011	13.70	110,000	DD	.012	13.2
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48,000	AE	.036	6.5	20,000	AE	.043	5.9
50,000	BB	.045	5.3	20,000	BB	.052	4.9
53,000	AF	.032	7.2	23,000	AF	.037	6.6
75,000	BC	.027	7.8	31,000	BC	.030	7.4
82,000	CB	.025	7.0	35,000	CB	.030	6.5
86,000	BD	.023	8.5	36,000	BD	.027	7.9
100,000	BE	.021	9.4	41,000	BE	.024	8.8
112,000	BF	.019	10.4	46,000	BF	.021	9.8
120,000	CC	.015	10.5	52,000	CC	.018	9.5
140,000	CD	.014	11.3	61,000	CD	.016	10.6
160,000	CE	.011	13.0	70,000	CE	.014	11.6
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25,000	AC	.049	5.5	13,000	AC	.054	5.2
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32,000	AE	.038	6.3	17,000	AE	.044	5.8
33,000	BB	.047	5.2	18,000	BB	.055	4.7
37,000	AF	.033	7.0	19,000	AF	.039	6.5
50,000	BC	.028	7.7	28,000	BC	.031	7.3
57,000	CB	.027	6.8	30,000	CB	.030	6.5
59,000	BD	.024	8.4	33,000	BD	.027	7.9
67,000	BE	.022	9.2	37,000	BE	.024	8.8
76,000	BF	.019	10.4	42,000	BF	.022	9.7
85,000	CC	.016	10.5	45,000	CC	.018	9.6
100,000	CD	.015	11.0	52,000	CD	.016	10.5
114,000	CE	.012	12.5	60,000	CE	.014	11.6
127,000	CF	.011	13.8	67,000	CF	.012	13.2
127,000	DC	.013	12.0	69,000	DC	.015	11.2
150,000	DD	.012	13.2	80,000	DD	.013	13.1
174,000	DE	.011	14.3	90,000	DE	.012	13.7
190,000	DF	.010	15.5	103,000	DF	.011	14.4

ordering codes and dimensions

screw terminal can styles

axial leaded styles

How to order
Order by complete part number as shown.

Terminal: A = Low screw insert, B = High screw insert

Style Number: polypropylene coated insulation .012" + .004", -.002"

Case Code: See Table of Dimensions.

DC Voltage Rating: This is expressed in volts, where necessary, to complete the three digit blocks; zeros are used to precede the voltage rating.

Capacitance Tolerance: U = +75, -10%, T = +50, -10%, M = ±20%*

Capacitance: This is expressed in microfarads. The first digits are significant figures, the last digit is the number of zeros.

Sangamo Type

* See individual ranges for list of available tolerances.

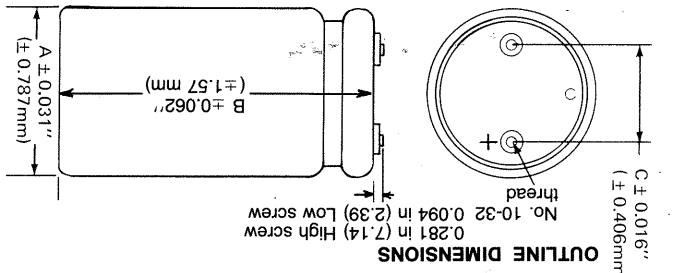


Table 1: Uninsulated Case Dimensions

Case Code	Dim. in Inches			Dim. in Millimeters		
	A	B	C	A	B	C
AK	1.375	1.625	0.500	34.93	41.28	12.7
AA	1.375	2.150	0.500	34.93	53.98	12.7
AH	1.375	2.625	0.500	34.93	66.68	12.7
AB	1.375	3.125	0.500	34.93	79.38	12.7
AD	1.375	3.625	0.500	34.93	92.08	12.7
AC	1.375	4.125	0.500	34.93	104.78	12.7
AE	1.375	4.625	0.500	34.93	117.48	12.7
AF	1.375	5.125	0.500	34.93	130.18	12.7
AG	1.375	5.625	0.500	34.93	142.88	12.7
AA	1.750	2.125	0.750	44.45	53.98	19.05
EA	1.750	2.625	0.750	44.45	66.68	19.05
EA	1.750	3.125	0.750	44.45	79.38	19.05
EA	1.750	3.625	0.750	44.45	92.08	19.05
EA	1.750	4.125	0.750	44.45	104.78	19.05
EA	1.750	4.625	0.750	44.45	117.48	19.05
EA	1.750	5.125	0.750	44.45	130.18	19.05
EA	1.750	5.625	0.750	44.45	142.88	19.05
EA	2.000	2.125	0.875	50.80	53.98	22.23
BA	2.000	2.625	0.875	50.80	66.68	22.23
BA	2.000	3.125	0.875	50.80	79.38	22.23
BA	2.000	3.625	0.875	50.80	92.08	22.23
BA	2.000	4.125	0.875	50.80	104.78	22.23
BA	2.000	4.625	0.875	50.80	117.48	22.23
BA	2.000	5.125	0.875	50.80	130.18	22.23
BA	2.000	5.625	0.875	50.80	142.88	22.23
BA	2.500	2.125	1.125	63.50	63.50	28.58
CD	2.500	2.625	1.125	63.50	76.20	28.58
CD	2.500	3.125	1.125	63.50	88.90	28.58
CD	2.500	3.625	1.125	63.50	101.60	28.58
CD	2.500	4.125	1.125	63.50	114.30	28.58
CD	2.500	4.625	1.125	63.50	127.00	28.58
CD	2.500	5.125	1.125	63.50	139.70	28.58
CD	2.500	5.625	1.125	63.50	152.40	28.58
CD	3.000	2.125	1.250	76.20	76.20	31.75
DC	3.000	2.625	1.250	76.20	88.90	31.75
DC	3.000	3.125	1.250	76.20	101.60	31.75
DC	3.000	3.625	1.250	76.20	114.30	31.75
DC	3.000	4.125	1.250	76.20	127.00	31.75
DC	3.000	4.625	1.250	76.20	139.70	31.75
DC	3.000	5.125	1.250	76.20	152.40	31.75
DC	3.000	5.625	1.250	76.20	165.10	31.75
DC	3.000	6.125	1.250	76.20	177.80	31.75
DC	3.000	6.625	1.250	76.20	190.50	31.75
DC	3.000	7.125	1.250	76.20	203.20	31.75
DC	3.000	7.625	1.250	76.20	215.90	31.75
DC	3.000	8.125	1.250	76.20	228.60	31.75
DC	3.000	8.625	1.250	76.20	241.30	31.75
DC	3.000	9.125	1.250	76.20	254.00	31.75
DC	3.000	9.625	1.250	76.20	266.70	31.75
DC	3.000	10.125	1.250	76.20	279.40	31.75
DC	3.000	10.625	1.250	76.20	292.10	31.75
DC	3.000	11.125	1.250	76.20	304.80	31.75
DC	3.000	11.625	1.250	76.20	317.50	31.75
DC	3.000	12.125	1.250	76.20	330.20	31.75
DC	3.000	12.625	1.250	76.20	342.90	31.75
DC	3.000	13.125	1.250	76.20	355.60	31.75
DC	3.000	13.625	1.250	76.20	368.30	31.75
DC	3.000	14.125	1.250	76.20	381.00	31.75
DC	3.000	14.625	1.250	76.20	393.70	31.75
DC	3.000	15.125	1.250	76.20	406.40	31.75
DC	3.000	15.625	1.250	76.20	419.10	31.75
DC	3.000	16.125	1.250	76.20	431.80	31.75
DC	3.000	16.625	1.250	76.20	444.50	31.75
DC	3.000	17.125	1.250	76.20	457.20	31.75
DC	3.000	17.625	1.250	76.20	469.90	31.75
DC	3.000	18.125	1.250	76.20	482.60	31.75
DC	3.000	18.625	1.250	76.20	495.30	31.75
DC	3.000	19.125	1.250	76.20	508.00	31.75
DC	3.000	19.625	1.250	76.20	520.70	31.75
DC	3.000	20.125	1.250	76.20	533.40	31.75
DC	3.000	20.625	1.250	76.20	546.10	31.75
DC	3.000	21.125	1.250	76.20	558.80	31.75
DC	3.000	21.625	1.250	76.20	571.50	31.75
DC	3.000	22.125	1.250	76.20	584.20	31.75
DC	3.000	22.625	1.250	76.20	596.90	31.75
DC	3.000	23.125	1.250	76.20	609.60	31.75
DC	3.000	23.625	1.250	76.20	622.30	31.75
DC	3.000	24.125	1.250	76.20	635.00	31.75
DC	3.000	24.625	1.250	76.20	647.70	31.75
DC	3.000	25.125	1.250	76.20	660.40	31.75
DC	3.000	25.625	1.250	76.20	673.10	31.75
DC	3.000	26.125	1.250	76.20	685.80	31.75
DC	3.000	26.625	1.250	76.20	698.50	31.75
DC	3.000	27.125	1.250	76.20	711.20	31.75
DC	3.000	27.625	1.250	76.20	723.90	31.75
DC	3.000	28.125	1.250	76.20	736.60	31.75
DC	3.000	28.625	1.250	76.20	749.30	31.75
DC	3.000	29.125	1.250	76.20	762.00	31.75
DC	3.000	29.625	1.250	76.20	774.70	31.75
DC	3.000	30.125	1.250	76.20	787.40	31.75
DC	3.000	30.625	1.250	76.20	800.10	31.75
DC	3.000	31.125	1.250	76.20	812.80	31.75
DC	3.000	31.625	1.250	76.20	825.50	31.75
DC	3.000	32.125	1.250	76.20	838.20	31.75
DC	3.000	32.625	1.250	76.20	850.90	31.75
DC	3.000	33.125	1.250	76.20	863.60	31.75
DC	3.000	33.625	1.250	76.20	876.30	31.75
DC	3.000	34.125	1.250	76.20	889.00	31.75
DC	3.000	34.625	1.250	76.20	901.70	31.75
DC	3.000	35.125	1.250	76.20	914.40	31.75
DC	3.000	35.625	1.250	76.20	927.10	31.75
DC	3.000	36.125	1.250	76.20	939.80	31.75
DC	3.000	36.625	1.250	76.20	952.50	31.75
DC	3.000	37.125	1.250	76.20	965.20	31.75
DC	3.000	37.625	1.250	76.20	977.90	31.75
DC	3.000	38.125	1.250	76.20	990.60	31.75
DC	3.000	38.625	1.250	76.20	1003.30	31.75
DC	3.000	39.125	1.250	76.20	1016.00	31.75
DC	3.000	39.625	1.250	76.20	1028.70	31.75
DC	3.000	40.125	1.250	76.20	1041.40	31.75
DC	3.000	40.625	1.250	76.20	1054.10	31.75
DC	3.000	41.125	1.250	76.20	1066.80	31.75
DC	3.000	41.625	1.250	76.20	1079.50	31.75
DC	3.000	42.125	1.250	76.20	1092.20	31.75
DC	3.000	42.625	1.250	76.20	1104.90	31.75
DC	3.000	43.125	1.250	76.20	1117.60	31.75
DC	3.000	43.625	1.250	76.20	1130.30	31.75
DC	3.000	44.125	1.250	76.20	1143.00	31.75
DC	3.000	44.625	1.250	76.20	1155.70	31.75
DC	3.000	45.125	1.250	76.20	1168.40	31.75
DC	3.000	45.625	1.250	76.20	1181.10	31.75
DC	3.000	46.125	1.250	76.20	1193.80	31.75
DC	3.000	46.625	1.250	76.20	1206.50	31.75
DC	3.000	47.125	1.250	76.20	1219.20	31.75
DC	3.000	47.625	1.250	76.20	1231.90	31.75
DC	3.000	48.125	1.250	76.20	1244.60	31.75
DC	3.000	48.625	1.250	76.20	1257.30	31.75
DC	3.000	49.125	1.250	76.20	1270.00	31.75
DC	3.000	49.625	1.250	76.20	1282.70	31.75
DC	3.000	50.125	1.250	76.20	1295.40	31.75
DC	3.000	50.625	1.250	76.20	1308.10	31.75
DC	3.000	51.125	1.250	76.20	1320.80	31.75
DC	3.000	51.625	1.250	76.20	1333.50	31.75
DC	3.000	52.125	1.250	76.20	1346.20	31.75
DC	3.000	52.625	1.250	76.20	1358.90	31.75
DC	3.000	53.125	1.250	76.20	1371.60	31.75
DC	3.000	53.625	1.250	76.20	1384.30	31.75
DC	3.000	54.125	1.250	76.20	1397.00	31.75
DC	3.000	54.625	1.250	76.20	1409.70	31.75
DC	3.000	55.125	1.250	76.20	1422.40	31.75
DC	3.000	55.625	1.250	76.20	1435.10	31.75
DC	3.000	56.125	1.250	76.20	1447.80	31.75
DC	3.000	56.625	1.250	76.20	1460.50	31.75
DC	3.000	57.125	1.250	76.20	1473.20	31.75
DC	3.000	57.625	1.250	76.20	1485.90	31.75
DC	3.000	58.125	1.250	76.20	1498.60	31.75
DC	3.000	58.625	1.250	76.20	1511.30	31.75
DC	3.000	59.125	1.250	76.20	1524.00	31.75
DC	3.000	59.625	1.250	76.20	1536.70	31.75
DC	3.000	60.125	1.250	76.20	1549.40	31.75
DC	3.000	60.625	1.250	76.20	1562.10	31.75
DC	3.000	61.125	1.250	76.20	1574.80	31.75
DC	3.000	61.625	1.250	76.20	1587.50	31.75
DC	3.000	62.125	1.250	76.20	1600.20	31.75
DC	3.000	62.625	1.250	76.20	1612.90	31.75
DC	3.000	63.125	1.250	76.20	1625.60	31