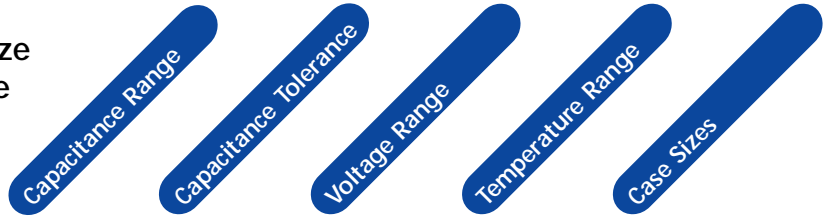


PCB Snap-In Capacitors

ALC10/40 series

Listed here are only samples of the range of PCB mounting Snap-In Capacitors we can produce.

Electrical characteristics and case size are just two parameters that can be optimised by our design engineers to achieve the exact product you require. Please contact our sales office for more details.



| | | | | | |
|---------------------|-------------------|------|------------------|-----------------|-------------------------|
| ALC10 series | 39µF to 220,000µF | ±20% | 10V to 500V d.c. | -40°C to +85°C | 22 x 30mm to 40 x 105mm |
| ALC40 series | 33µF to 220,000µF | ±20% | 10V to 450V d.c. | -40°C to +105°C | 22 x 30mm to 40 x 105mm |

Case Sizes 45 and 50mm diameter available upon request.



ALC10 Series

The ALC10 series of snap-in capacitors cover a wide range of case sizes and voltage ratings featuring high ripple currents and long life performance. They are ideally suited for industrial and commercial applications demanding high reliability and long life expectancy such as frequency converters, UPS systems and switch mode power supplies.

ALC40 Series

The ALC40 series of snap-in capacitors feature the same high ripple currents and long life characteristics as the ALC10 series but can operate at higher temperatures. They are similarly suited for high reliability and long life applications such as frequency converters, UPS systems and switch mode power supplies, but the extended temperature range allows increased ripple currents at lower temperatures.

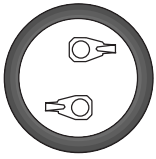
New - ALC12/42

The ALC12 (85°C) and ALC42 (105°C) are high CV, snap-in, versions of the ALC10 and ALC40 ranges. Both series are designed for applications where high reliability and compact sizes are important such as switch mode power supplies and frequency converters. An overview of both series can be found on pages 45 and 46.

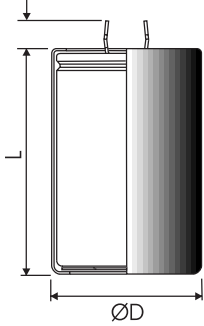
PCB Snap-in Capacitors

ALC10/40 case sizes

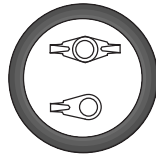
STYLE A/D
2 Pin



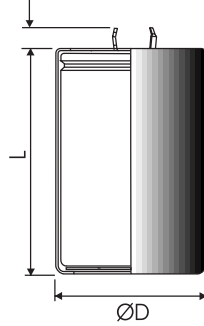
Style A - 6.3 ± 1
Style D - 4.0 ± 1



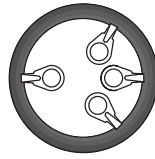
STYLE F
3 Pin



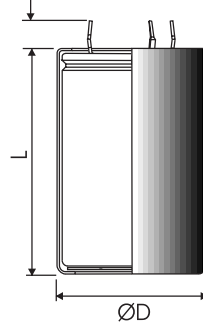
4.0 ± 1



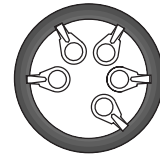
STYLE C/E
4 Pin



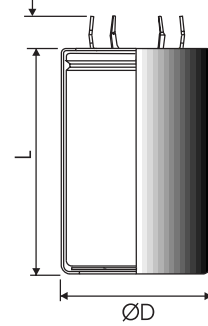
Style C - 6.3 ± 1
Style E - 4.0 ± 1



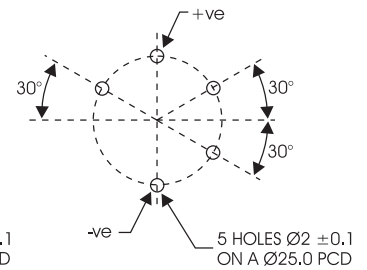
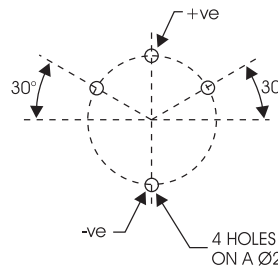
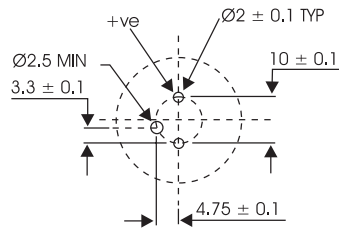
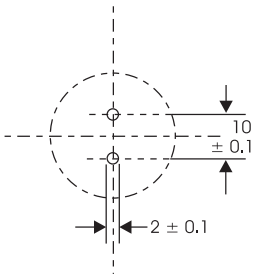
STYLE G/H
5 Pin



Style G - 6.3 ± 1
Style H - 4.0 ± 1



Negative denoted by line on sleeve



Mounting

These capacitors are designed to be mounted by their terminations alone, and may be used in any position.

CASE CODE (COMPONENT WEIGHT grams - nom.)

| DIA. mm | LENGTH mm ±2 | | | | | | | | | |
|---------|--------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
| | -0+1 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 80 | 105 |
| 22 | | AB (25) | AC (26) | AD (30) | | | | | | |
| 25 | | BB (28) | BC (30) | BD (35) | | | | | | |
| 30 | | CB (35) | CC (40) | CD (45) | CE (50) | CF (55) | | | | |
| 35 | | DB (42) | DC (50) | DD (55) | DE (65) | DF (70) | DG (75) | DH (80) | DL (105) | |
| 40 | | EB (49) | EC (57) | ED (65) | EE (80) | EF (82) | EG (95) | EH (98) | EL (131) | EP (170) |
| 45 | | FB (62) | FC (72) | FD (82) | FE (92) | FF (103) | FG (113) | FH (123) | FL (164) | FP (215) |
| 50 | | GB (75) | GC (88) | GD (100) | GE (113) | GF (126) | GG (138) | GH (151) | GL (201) | GP (264) |

Other sizes available upon request

TERMINAL STYLE

| DESCRIPTION | 2 pin standard | 2 pin short | 3 pin short | 4 pin standard | 4 pin short | 5 pin standard | 5 pin short |
|--------------|----------------|-------------|-------------|----------------|-------------|----------------|-------------|
| PIN LENGTH | 6.3 ± 1 | 4.0 ± 1 | 4.0 ± 1 | 6.3 ± 1 | 4.0 ± 1 | 6.3 ± 1 | 4.0 ± 1 |
| CODE | A | D | F | C | E | G | H |
| DIA. mm -0+1 | | | | | | | |
| 22 | ● | | | | | | |
| 25 | ● | | ● | | | | |
| 30 | ● | | ● | ● | | | |
| 35 | ● | | ● | ● | ● | | |
| 40 | ● | ● | | ● | ● | ● | ● |
| 45 | | | | ● | ● | ● | ● |
| 50 | | | | ● | ● | ● | ● |

TECHNICAL DATA

Related documents

IEC 384-4

Temperature range

ALC10

Storage -55°C to +85°C

Operating -40°C to +85°C

Environmental classification 40/085/56

ALC40

Storage -55°C to +105°C

Operating -40°C to +105°C

Environmental classification 40/105/56

Surge voltage

1000 surges (30 seconds) at 85°C (ALC10) and 105°C (ALC40) with surge voltage applied. See electrical characteristics for more details.

Charge/discharge

10⁶ cycles at 25°C and rated voltage. One cycle per second with a time constant of 0.1.

D.C. leakage current

After application of rated d.c. voltage for 5 minutes at 20°C, the d.c. leakage current shall not exceed (0.006 C_r U_r) μA. Where C_r is the rated capacitance in μF and U_r is the rated d.c. voltage.

Vibration

10Hz to 500Hz at 0.75mm or 10g for 3x2hrs duration.

Insulation resistance

≥ 100MΩ at 100V d.c., across insulating sleeve.

Voltage proof

≥ 2500V d.c., across insulating sleeve.

Ripple current

The following values are approximate only, to give an indication of the effects of frequency and temperature on ripple current. More accurate data can be obtained by referring to the Application Notes available from BHC Aerovox.

FREQUENCY CORRECTION - ALC10/40

Capacitors shall withstand the rated r.m.s. ripple current as given in the tables at upper category temperature in circulating air. For frequencies other than those shown the following formula should be used:

$$\text{Ripple current} = \sqrt{\frac{F \times A^2 \times B^2}{100 \times (B^2 - A^2) + (F \times A^2)}}$$

A = 100Hz ripple current

B = 10kHz ripple current

F = Required frequency (Hz)

TEMPERATURE CORRECTION - ALC10

For ambient temperatures other than 85°C the following correction factors should be employed.

| AMBIENT TEMPERATURE | FACTOR |
|---------------------|--------|
| 30°C | 2.5 |
| 50°C | 2.1 |
| 70°C | 1.6 |
| 85°C | 1.0 |

TEMPERATURE CORRECTION - ALC40

For ambient temperatures other than 105°C the following correction factors should be employed.

| AMBIENT TEMPERATURE | FACTOR |
|---------------------|--------|
| 50°C | 2.5 |
| 60°C | 2.4 |
| 70°C | 2.2 |
| 85°C | 1.8 |
| 105°C | 1.0 |

N.B. The sum of the d.c. and a.c. voltage components should not exceed the d.c. voltage rating.

Life expectancy

At rated temperature with rated voltage and ripple current applied.

| CAN DIAMETER (mm) | RANGE | LIFE EXPECTANCY (hours) |
|-------------------|-------|-------------------------|
| 22 | ALC10 | 8000 |
| | ALC40 | 4000 |
| 25 | ALC10 | 10000 |
| | ALC40 | 6000 |
| 30 | ALC10 | 13000 |
| | ALC40 | 7000 |
| 35 | ALC10 | 15000 |
| | ALC40 | 8000 |
| 40 | ALC10 | 18000 |
| | ALC40 | 9000 |

Capacitor marking

The capacitors are marked with items 1 to 6 from the following list as a minimum, and as much of the remaining information as is practical.

1. Rated capacitance in μF
2. Rated voltage d.c.
3. Polarity of terminations
4. Tolerance on rated capacitance
5. Date code/Batch number
6. BHC part number
7. Environmental classification

Ordering information

For details of ordering see page 54.

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C, 10 KHz | Ripple current A at 85°C 100 Hz | Ripple current A at 85°C 10 KHz | Type number |
|---------------------------|-------------|-----------|--------------------------------|--|------------------------------------|------------------------------------|----------------|
| 10V d.c. (11.5V surge) | 8200 | 22x30 | 151 | 136 | 1.95 | 2.02 | ALC10A822AB010 |
| | 12000 | 25x30 | 119 | 107 | 2.39 | 2.48 | ALC10A123BB010 |
| | 12000 | 22x40 | 103 | 93 | 2.63 | 2.72 | ALC10A123AD010 |
| | 15000 | 25x35 | 94 | 85 | 2.84 | 2.94 | ALC10A153BC010 |
| | 18000 | 30x30 | 102 | 92 | 2.91 | 3.01 | ALC10A183CB010 |
| | 18000 | 25x40 | 80 | 72 | 3.23 | 3.34 | ALC10A183BD010 |
| | 22000 | 30x35 | 80 | 72 | 3.46 | 3.58 | ALC10A223CC010 |
| | 27000 | 30x40 | 69 | 62 | 3.91 | 4.05 | ALC10A273CD010 |
| | 33000 | 35x35 | 74 | 67 | 3.98 | 4.12 | ALC10A333DC010 |
| | 39000 | 30x50 | 52 | 47 | 4.89 | 5.06 | ALC10A393CF010 |
| | 39000 | 35x40 | 64 | 58 | 4.48 | 4.64 | ALC10A393DD010 |
| | 47000 | 35x50 | 49 | 44 | 5.55 | 5.75 | ALC10A473DF010 |
| | 56000 | 40x30 | 65 | 59 | 4.91 | 5.08 | ALC10A563EB010 |
| | 68000 | 40x40 | 52 | 47 | 6.78 | 7.02 | ALC10A683ED010 |
| | 82000 | 40x45 | 43 | 39 | 7.72 | 7.99 | ALC10A823EE010 |
| | 100000 | 40x50 | 36 | 32 | 8.79 | 9.10 | ALC10A104EF010 |
| | 120000 | 40x55 | 32 | 29 | 9.11 | 9.43 | ALC10A124EG010 |
| | 150000 | 40x60 | 27 | 24 | 10.04 | 10.40 | ALC10A154EH010 |
| 180000 | 40x80 | 20 | 18 | 13.14 | 13.61 | ALC10A184EL010 | |
| 220000 | 40x105 | 17 | 16 | 13.64 | 14.05 | ALC10A224EP010 | |
| 16V d.c. (18.5V surge) | 6800 | 22x30 | 139 | 122 | 2.03 | 2.11 | ALC10A682AB016 |
| | 8200 | 25x30 | 128 | 113 | 2.30 | 2.40 | ALC10A822BB016 |
| | 10000 | 22x40 | 94 | 83 | 2.76 | 2.87 | ALC10A103AD016 |
| | 10000 | 25x35 | 101 | 89 | 2.74 | 2.85 | ALC10A103BC016 |
| | 12000 | 30x30 | 115 | 101 | 2.74 | 2.85 | ALC10A123CB016 |
| | 12000 | 25x40 | 87 | 77 | 3.10 | 3.23 | ALC10A123BD016 |
| | 18000 | 30x35 | 87 | 77 | 3.32 | 3.46 | ALC10A183CC016 |
| | 22000 | 30x40 | 75 | 66 | 3.75 | 3.91 | ALC10A223CD016 |
| | 22000 | 35x35 | 86 | 76 | 3.69 | 3.84 | ALC10A223DC016 |
| | 27000 | 30x50 | 59 | 52 | 4.59 | 4.78 | ALC10A273CF016 |
| | 27000 | 35x40 | 74 | 65 | 4.17 | 4.34 | ALC10A273DD016 |
| | 33000 | 40x30 | 76 | 68 | 5.06 | 5.17 | ALC10A333EB016 |
| | 39000 | 35x50 | 55 | 48 | 5.23 | 5.45 | ALC10A393DF016 |
| | 39000 | 40x35 | 66 | 60 | 5.63 | 5.74 | ALC10A393EC016 |
| | 47000 | 40x40 | 53 | 48 | 6.68 | 6.83 | ALC10A473ED016 |
| | 56000 | 40x45 | 44 | 40 | 7.67 | 7.84 | ALC10A563EE016 |
| | 68000 | 40x50 | 37 | 33 | 8.74 | 8.93 | ALC10A683EF016 |
| | 82000 | 40x55 | 33 | 29 | 9.05 | 9.22 | ALC10A823EG016 |
| 100000 | 40x60 | 27 | 25 | 10.05 | 10.23 | ALC10A104EH016 | |
| 120000 | 40x80 | 20 | 18 | 13.13 | 13.43 | ALC10A124EL016 | |
| 220000 | 40x105 | 17 | 16 | 13.64 | 14.05 | ALC10A224EP016 | |
| 25V d.c. (28.5V surge) | 4700 | 22x30 | 139 | 118 | 2.03 | 2.14 | ALC10A472AB025 |
| | 5600 | 25x30 | 129 | 110 | 2.29 | 2.41 | ALC10A562BB025 |
| | 6800 | 22x40 | 95 | 81 | 2.74 | 2.89 | ALC10A682AD025 |
| | 8200 | 25x35 | 95 | 81 | 2.82 | 2.97 | ALC10A822BC025 |
| | 10000 | 30x30 | 113 | 96 | 2.76 | 2.91 | ALC10A103CB025 |
| | 10000 | 25x40 | 81 | 69 | 3.21 | 3.38 | ALC10A103BD025 |
| | 12000 | 30x35 | 88 | 75 | 3.30 | 3.48 | ALC10A123CC025 |
| | 15000 | 30x40 | 75 | 64 | 3.75 | 3.95 | ALC10A153CD025 |
| | 18000 | 35x35 | 85 | 72 | 3.71 | 3.91 | ALC10A183DC025 |
| | 18000 | 30x50 | 59 | 50 | 4.59 | 4.84 | ALC10A183CF025 |
| | 22000 | 35x40 | 74 | 63 | 4.17 | 4.40 | ALC10A223DD025 |
| | 27000 | 35x50 | 55 | 47 | 5.23 | 5.51 | ALC10A273DF025 |
| | 27000 | 40x30 | 84 | 76 | 4.10 | 4.15 | ALC10A273EB025 |
| | 39000 | 40x40 | 59 | 54 | 5.65 | 5.73 | ALC10A393ED025 |
| | 47000 | 40x45 | 49 | 44 | 6.44 | 6.53 | ALC10A473EE025 |
| | 56000 | 40x50 | 40 | 37 | 7.42 | 7.52 | ALC10A563EF025 |
| | 68000 | 40x55 | 37 | 34 | 7.56 | 7.64 | ALC10A683EG025 |
| | 82000 | 40x60 | 31 | 29 | 8.43 | 8.52 | ALC10A823EH025 |
| 100000 | 40x80 | 22 | 20 | 11.20 | 11.36 | ALC10A104EL025 | |
| 120000 | 40x105 | 18 | 17 | 12.96 | 13.53 | ALC10A124EP025 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C, 10 KHz | Ripple current A at 85°C 100 Hz | Ripple current A at 85°C 10 KHz | Type number |
|-------------------------|-------------|-----------|--------------------------------|--|------------------------------------|------------------------------------|----------------|
| 35V d.c. (40V surge) | 3300 | 22x30 | 145 | 120 | 2.00 | 2.14 | ALC10A332AB035 |
| | 4700 | 25x30 | 127 | 107 | 2.31 | 2.47 | ALC10A472BB035 |
| | 5600 | 22x40 | 98 | 82 | 2.70 | 2.88 | ALC10A562AD035 |
| | 6800 | 25x35 | 97 | 81 | 2.80 | 2.99 | ALC10A682BC035 |
| | 8200 | 30x30 | 114 | 95 | 2.75 | 2.94 | ALC10A822CB035 |
| | 8200 | 25x40 | 83 | 70 | 3.17 | 3.39 | ALC10A822BD035 |
| | 10000 | 30x35 | 89 | 75 | 3.28 | 3.50 | ALC10A103CC035 |
| | 12000 | 30x40 | 76 | 64 | 3.73 | 3.99 | ALC10A123CD035 |
| | 15000 | 35x35 | 86 | 72 | 3.70 | 3.95 | ALC10A153DC035 |
| | 15000 | 30x50 | 59 | 49 | 4.59 | 4.90 | ALC10A153CF035 |
| | 15000 | 40x30 | 87 | 78 | 4.24 | 4.31 | ALC10A153EB035 |
| | 18000 | 35x40 | 75 | 63 | 4.16 | 4.44 | ALC10A183DD035 |
| | 18000 | 40x35 | 77 | 70 | 4.66 | 4.73 | ALC10A183EC035 |
| | 22000 | 35x50 | 55 | 46 | 5.23 | 5.59 | ALC10A223DF035 |
| | 22000 | 40x40 | 61 | 55 | 5.56 | 5.65 | ALC10A223ED035 |
| | 27000 | 40x45 | 51 | 46 | 6.30 | 6.40 | ALC10A273EE035 |
| | 33000 | 40x50 | 42 | 38 | 7.16 | 7.27 | ALC10A333EF035 |
| | 39000 | 40x60 | 33 | 30 | 8.75 | 8.91 | ALC10A393EH035 |
| | 56000 | 40x80 | 23 | 21 | 10.94 | 11.14 | ALC10A563EL035 |
| | 100000 | 40x105 | 17 | 16 | 12.67 | 13.34 | ALC10A104EP035 |
| 40V d.c. (46V surge) | 2700 | 22x30 | 148 | 121 | 1.97 | 2.14 | ALC10A272AB040 |
| | 3900 | 25x30 | 125 | 103 | 2.33 | 2.53 | ALC10A392BB040 |
| | 3900 | 22x40 | 101 | 83 | 2.66 | 2.89 | ALC10A392AD040 |
| | 4700 | 25x35 | 99 | 81 | 2.77 | 3.01 | ALC10A472BC040 |
| | 5600 | 30x30 | 115 | 94 | 2.74 | 2.98 | ALC10A562CB040 |
| | 5600 | 25x40 | 85 | 70 | 3.14 | 3.42 | ALC10A562BD040 |
| | 6800 | 30x35 | 90 | 74 | 3.26 | 3.55 | ALC10A682CC040 |
| | 8200 | 30x40 | 77 | 63 | 3.70 | 4.03 | ALC10A822CD040 |
| | 10000 | 35x35 | 86 | 71 | 3.69 | 4.01 | ALC10A103DC040 |
| | 12000 | 30x50 | 59 | 48 | 4.59 | 4.99 | ALC10A123CF040 |
| | 12000 | 35x40 | 75 | 62 | 4.14 | 4.50 | ALC10A123DD040 |
| | 15000 | 40x30 | 89 | 79 | 4.42 | 4.51 | ALC10A153EB040 |
| | 18000 | 35x50 | 55 | 45 | 5.23 | 5.69 | ALC10A183DF040 |
| | 18000 | 40x35 | 78 | 70 | 4.88 | 4.97 | ALC10A183EC040 |
| | 22000 | 40x40 | 62 | 56 | 5.81 | 5.92 | ALC10A223ED040 |
| | 27000 | 40x50 | 43 | 38 | 7.23 | 7.36 | ALC10A273EF040 |
| | 33000 | 40x60 | 33 | 30 | 8.74 | 8.91 | ALC10A333EH040 |
| 47000 | 40x80 | 23 | 21 | 10.96 | 11.17 | ALC10A473EL040 | |
| 82000 | 40x105 | 18 | 17 | 12.63 | 13.44 | ALC10A823EP040 | |
| 50V d.c. (57V surge) | 1800 | 22x30 | 175 | 140 | 1.85 | 2.07 | ALC10A182AB050 |
| | 2700 | 25x30 | 137 | 110 | 2.23 | 2.49 | ALC10A272BB050 |
| | 2700 | 22x40 | 125 | 100 | 2.43 | 2.72 | ALC10A272AD050 |
| | 3300 | 25x35 | 114 | 91 | 2.60 | 2.91 | ALC10A332BC050 |
| | 3900 | 30x30 | 113 | 91 | 2.75 | 3.07 | ALC10A392CB050 |
| | 3900 | 25x40 | 99 | 80 | 2.94 | 3.29 | ALC10A392BD050 |
| | 5600 | 30x35 | 91 | 73 | 3.25 | 3.63 | ALC10A562CC050 |
| | 6800 | 30x40 | 80 | 65 | 3.63 | 4.06 | ALC10A682CD050 |
| | 8200 | 35x35 | 81 | 65 | 3.82 | 4.27 | ALC10A822DC050 |
| | 8200 | 30x50 | 68 | 54 | 4.33 | 4.84 | ALC10A822CF050 |
| | 10000 | 35x40 | 73 | 59 | 4.23 | 4.73 | ALC10A103DD050 |
| | 10000 | 40x30 | 81 | 72 | 4.15 | 4.24 | ALC10A103EB050 |
| | 12000 | 35x50 | 60 | 48 | 5.05 | 5.65 | ALC10A123DF050 |
| | 12000 | 40x40 | 65 | 57 | 5.75 | 5.89 | ALC10A123ED050 |
| | 15000 | 40x45 | 53 | 47 | 6.48 | 6.64 | ALC10A153EE050 |
| | 18000 | 40x50 | 44 | 39 | 7.41 | 7.59 | ALC10A183EF050 |
| | 22000 | 40x55 | 40 | 36 | 7.60 | 7.75 | ALC10A223EG050 |
| 27000 | 40x60 | 33 | 30 | 8.41 | 8.56 | ALC10A273EH050 | |
| 39000 | 40x80 | 23 | 21 | 10.49 | 10.68 | ALC10A393EL050 | |
| 68000 | 40x105 | 18 | 16 | 12.42 | 13.30 | ALC10A683EP050 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C, 10 KHz | Ripple current A at 85°C 100 Hz | Ripple current A at 85°C 10 KHz | Type number |
|---------------------------|-------------|-----------|--------------------------------|--|------------------------------------|------------------------------------|----------------|
| 63V d.c. (72.5V surge) | 1500 | 22x30 | 199 | 157 | 1.70 | 1.89 | ALC10A152AB063 |
| | 2200 | 25x30 | 149 | 118 | 2.13 | 2.37 | ALC10A222BB063 |
| | 2200 | 22x40 | 149 | 118 | 2.19 | 2.44 | ALC10A222AD063 |
| | 2700 | 25x35 | 128 | 101 | 2.43 | 2.70 | ALC10A272BC063 |
| | 3300 | 30x30 | 112 | 88 | 2.77 | 3.08 | ALC10A332CB063 |
| | 3300 | 25x40 | 112 | 88 | 2.73 | 3.04 | ALC10A332BD063 |
| | 4700 | 30x35 | 91 | 72 | 3.24 | 3.61 | ALC10A472CC063 |
| | 5600 | 30x40 | 83 | 66 | 3.56 | 3.96 | ALC10A562CD063 |
| | 6800 | 35x35 | 75 | 59 | 3.95 | 4.40 | ALC10A682DC063 |
| | 6800 | 30x50 | 75 | 59 | 4.07 | 4.53 | ALC10A682CF063 |
| | 8200 | 35x40 | 69 | 55 | 4.31 | 4.80 | ALC10A822DD063 |
| | 8200 | 40x30 | 82 | 72 | 3.95 | 4.03 | ALC10A822EB063 |
| | 10000 | 35x50 | 64 | 51 | 4.85 | 5.40 | ALC10A103DF063 |
| | 10000 | 40x35 | 80 | 72 | 4.58 | 4.67 | ALC10A103EC063 |
| | 12000 | 40x40 | 64 | 57 | 5.42 | 5.55 | ALC10A123ED063 |
| | 15000 | 40x50 | 44 | 39 | 7.02 | 7.18 | ALC10A153EF063 |
| | 18000 | 40x60 | 35 | 31 | 8.54 | 8.75 | ALC10A183EH063 |
| | 27000 | 40x80 | 24 | 21 | 10.53 | 10.78 | ALC10A273EL063 |
| 39000 | 40x105 | 19 | 17 | 12.23 | 13.51 | ALC10A393EP063 | |
| 100V d.c. (115V surge) | 680 | 22x30 | 355 | 266 | 1.27 | 1.55 | ALC10A681AB100 |
| | 1000 | 25x30 | 243 | 182 | 1.67 | 2.04 | ALC10A102BB100 |
| | 1200 | 22x40 | 203 | 152 | 1.88 | 2.30 | ALC10A122AD100 |
| | 1200 | 25x35 | 203 | 152 | 1.93 | 2.36 | ALC10A122BC100 |
| | 1500 | 30x40 | 163 | 122 | 2.30 | 2.81 | ALC10A152CB100 |
| | 1500 | 25x40 | 163 | 122 | 2.27 | 2.78 | ALC10A152BD100 |
| | 1800 | 30x35 | 137 | 103 | 2.64 | 3.23 | ALC10A182CC100 |
| | 2200 | 30x40 | 113 | 85 | 3.05 | 3.73 | ALC10A222CD100 |
| | 2700 | 35x35 | 92 | 69 | 3.57 | 4.37 | ALC10A272DC100 |
| | 2700 | 40x30 | 121 | 104 | 3.72 | 3.88 | ALC10A272EB100 |
| | 3300 | 30x50 | 76 | 57 | 4.05 | 4.95 | ALC10A332CF100 |
| | 3300 | 35x40 | 76 | 57 | 4.11 | 5.03 | ALC10A332DD100 |
| | 3300 | 40x35 | 106 | 92 | 4.09 | 4.24 | ALC10A332EC100 |
| | 3900 | 40x40 | 85 | 74 | 4.88 | 5.08 | ALC10A392ED100 |
| | 4700 | 35x50 | 55 | 41 | 5.23 | 6.40 | ALC10A472DF100 |
| | 4700 | 40x45 | 70 | 61 | 5.60 | 5.83 | ALC10A472EE100 |
| | 5600 | 40x50 | 59 | 51 | 6.41 | 6.68 | ALC10A562EF100 |
| | 6800 | 40x55 | 53 | 46 | 6.61 | 6.84 | ALC10A682EG100 |
| 8200 | 40x60 | 44 | 39 | 7.36 | 7.61 | ALC10A822EH100 | |
| 12000 | 40x80 | 31 | 27 | 9.14 | 9.45 | ALC10A123EL100 | |
| 18000 | 40x105 | 19 | 17 | 11.34 | 12.61 | ALC10A183EP100 | |
| 200V d.c. (230V surge) | 220 | 22x30 | 727 | 509 | 0.89 | 1.23 | ALC10A221AB200 |
| | 330 | 25x30 | 486 | 340 | 1.18 | 1.63 | ALC10A331BB200 |
| | 330 | 22x40 | 486 | 340 | 1.21 | 1.67 | ALC10A331AD200 |
| | 390 | 25x35 | 412 | 288 | 1.36 | 1.87 | ALC10A391BC200 |
| | 470 | 30x30 | 343 | 240 | 1.58 | 2.18 | ALC10A471CB200 |
| | 470 | 25x40 | 343 | 240 | 1.56 | 2.15 | ALC10A471BD200 |
| | 560 | 30x35 | 288 | 202 | 1.82 | 2.51 | ALC10A561CC200 |
| | 680 | 30x40 | 238 | 167 | 2.10 | 2.89 | ALC10A681CD200 |
| | 820 | 35x35 | 198 | 139 | 2.43 | 3.35 | ALC10A821DC200 |
| | 820 | 40x30 | 178 | 142 | 3.06 | 3.63 | ALC10A821EB200 |
| | 1000 | 30x50 | 163 | 114 | 2.76 | 3.80 | ALC10A102CF200 |
| | 1000 | 35x40 | 163 | 114 | 2.81 | 3.87 | ALC10A102DD200 |
| | 1000 | 40x35 | 153 | 124 | 3.43 | 3.99 | ALC10A102EC200 |
| | 1200 | 35x50 | 135 | 82 | 3.06 | 4.01 | ALC10A122DF200 |
| | 1200 | 40x40 | 124 | 99 | 4.02 | 4.69 | ALC10A122ED200 |
| | 1500 | 35x50 | 110 | 77 | 3.70 | 5.10 | ALC10A152DF200 |
| | 1500 | 40x45 | 101 | 81 | 4.61 | 5.38 | ALC10A152EE200 |
| | 1800 | 40x50 | 84 | 68 | 5.27 | 6.15 | ALC10A182EF200 |
| 2200 | 40x60 | 67 | 53 | 6.29 | 7.43 | ALC10A222EH200 | |
| 3300 | 40x80 | 46 | 37 | 7.83 | 9.17 | ALC10A332EL200 | |
| 4700 | 40x105 | 45 | 32 | 8.08 | 11.73 | ALC10A472EP200 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C,10 KHz | Ripple current A at 85°C 100 Hz | Ripple current A at 85°C 10 KHz | Type number |
|---------------------------|-------------|-----------|--------------------------------|---------------------------------------|------------------------------------|------------------------------------|----------------|
| 250V d.c. (287V surge) | 180 | 22x30 | 888 | 577 | 0.80 | 1.17 | ALC10A181AB250 |
| | 220 | 25x30 | 727 | 473 | 0.97 | 1.41 | ALC10A221BB250 |
| | 270 | 22x40 | 593 | 385 | 1.10 | 1.60 | ALC10A271AD250 |
| | 270 | 25x35 | 593 | 385 | 1.13 | 1.65 | ALC10A271BC250 |
| | 330 | 30x30 | 486 | 316 | 1.33 | 1.94 | ALC10A331CB250 |
| | 330 | 25x35 | 490 | 320 | 1.34 | 1.95 | ALC10A331BC250 |
| | 330 | 25x40 | 486 | 316 | 1.31 | 1.91 | ALC10A331BD250 |
| | 470 | 30x35 | 343 | 223 | 1.67 | 2.43 | ALC10A471CC250 |
| | 560 | 30x40 | 288 | 187 | 1.91 | 2.78 | ALC10A561CD250 |
| | 680 | 35x35 | 238 | 155 | 2.22 | 3.23 | ALC10A681DC250 |
| | 680 | 30x50 | 238 | 155 | 2.29 | 3.34 | ALC10A681CF250 |
| | 680 | 40x30 | 187 | 144 | 2.79 | 3.56 | ALC10A681EB250 |
| | 820 | 35x40 | 198 | 129 | 2.55 | 3.72 | ALC10A821DD250 |
| | 820 | 40x40 | 153 | 116 | 3.80 | 4.91 | ALC10A821ED250 |
| | 1000 | 35x50 | 163 | 106 | 3.26 | 4.75 | ALC10A102DF250 |
| | 1000 | 40x45 | 126 | 96 | 4.33 | 5.58 | ALC10A102EE250 |
| | 1200 | 35x60 | 140 | 100 | 3.76 | 5.48 | ALC10A122DH250 |
| | 1200 | 40x50 | 104 | 80 | 4.94 | 6.37 | ALC10A122EF250 |
| | 1500 | 40x55 | 89 | 69 | 5.29 | 6.58 | ALC10A152EG250 |
| | 1800 | 35x80 | 100 | 82 | 4.60 | 6.69 | ALC10A182DL250 |
| 1800 | 40x60 | 74 | 58 | 5.92 | 7.34 | ALC10A182EH250 | |
| 2200 | 40x80 | 57 | 43 | 7.33 | 9.49 | ALC10A222EL250 | |
| 3900 | 40x105 | 46 | 32 | 7.78 | 11.71 | ALC10A392EP250 | |
| 350V d.c. (385V surge) | 100 | 22x30 | 1359 | 876 | 0.69 | 1.49 | ALC10A101AB350 |
| | 120 | 25x30 | 1139 | 736 | 0.83 | 1.75 | ALC10A121BB350 |
| | 150 | 22x40 | 908 | 585 | 0.95 | 2.03 | ALC10A151AD350 |
| | 150 | 25x35 | 912 | 589 | 0.99 | 2.07 | ALC10A151BC350 |
| | 180 | 25x40 | 761 | 492 | 1.13 | 2.37 | ALC10A181BD350 |
| | 180 | 30x30 | 776 | 506 | 1.11 | 2.19 | ALC10A181CB350 |
| | 270 | 30x35 | 527 | 346 | 1.41 | 2.65 | ALC10A271CC350 |
| | 330 | 30x40 | 432 | 284 | 1.65 | 3.07 | ALC10A331CD350 |
| | 330 | 40x30 | 424 | 277 | 2.02 | 3.97 | ALC10A331EB350 |
| | 390 | 30x50 | 364 | 238 | 1.92 | 3.65 | ALC10A391CF350 |
| | 390 | 35x35 | 386 | 259 | 1.82 | 3.07 | ALC10A391DC350 |
| | 390 | 40x35 | 361 | 236 | 2.33 | 4.50 | ALC10A391EC350 |
| | 470 | 35x40 | 321 | 216 | 2.07 | 3.47 | ALC10A471DD350 |
| | 470 | 40x40 | 299 | 195 | 2.69 | 5.22 | ALC10A471ED350 |
| | 560 | 35x50 | 268 | 180 | 2.80 | 4.80 | ALC10A561DF350 |
| | 560 | 40x45 | 251 | 164 | 3.04 | 5.88 | ALC10A561EE350 |
| | 680 | 40x50 | 207 | 136 | 3.46 | 6.65 | ALC10A681EF350 |
| | 820 | 35x60 | 190 | 130 | 3.40 | 5.50 | ALC10A821DH350 |
| | 820 | 40x55 | 174 | 114 | 3.84 | 7.16 | ALC10A821EG350 |
| | 820 | 40x60 | 172 | 112 | 3.99 | 7.67 | ALC10A821EH350 |
| 1000 | 35x80 | 154 | 104 | 3.90 | 6.40 | ALC10A102DL350 | |
| 1200 | 40x80 | 119 | 78 | 4.95 | 9.20 | ALC10A122EL350 | |
| 1800 | 40x105 | 81 | 54 | 6.14 | 10.73 | ALC10A182EP350 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR m Ω at 20°C | | Impedance m Ω at 20°C, 10 KHz | | Ripple current A at 85°C | | Type number |
|---------------------------|-------------|-----------|------------------------|----|--------------------------------------|------|--------------------------|----------------|----------------|
| | | | 100Hz | | | | 100 Hz | 10 KHz | |
| 400V d.c. (440V surge) | 68 | 22x30 | 2042 | | 1370 | | 0.59 | 1.25 | ALC10A680AB400 |
| | 100 | 25x30 | 1400 | | 943 | | 0.77 | 1.60 | ALC10A101BB400 |
| | 100 | 22x40 | 1389 | | 933 | | 0.80 | 1.69 | ALC10A101AD400 |
| | 120 | 25x35 | 1166 | | 785 | | 0.90 | 1.87 | ALC10A121BC400 |
| | 150 | 30x30 | 950 | | 645 | | 1.04 | 2.03 | ALC10A151CB400 |
| | 150 | 25x40 | 935 | | 630 | | 1.06 | 2.18 | ALC10A151BD400 |
| | 180 | 30x35 | 791 | | 536 | | 1.20 | 2.36 | ALC10A181CC400 |
| | 220 | 30x35 | 650 | | 400 | | 1.31 | 2.47 | ALC10A221CC400 |
| | 220 | 30x40 | 648 | | 440 | | 1.41 | 2.74 | ALC10A221CD400 |
| | 270 | 35x35 | 547 | | 376 | | 1.61 | 2.88 | ALC10A271DC400 |
| | 270 | 40x30 | 441 | | 284 | | 1.85 | 3.67 | ALC10A271EB400 |
| | 330 | 35x35 | 461 | | 320 | | 1.73 | 2.92 | ALC10A331DC400 |
| | 330 | 30x50 | 438 | | 299 | | 1.82 | 3.42 | ALC10A331CF400 |
| | 330 | 35x40 | 449 | | 309 | | 1.84 | 3.27 | ALC10A331DD400 |
| | 330 | 40x35 | 378 | | 252 | | 2.29 | 4.21 | ALC10A331EC400 |
| | 390 | 35x50 | 377 | | 226 | | 2.19 | 3.96 | ALC10A391DF400 |
| | 390 | 40x40 | 312 | | 203 | | 2.62 | 4.86 | ALC10A391ED400 |
| | 470 | 35x50 | 321 | | 223 | | 2.62 | 4.41 | ALC10A471DF400 |
| | 470 | 40x40 | 230 | | 156 | | 2.74 | 5.21 | ALC10A471ED400 |
| | 470 | 40x45 | 258 | | 168 | | 3.00 | 5.49 | ALC10A471EE400 |
| | 560 | 35x50 | 278 | | 180 | | 2.57 | 4.04 | ALC10A561DF400 |
| | 560 | 35x60 | 264 | | 184 | | 3.01 | 5.11 | ALC10A561DH400 |
| | 560 | 40x50 | 216 | | 141 | | 3.41 | 6.19 | ALC10A561EF400 |
| | 680 | 35x60 | 232 | | 142 | | 2.90 | 4.73 | ALC10A681DH400 |
| | 680 | 40x60 | 177 | | 114 | | 3.99 | 7.14 | ALC10A681EH400 |
| | 820 | 35x80 | 181 | | 127 | | 3.70 | 6.09 | ALC10A821DL400 |
| | 1000 | 35x80 | 112 | | 77 | | 3.98 | 6.32 | ALC10A102DL400 |
| | 1000 | 40x80 | 120 | | 78 | | 5.00 | 8.82 | ALC10A102EL400 |
| 1500 | 40x105 | 99 | | 68 | | 5.79 | 10.16 | ALC10A152EP400 | |
| 450V d.c. (495V surge) | 56 | 22x30 | 2067 | | 1372 | | 0.57 | 1.27 | ALC10A560AB450 |
| | 68 | 25x30 | 1708 | | 1135 | | 0.69 | 1.50 | ALC10A680BB450 |
| | 82 | 22x40 | 1413 | | 938 | | 0.77 | 1.71 | ALC10A820AD450 |
| | 100 | 25x35 | 1167 | | 777 | | 0.88 | 1.90 | ALC10A101BC450 |
| | 120 | 30x30 | 989 | | 663 | | 1.00 | 2.03 | ALC10A121CB450 |
| | 120 | 25x40 | 973 | | 648 | | 1.01 | 2.18 | ALC10A121BD450 |
| | 150 | 25x40 | 785 | | 524 | | 1.12 | 2.35 | ALC10A151BD450 |
| | 150 | 30x30 | 805 | | 543 | | 1.10 | 2.12 | ALC10A151CB450 |
| | 150 | 30x35 | 792 | | 531 | | 1.17 | 2.38 | ALC10A151CC450 |
| | 180 | 30x40 | 661 | | 443 | | 1.36 | 2.76 | ALC10A181CD450 |
| | 220 | 35x35 | 559 | | 379 | | 1.56 | 2.89 | ALC10A221DC450 |
| | 220 | 30x50 | 540 | | 362 | | 1.61 | 3.27 | ALC10A221CF450 |
| | 220 | 40x30 | 517 | | 311 | | 1.77 | 3.68 | ALC10A221EB450 |
| | 270 | 30x50 | 446 | | 301 | | 1.76 | 3.43 | ALC10A271CF450 |
| | 270 | 35x35 | 470 | | 322 | | 1.68 | 2.91 | ALC10A271DC450 |
| | 270 | 35x40 | 458 | | 311 | | 1.78 | 3.27 | ALC10A271DD450 |
| | 270 | 40x35 | 427 | | 259 | | 2.07 | 4.22 | ALC10A271EC450 |
| | 330 | 30x50 | 373 | | 253 | | 1.91 | 3.54 | ALC10A331CF450 |
| | 330 | 35x50 | 373 | | 253 | | 2.41 | 4.38 | ALC10A331DF450 |
| | 330 | 40x40 | 348 | | 210 | | 2.47 | 4.91 | ALC10A331ED450 |
| | 390 | 35x50 | 240 | | 166 | | 2.60 | 4.41 | ALC10C391DF450 |
| | 390 | 40x45 | 293 | | 177 | | 2.70 | 5.53 | ALC10A391EE450 |
| | 470 | 35x50 | 252 | | 155 | | 2.43 | 4.03 | ALC10A471DF450 |
| | 470 | 35x60 | 270 | | 185 | | 2.95 | 5.12 | ALC10A471DH450 |
| | 470 | 40x50 | 243 | | 147 | | 3.08 | 6.25 | ALC10A471EF450 |
| | 560 | 40x60 | 202 | | 121 | | 3.56 | 7.04 | ALC10A561EH450 |
| | 680 | 35x80 | 190 | | 131 | | 3.61 | 6.09 | ALC10A681DL450 |
| | 820 | 40x80 | 138 | | 83 | | 4.47 | 8.78 | ALC10A821EL450 |
| 1000 | 40x80 | 114 | | 75 | | 4.95 | 9.32 | ALC10A102EL450 | |
| 1200 | 40x105 | 103 | | 70 | | 5.57 | 10.15 | ALC10A122EP450 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C | | Impedance $m\Omega$ at 20°C, 10 KHz | | Ripple current A at 85°C | | Type number |
|---------------------------|-------------|-----------|-----------------------|-----|-------------------------------------|--------|--------------------------|----------------|----------------|
| | | | 100Hz | | 100 Hz | 10 KHz | | | |
| 500V d.c. (550V surge) | 39 | 22x30 | 3150 | | 2339 | | 0.57 | 1.13 | ALC10A390AB500 |
| | 56 | 25x30 | 2207 | | 1642 | | 0.74 | 1.44 | ALC10A560BB500 |
| | 68 | 22x40 | 1811 | | 1345 | | 0.84 | 1.65 | ALC10A680AD500 |
| | 68 | 25x35 | 1816 | | 1351 | | 0.87 | 1.70 | ALC10A680BC500 |
| | 82 | 25x40 | 1507 | | 1120 | | 1.00 | 1.95 | ALC10A820BD500 |
| | 82 | 30x30 | 1527 | | 1140 | | 0.99 | 1.84 | ALC10A820CB500 |
| | 100 | 30x30 | 1000 | | 765 | | 1.08 | 1.94 | ALC10A101CB500 |
| | 100 | 30x35 | 1220 | | 840 | | 1.15 | 2.16 | ALC10A101CC500 |
| | 120 | 30x35 | 1052 | | 786 | | 1.25 | 2.28 | ALC10A121CC500 |
| | 150 | 30x40 | 843 | | 631 | | 1.48 | 2.67 | ALC10A151CD500 |
| | 180 | 30x50 | 699 | | 522 | | 1.78 | 3.27 | ALC10A181CF500 |
| | 180 | 35x35 | 728 | | 549 | | 1.70 | 2.84 | ALC10A181DC500 |
| | 180 | 40x30 | 699 | | 522 | | 1.76 | 3.22 | ALC10A181EB500 |
| | 220 | 35x40 | 596 | | 450 | | 1.96 | 3.26 | ALC10A221DD500 |
| | 220 | 40x35 | 571 | | 426 | | 2.07 | 3.82 | ALC10A221EC500 |
| | 270 | 35x50 | 481 | | 362 | | 2.34 | 3.97 | ALC10A271DF500 |
| | 270 | 40x40 | 466 | | 348 | | 2.41 | 4.42 | ALC10A271ED500 |
| | 330 | 40x45 | 382 | | 286 | | 2.74 | 5.00 | ALC10A331EE500 |
| | 390 | 35x60 | 340 | | 258 | | 2.87 | 4.67 | ALC10A391DH500 |
| | 390 | 40x50 | 324 | | 242 | | 3.09 | 5.59 | ALC10A391EF500 |
| 470 | 40x60 | 269 | | 201 | | 3.56 | 6.43 | ALC10A471EH500 | |
| 560 | 35x80 | 240 | | 182 | | 3.50 | 5.57 | ALC10A561DL500 | |
| 680 | 40x80 | 187 | | 140 | | 4.40 | 7.77 | ALC10A681EL500 | |
| 1000 | 40x105 | 130 | | 98 | | 5.43 | 9.18 | ALC10A102EP500 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C, 10 KHz | Ripple current A at 105°C 100 Hz | Ripple current A at 105°C 10 KHz | Type number |
|---------------------------|-------------|-----------|--------------------------------|--|-------------------------------------|-------------------------------------|----------------|
| 10V d.c. (11.5V surge) | 12000 | 22x30 | 233 | 201 | 1.95 | 2.05 | ALC40A123AB010 |
| | 15000 | 22x40 | 181 | 155 | 2.60 | 2.74 | ALC40A153AD010 |
| | 18000 | 22x40 | 154 | 133 | 2.70 | 2.84 | ALC40A183AD010 |
| | 18000 | 25x30 | 172 | 150 | 2.19 | 2.29 | ALC40A183BB010 |
| | 22000 | 25x35 | 139 | 121 | 2.59 | 2.71 | ALC40A223BC010 |
| | 27000 | 25x40 | 114 | 99 | 3.04 | 3.18 | ALC40A273BD010 |
| | 27000 | 30x30 | 138 | 123 | 2.45 | 2.55 | ALC40A273CB010 |
| | 33000 | 30x35 | 111 | 98 | 2.97 | 3.09 | ALC40A333CC010 |
| | 39000 | 30x40 | 92 | 82 | 3.40 | 3.54 | ALC40A393CD010 |
| | 47000 | 35x35 | 98 | 89 | 3.26 | 3.39 | ALC40A473DC010 |
| | 56000 | 30x50 | 66 | 58 | 4.41 | 4.59 | ALC40A563CF010 |
| | 56000 | 35x40 | 81 | 74 | 3.74 | 3.90 | ALC40A563DD010 |
| | 56000 | 40x30 | 65 | 59 | 4.91 | 5.00 | ALC40A563EB010 |
| | 68000 | 35x50 | 61 | 55 | 4.85 | 5.03 | ALC40A683DF010 |
| | 68000 | 40x40 | 52 | 47 | 6.78 | 6.91 | ALC40A683ED010 |
| | 82000 | 35x50 | 58 | 53 | 4.85 | 5.05 | ALC40A823DF010 |
| | 82000 | 40x45 | 43 | 39 | 7.72 | 7.87 | ALC40A823EE010 |
| | 100000 | 40x50 | 36 | 32 | 8.79 | 8.95 | ALC40A104EF010 |
| | 120000 | 40x55 | 32 | 29 | 9.11 | 9.25 | ALC40A124EG010 |
| | 150000 | 40x60 | 27 | 24 | 10.04 | 10.19 | ALC40A154EH010 |
| 180000 | 40x80 | 19 | 18 | 13.18 | 13.48 | ALC40A184EL010 | |
| 220000 | 40x105 | 17 | 16 | 14.15 | 14.61 | ALC40A224EP010 | |
| 16V d.c. (18.5V surge) | 8200 | 22x30 | 228 | 195 | 1.83 | 1.94 | ALC40A822AB016 |
| | 10000 | 22x40 | 177 | 151 | 2.47 | 2.63 | ALC40A103AD016 |
| | 12000 | 22x40 | 154 | 131 | 2.53 | 2.69 | ALC40A123AD016 |
| | 12000 | 25x30 | 179 | 156 | 2.01 | 2.12 | ALC40A123BB016 |
| | 15000 | 25x35 | 142 | 124 | 2.39 | 2.51 | ALC40A153BC016 |
| | 18000 | 25x40 | 118 | 103 | 2.80 | 2.95 | ALC40A183BD016 |
| | 18000 | 30x30 | 153 | 136 | 2.23 | 2.34 | ALC40A183CB016 |
| | 22000 | 30x35 | 122 | 108 | 2.70 | 2.84 | ALC40A223CC016 |
| | 27000 | 30x40 | 100 | 89 | 3.10 | 3.26 | ALC40A273CD016 |
| | 33000 | 30x50 | 75 | 67 | 4.02 | 4.22 | ALC40A333CF016 |
| | 33000 | 35x35 | 113 | 102 | 2.97 | 3.12 | ALC40A333DC016 |
| | 33000 | 40x30 | 76 | 68 | 5.06 | 5.17 | ALC40A333EB016 |
| | 39000 | 35x40 | 94 | 85 | 3.41 | 3.58 | ALC40A393DD016 |
| | 39000 | 40x35 | 66 | 60 | 5.63 | 5.74 | ALC40A393EC016 |
| | 47000 | 35x50 | 69 | 62 | 4.41 | 4.63 | ALC40A473DF016 |
| | 47000 | 40x40 | 53 | 48 | 6.68 | 6.83 | ALC40A473ED016 |
| | 56000 | 35x50 | 68 | 61 | 4.41 | 4.63 | ALC40A563DF016 |
| | 56000 | 40x45 | 44 | 40 | 7.67 | 7.84 | ALC40A563EE016 |
| | 68000 | 40x50 | 37 | 33 | 8.74 | 8.93 | ALC40A683EF016 |
| | 82000 | 40x55 | 33 | 29 | 9.05 | 9.22 | ALC40A823EG016 |
| 100000 | 40x60 | 27 | 25 | 10.05 | 10.23 | ALC40A104EH016 | |
| 120000 | 40x80 | 20 | 18 | 13.13 | 13.43 | ALC40A124EL016 | |
| 220000 | 40x105 | 17 | 16 | 14.15 | 14.61 | ALC40A224EP016 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C, 10 KHz | Ripple current A at 105°C 100 Hz | Ripple current A at 105°C 10 KHz | Type number |
|---------------------------|-------------|-----------|--------------------------------|--|-------------------------------------|-------------------------------------|----------------|
| 25V d.c. (28.5V surge) | 5600 | 22x30 | 233 | 196 | 1.80 | 1.94 | ALC40A562AB025 |
| | 6800 | 22x40 | 182 | 151 | 2.42 | 2.63 | ALC40A682AD025 |
| | 8200 | 22x40 | 157 | 132 | 2.48 | 2.68 | ALC40A822AD025 |
| | 8200 | 25x30 | 183 | 157 | 1.97 | 2.11 | ALC40A822BB025 |
| | 10000 | 25x35 | 148 | 126 | 2.33 | 2.50 | ALC40A103BC025 |
| | 12000 | 25x40 | 123 | 105 | 2.74 | 2.93 | ALC40A123BD025 |
| | 12000 | 30x30 | 157 | 138 | 2.18 | 2.33 | ALC40A123CB025 |
| | 15000 | 30x35 | 125 | 109 | 2.65 | 2.83 | ALC40A153CC025 |
| | 18000 | 30x40 | 103 | 91 | 3.04 | 3.24 | ALC40A183CD025 |
| | 22000 | 35x35 | 116 | 104 | 2.91 | 3.10 | ALC40A223DC025 |
| | 27000 | 30x50 | 73 | 64 | 3.94 | 4.21 | ALC40A273CF025 |
| | 27000 | 35x40 | 96 | 86 | 3.34 | 3.56 | ALC40A273DD025 |
| | 27000 | 40x30 | 75 | 69 | 4.03 | 4.09 | ALC40A273EB025 |
| | 33000 | 35x50 | 70 | 63 | 4.32 | 4.61 | ALC40A333DF025 |
| | 33000 | 40x35 | 66 | 62 | 4.83 | 4.90 | ALC40A333EC025 |
| | 39000 | 35x50 | 69 | 62 | 4.32 | 4.61 | ALC40A393DF025 |
| | 39000 | 40x40 | 53 | 49 | 5.57 | 5.65 | ALC40A393ED025 |
| | 47000 | 40x50 | 41 | 37 | 7.30 | 7.40 | ALC40A473EF025 |
| | 56000 | 40x55 | 38 | 35 | 7.51 | 7.61 | ALC40A563EG025 |
| | 82000 | 40x80 | 22 | 20 | 11.06 | 11.24 | ALC40A823EL025 |
| 120000 | 40x105 | 18 | 17 | 13.41 | 14.05 | ALC40A124EP025 | |
| 35V d.c. (40V surge) | 3900 | 22x30 | 239 | 196 | 1.75 | 1.93 | ALC40A392AB035 |
| | 4700 | 22x40 | 187 | 152 | 2.35 | 2.63 | ALC40A472AD035 |
| | 5600 | 22x40 | 163 | 133 | 2.41 | 2.67 | ALC40A562AD035 |
| | 5600 | 25x30 | 190 | 159 | 1.93 | 2.10 | ALC40A562BB035 |
| | 6800 | 25x35 | 153 | 128 | 2.27 | 2.49 | ALC40A682BC035 |
| | 8200 | 25x40 | 127 | 106 | 2.67 | 2.92 | ALC40A822BD035 |
| | 8200 | 30x30 | 162 | 140 | 2.13 | 2.32 | ALC40A822CB035 |
| | 10000 | 30x35 | 130 | 112 | 2.59 | 2.82 | ALC40A103CC035 |
| | 12000 | 30x40 | 107 | 92 | 2.96 | 3.23 | ALC40A123CD035 |
| | 15000 | 35x35 | 120 | 105 | 2.84 | 3.09 | ALC40A153DC035 |
| | 15000 | 40x30 | 87 | 78 | 4.24 | 4.31 | ALC40A153EB035 |
| | 18000 | 30x50 | 76 | 66 | 3.85 | 4.19 | ALC40A183CF035 |
| | 18000 | 35x40 | 99 | 87 | 3.25 | 3.55 | ALC40A183DD035 |
| | 18000 | 40x35 | 77 | 70 | 4.66 | 4.73 | ALC40A183EC035 |
| | 22000 | 35x50 | 73 | 64 | 4.22 | 4.59 | ALC40A223DF035 |
| | 22000 | 40x40 | 61 | 55 | 5.49 | 5.58 | ALC40A223ED035 |
| | 27000 | 35x50 | 71 | 63 | 4.22 | 4.59 | ALC40A273DF035 |
| | 27000 | 40x45 | 51 | 46 | 6.30 | 6.40 | ALC40A273EE035 |
| | 33000 | 40x50 | 42 | 38 | 7.16 | 7.27 | ALC40A333EF035 |
| | 39000 | 40x60 | 33 | 30 | 8.75 | 8.91 | ALC40A393EH035 |
| 56000 | 40x80 | 23 | 21 | 10.94 | 11.14 | ALC40A563EL035 | |
| 100000 | 40x105 | 17 | 16 | 13.04 | 13.77 | ALC40A104EP035 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C, 10 KHz | Ripple current A at 105°C 100 Hz | Ripple current A at 105°C 10 KHz | Type number |
|---------------------------|-------------|-----------|--------------------------------|--|-------------------------------------|-------------------------------------|----------------|
| 40V d.c. (46V surge) | 2700 | 22x30 | 259 | 207 | 1.69 | 1.92 | ALC40A272AB040 |
| | 3300 | 22x40 | 202 | 160 | 2.26 | 2.60 | ALC40A332AD040 |
| | 3900 | 25x30 | 202 | 166 | 1.87 | 2.09 | ALC40A392BB040 |
| | 4700 | 22x40 | 154 | 124 | 2.38 | 2.69 | ALC40A472AD040 |
| | 5600 | 25x35 | 149 | 124 | 2.23 | 2.49 | ALC40A562BC040 |
| | 5600 | 30x30 | 171 | 144 | 2.08 | 2.31 | ALC40A562CB040 |
| | 6800 | 25x40 | 123 | 102 | 2.61 | 2.92 | ALC40A682BD040 |
| | 6800 | 30x35 | 145 | 120 | 2.55 | 2.84 | ALC40A682CC040 |
| | 8200 | 30x35 | 129 | 110 | 2.53 | 2.81 | ALC40A822CC040 |
| | 10000 | 30x40 | 107 | 91 | 2.90 | 3.22 | ALC40A103CD040 |
| | 12000 | 30x50 | 80 | 68 | 3.75 | 4.18 | ALC40A123CF040 |
| | 12000 | 35x35 | 121 | 106 | 2.77 | 3.08 | ALC40A123DC040 |
| | 12000 | 40x30 | 88 | 79 | 4.13 | 4.22 | ALC40A123EB040 |
| | 15000 | 35x40 | 100 | 87 | 3.18 | 3.53 | ALC40A153DD040 |
| | 15000 | 40x40 | 63 | 56 | 5.66 | 5.78 | ALC40A153ED040 |
| | 18000 | 35x50 | 73 | 64 | 4.12 | 4.58 | ALC40A183DF040 |
| | 18000 | 40x45 | 53 | 47 | 6.46 | 6.60 | ALC40A183EE040 |
| | 22000 | 40x50 | 43 | 39 | 7.34 | 7.50 | ALC40A223EF040 |
| | 27000 | 40x55 | 39 | 35 | 7.50 | 7.63 | ALC40A273EG040 |
| | 47000 | 40x80 | 23 | 21 | 10.42 | 10.59 | ALC40A473EL040 |
| 68000 | 40x105 | 17 | 16 | 12.71 | 13.47 | ALC40A683EP040 | |
| 50V d.c. (57.5V surge) | 1800 | 22x30 | 282 | 218 | 1.60 | 1.90 | ALC40A182AB050 |
| | 2200 | 22x40 | 222 | 170 | 2.13 | 2.57 | ALC40A222AD050 |
| | 2700 | 22x40 | 187 | 145 | 2.22 | 2.64 | ALC40A272AD050 |
| | 2700 | 25x30 | 213 | 169 | 1.80 | 2.09 | ALC40A272BB050 |
| | 3300 | 25x35 | 172 | 136 | 2.13 | 2.47 | ALC40A332BC050 |
| | 3900 | 25x35 | 156 | 126 | 2.15 | 2.48 | ALC40A392BC050 |
| | 3900 | 30x30 | 178 | 147 | 2.01 | 2.31 | ALC40A392CB050 |
| | 4700 | 25x40 | 129 | 104 | 2.52 | 2.90 | ALC40A472BD050 |
| | 5600 | 30x35 | 135 | 112 | 2.44 | 2.80 | ALC40A562CC050 |
| | 6800 | 30x40 | 112 | 93 | 2.80 | 3.21 | ALC40A682CD050 |
| | 8200 | 30x50 | 84 | 69 | 3.63 | 4.16 | ALC40A822CF050 |
| | 8200 | 35x35 | 126 | 107 | 2.68 | 3.07 | ALC40A822DC050 |
| | 8200 | 40x30 | 91 | 80 | 4.15 | 4.26 | ALC40A822EB050 |
| | 10000 | 30x50 | 104 | 88 | 3.40 | 4.04 | ALC40A103CF050 |
| | 10000 | 35x40 | 104 | 88 | 3.08 | 3.52 | ALC40A103DD050 |
| | 12000 | 35x50 | 77 | 65 | 3.98 | 4.56 | ALC40A123DF050 |
| | 12000 | 40x40 | 64 | 57 | 5.42 | 5.53 | ALC40A123ED050 |
| | 15000 | 35x50 | 57 | 44 | 4.73 | 5.42 | ALC40A153DF050 |
| | 15000 | 40x45 | 53 | 47 | 6.11 | 6.23 | ALC40A153EE050 |
| | 18000 | 40x50 | 44 | 39 | 6.98 | 7.12 | ALC40A183EF050 |
| 22000 | 40x60 | 34 | 30 | 8.45 | 8.63 | ALC40A223EH050 | |
| 33000 | 40x80 | 24 | 21 | 10.41 | 10.62 | ALC40A333EL050 | |
| 56000 | 40x105 | 18 | 16 | 12.64 | 13.72 | ALC40A563EP050 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C, 10 KHz | Ripple current A at 105°C 100 Hz | Ripple current A at 105°C 10 KHz | Type number |
|---------------------------|-------------|-----------|--------------------------------|--|-------------------------------------|-------------------------------------|----------------|
| 63V d.c. (72V surge) | 1800 | 22x30 | 256 | 200 | 1.55 | 1.83 | ALC40A182AB063 |
| | 2200 | 25x30 | 227 | 180 | 1.69 | 1.98 | ALC40A222BB063 |
| | 2700 | 22x40 | 170 | 132 | 2.15 | 2.55 | ALC40A272AD063 |
| | 3300 | 25x35 | 165 | 133 | 2.01 | 2.35 | ALC40A332BC063 |
| | 3900 | 25x40 | 138 | 111 | 2.36 | 2.75 | ALC40A392BD063 |
| | 3900 | 30x30 | 185 | 154 | 1.88 | 2.18 | ALC40A392CB063 |
| | 4700 | 30x35 | 148 | 123 | 2.28 | 2.65 | ALC40A472CC063 |
| | 5600 | 30x40 | 122 | 102 | 2.61 | 3.03 | ALC40A562CD063 |
| | 5600 | 40x30 | 102 | 90 | 3.82 | 3.91 | ALC40A562EB063 |
| | 6800 | 30x50 | 92 | 75 | 3.39 | 3.93 | ALC40A682CF063 |
| | 6800 | 35x35 | 141 | 119 | 2.50 | 2.90 | ALC40A682DC063 |
| | 6800 | 40x35 | 91 | 81 | 4.18 | 4.26 | ALC40A682EC063 |
| | 8200 | 30x50 | 48 | 35 | 3.33 | 3.98 | ALC40A822CF063 |
| | 8200 | 35x40 | 116 | 99 | 2.87 | 3.33 | ALC40A822DD063 |
| | 8200 | 40x40 | 72 | 64 | 5.01 | 5.12 | ALC40A822ED063 |
| | 10000 | 35x50 | 85 | 72 | 3.71 | 4.31 | ALC40A103DF063 |
| | 10000 | 40x45 | 60 | 53 | 5.69 | 5.81 | ALC40A103EE063 |
| | 12000 | 40x50 | 50 | 44 | 6.50 | 6.64 | ALC40A123EF063 |
| | 15000 | 40x60 | 39 | 34 | 7.81 | 7.99 | ALC40A153EH063 |
| | 22000 | 40x80 | 27 | 24 | 9.70 | 9.92 | ALC40A223EL063 |
| 33000 | 40x105 | 18 | 17 | 12.01 | 13.01 | ALC40A333EP063 | |
| 100V d.c. (115V surge) | 560 | 22x30 | 383 | 276 | 1.22 | 1.67 | ALC40A561AB100 |
| | 680 | 22x40 | 302 | 214 | 1.60 | 2.26 | ALC40A681AD100 |
| | 820 | 22x40 | 259 | 186 | 1.68 | 2.31 | ALC40A821AD100 |
| | 820 | 25x30 | 294 | 220 | 1.39 | 1.82 | ALC40A821BB100 |
| | 1000 | 25x35 | 238 | 177 | 1.65 | 2.16 | ALC40A102BC100 |
| | 1200 | 25x40 | 198 | 147 | 1.93 | 2.53 | ALC40A122BD100 |
| | 1200 | 30x30 | 245 | 191 | 1.57 | 2.01 | ALC40A122CB100 |
| | 1500 | 30x35 | 195 | 151 | 1.90 | 2.44 | ALC40A152CC100 |
| | 1800 | 30x40 | 162 | 125 | 2.18 | 2.80 | ALC40A182CD100 |
| | 2200 | 30x50 | 123 | 94 | 2.82 | 3.63 | ALC40A222CF100 |
| | 2200 | 35x35 | 177 | 142 | 2.10 | 2.67 | ALC40A222DC100 |
| | 2200 | 40x30 | 128 | 110 | 3.58 | 3.80 | ALC40A222EB100 |
| | 2700 | 35x40 | 146 | 118 | 2.41 | 3.07 | ALC40A272DD100 |
| | 2700 | 40x40 | 95 | 80 | 4.92 | 5.24 | ALC40A272ED100 |
| | 3300 | 35x50 | 108 | 86 | 3.12 | 3.97 | ALC40A332DF100 |
| | 3300 | 40x45 | 78 | 66 | 5.59 | 5.95 | ALC40A332EE100 |
| | 3900 | 40x50 | 65 | 55 | 6.41 | 6.83 | ALC40A392EF100 |
| | 4700 | 40x55 | 58 | 50 | 6.67 | 7.04 | ALC40A472EG100 |
| | 5600 | 40x60 | 49 | 42 | 7.46 | 7.87 | ALC40A562EH100 |
| | 8200 | 40x80 | 34 | 29 | 9.28 | 9.78 | ALC40A822EL100 |
| 10000 | 40x105 | 24 | 21 | 11.33 | 13.12 | ALC40A103EP100 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C | | Impedance $m\Omega$ at 20°C, 10 KHz | | Ripple current A at 105°C | | Type number |
|---------------------------|-------------|-----------|-----------------------|----|-------------------------------------|------|---------------------------|----------------|----------------|
| | | | 100Hz | | | | 100 Hz | 10 KHz | |
| 200V d.c. (230V surge) | 220 | 22x30 | 644 | | 442 | | 0.88 | 1.41 | ALC40A221AB200 |
| | 270 | 25x30 | 542 | | 377 | | 1.01 | 1.56 | ALC40A271BB200 |
| | 330 | 22x40 | 428 | | 294 | | 1.21 | 1.95 | ALC40A331AD200 |
| | 390 | 25x35 | 386 | | 271 | | 1.24 | 1.86 | ALC40A391BC200 |
| | 470 | 25x40 | 320 | | 224 | | 1.45 | 2.19 | ALC40A471BD200 |
| | 470 | 30x30 | 369 | | 270 | | 1.24 | 1.76 | ALC40A471CB200 |
| | 560 | 30x35 | 301 | | 219 | | 1.50 | 2.13 | ALC40A561CC200 |
| | 680 | 30x40 | 249 | | 181 | | 1.72 | 2.44 | ALC40A681CD200 |
| | 680 | 40x30 | 202 | | 158 | | 2.97 | 3.67 | ALC40A681EB200 |
| | 820 | 30x50 | 196 | | 140 | | 2.18 | 3.16 | ALC40A821CF200 |
| | 820 | 35x35 | 252 | | 191 | | 1.70 | 2.34 | ALC40A821DC200 |
| | 820 | 40x35 | 173 | | 137 | | 3.35 | 4.06 | ALC40A821EC200 |
| | 1000 | 35x40 | 208 | | 158 | | 1.95 | 2.69 | ALC40A102DD200 |
| | 1000 | 40x40 | 140 | | 110 | | 3.92 | 4.80 | ALC40A102ED200 |
| | 1200 | 35x50 | 159 | | 119 | | 2.50 | 3.48 | ALC40A122DF200 |
| | 1200 | 40x45 | 116 | | 91 | | 4.50 | 5.50 | ALC40A122EE200 |
| | 1500 | 40x50 | 94 | | 74 | | 5.13 | 6.23 | ALC40A152EF200 |
| | 1800 | 40x60 | 76 | | 60 | | 6.10 | 7.53 | ALC40A182EH200 |
| | 2700 | 40x80 | 52 | | 41 | | 7.62 | 9.32 | ALC40A272EL200 |
| 3900 | 40x105 | 49 | | 34 | | 7.90 | 12.31 | ALC40A392EP200 | |
| 250V d.c. (287V surge) | 150 | 22x30 | 823 | | 552 | | 0.76 | 1.32 | ALC40A151AB250 |
| | 180 | 22x40 | 674 | | 448 | | 0.96 | 1.73 | ALC40A181AD250 |
| | 220 | 22x40 | 559 | | 374 | | 1.04 | 1.82 | ALC40A221AD250 |
| | 220 | 25x30 | 592 | | 405 | | 0.93 | 1.50 | ALC40A221BB250 |
| | 270 | 25x35 | 480 | | 327 | | 1.10 | 1.77 | ALC40A271BC250 |
| | 330 | 25x40 | 393 | | 268 | | 1.29 | 2.08 | ALC40A331BD250 |
| | 330 | 30x30 | 441 | | 312 | | 1.13 | 1.69 | ALC40A331CB250 |
| | 390 | 30x35 | 364 | | 256 | | 1.36 | 2.04 | ALC40A391CC250 |
| | 470 | 30x40 | 302 | | 212 | | 1.56 | 2.34 | ALC40A471CD250 |
| | 470 | 40x30 | 258 | | 193 | | 2.59 | 3.49 | ALC40A471EB250 |
| | 560 | 30x50 | 243 | | 168 | | 1.96 | 3.02 | ALC40A561CF250 |
| | 560 | 35x35 | 297 | | 217 | | 1.57 | 2.25 | ALC40A561DC250 |
| | 560 | 40x35 | 221 | | 166 | | 3.05 | 4.16 | ALC40A561EC250 |
| | 680 | 35x40 | 245 | | 179 | | 1.80 | 2.59 | ALC40A681DD250 |
| | 680 | 40x40 | 180 | | 134 | | 3.49 | 4.76 | ALC40A681ED250 |
| | 820 | 35x50 | 190 | | 137 | | 3.12 | 4.66 | ALC40A821DF250 |
| | 820 | 40x45 | 149 | | 111 | | 4.01 | 5.46 | ALC40A821EE250 |
| | 1000 | 35x60 | 164 | | 125 | | 3.61 | 5.78 | ALC40A102DH250 |
| | 1000 | 40x50 | 123 | | 92 | | 4.58 | 6.22 | ALC40A102EF250 |
| | 1200 | 40x55 | 106 | | 80 | | 4.93 | 6.51 | ALC40A122EG250 |
| 1500 | 35x80 | 112 | | 90 | | 4.43 | 6.88 | ALC40A152DL250 | |
| 1800 | 40x80 | 67 | | 50 | | 6.77 | 9.27 | ALC40A182EL250 | |
| 2700 | 40x105 | 62 | | 42 | | 7.05 | 12.03 | ALC40A272EP250 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C 100Hz | Impedance $m\Omega$ at 20°C, 10 KHz | Ripple current A at 105°C 100 Hz | Ripple current A at 105°C 10 KHz | Type number |
|---------------------------|-------------|-----------|--------------------------------|--|-------------------------------------|-------------------------------------|----------------|
| 350V d.c. (385V surge) | 82 | 22x30 | 1233 | 789 | 0.67 | 1.69 | ALC40A820AB350 |
| | 100 | 22x40 | 1002 | 638 | 0.83 | 2.12 | ALC40A101AD350 |
| | 120 | 22x40 | 841 | 537 | 0.91 | 2.27 | ALC40A121AD350 |
| | 120 | 25x30 | 868 | 562 | 0.88 | 2.07 | ALC40A121BB350 |
| | 150 | 25x35 | 694 | 449 | 1.04 | 2.46 | ALC40A151BC350 |
| | 180 | 25x40 | 578 | 374 | 1.20 | 2.81 | ALC40A181BD350 |
| | 180 | 30x30 | 618 | 410 | 1.17 | 2.46 | ALC40A181CB350 |
| | 220 | 30x35 | 502 | 332 | 1.36 | 2.88 | ALC40A221CC350 |
| | 270 | 30x40 | 410 | 272 | 1.59 | 3.33 | ALC40A271CD350 |
| | 270 | 40x30 | 448 | 291 | 1.97 | 4.36 | ALC40A271EB350 |
| | 330 | 35x35 | 378 | 260 | 1.79 | 3.24 | ALC40A331DC350 |
| | 390 | 30x50 | 287 | 191 | 2.02 | 4.02 | ALC40A391CF350 |
| | 390 | 35x40 | 317 | 218 | 2.02 | 3.67 | ALC40A391DD350 |
| | 390 | 40x40 | 312 | 203 | 2.64 | 5.73 | ALC40A391ED350 |
| | 470 | 35x50 | 251 | 170 | 2.72 | 4.90 | ALC40A471DF350 |
| | 470 | 40x45 | 258 | 168 | 3.00 | 6.46 | ALC40A471EE350 |
| | 560 | 35x50 | 224 | 155 | 2.57 | 4.44 | ALC40A561DF350 |
| | 560 | 35x60 | 224 | 155 | 3.11 | 5.70 | ALC40A561DH350 |
| | 560 | 40x50 | 216 | 141 | 3.41 | 7.27 | ALC40A561EF350 |
| | 680 | 40x60 | 177 | 114 | 3.99 | 8.39 | ALC40A681EH350 |
| 820 | 35x80 | 150 | 102 | 3.82 | 6.72 | ALC40A821DL350 | |
| 1000 | 40x80 | 120 | 78 | 5.00 | 9.98 | ALC40A102EL350 | |
| 1500 | 40x105 | 99 | 68 | 6.00 | 11.47 | ALC40A152EP350 | |
| 400V d.c. (440V surge) | 68 | 22x30 | 1717 | 1123 | 0.65 | 1.71 | ALC40A680AB400 |
| | 82 | 22x40 | 1415 | 923 | 0.80 | 2.14 | ALC40A820AD400 |
| | 100 | 22x40 | 1166 | 762 | 0.88 | 2.30 | ALC40A101AD400 |
| | 100 | 25x30 | 1193 | 788 | 0.85 | 2.09 | ALC40A101BB400 |
| | 120 | 25x35 | 991 | 653 | 1.00 | 2.45 | ALC40A121BC400 |
| | 150 | 25x40 | 794 | 524 | 1.17 | 2.83 | ALC40A151BD400 |
| | 150 | 30x30 | 835 | 562 | 1.14 | 2.46 | ALC40A151CB400 |
| | 180 | 30x35 | 690 | 463 | 1.31 | 2.88 | ALC40A181CC400 |
| | 220 | 30x40 | 565 | 379 | 1.54 | 3.33 | ALC40A221CD400 |
| | 220 | 40x30 | 521 | 320 | 1.88 | 4.36 | ALC40A221EB400 |
| | 270 | 35x35 | 470 | 322 | 1.73 | 3.23 | ALC40A271DC400 |
| | 270 | 40x35 | 430 | 266 | 2.21 | 4.95 | ALC40A271EC400 |
| | 330 | 30x50 | 383 | 258 | 1.98 | 4.02 | ALC40A331CF400 |
| | 330 | 35x40 | 386 | 266 | 1.98 | 3.64 | ALC40A331DD400 |
| | 330 | 40x40 | 350 | 216 | 2.56 | 5.76 | ALC40A331ED400 |
| | 390 | 35x50 | 323 | 221 | 2.64 | 4.66 | ALC40A391DF400 |
| | 390 | 40x45 | 295 | 182 | 2.88 | 6.48 | ALC40A391EE400 |
| | 470 | 35x50 | 277 | 192 | 2.51 | 4.40 | ALC40A471DF400 |
| | 470 | 35x60 | 270 | 185 | 3.04 | 5.78 | ALC40A471DH400 |
| | 470 | 40x50 | 245 | 151 | 3.28 | 7.30 | ALC40A471EF400 |
| 560 | 40x55 | 209 | 130 | 3.62 | 7.78 | ALC40A561EG400 | |
| 680 | 35x80 | 200 | 131 | 3.72 | 6.69 | ALC40A681DL400 | |
| 680 | 40x60 | 173 | 107 | 4.08 | 8.58 | ALC40A681EH400 | |
| 1000 | 40x80 | 118 | 73 | 4.85 | 10.16 | ALC40A102EL400 | |
| 1200 | 40x105 | 103 | 70 | 5.76 | 11.46 | ALC40A122EP400 | |

Note: Values of E.S.R. and Impedance quoted above are maximum

| Rated voltage | Cap μ F | Case Size | ESR $m\Omega$ at 20°C | | Impedance $m\Omega$ at 20°C, 10 KHz | | Ripple current A at 105°C | | Type number |
|---------------------------|-------------|-----------|-----------------------|-----|-------------------------------------|------|---------------------------|----------------|----------------|
| | | | 100Hz | | | | 100 Hz | 10 KHz | |
| 450V d.c. (495V surge) | 33 | 22x30 | 2851 | | 1971 | | 0.51 | 1.38 | ALC40A330AB450 |
| | 47 | 22x40 | 2002 | | 1385 | | 0.67 | 1.84 | ALC40A470AD450 |
| | 47 | 25x30 | 2011 | | 1392 | | 0.66 | 1.74 | ALC40A470BB450 |
| | 56 | 25x35 | 1687 | | 1168 | | 0.76 | 2.03 | ALC40A560BC450 |
| | 68 | 25x40 | 1391 | | 963 | | 0.88 | 2.34 | ALC40A680BD450 |
| | 68 | 30x30 | 1403 | | 974 | | 0.87 | 2.19 | ALC40A680CB450 |
| | 82 | 30x35 | 1163 | | 807 | | 1.01 | 2.54 | ALC40A820CC450 |
| | 100 | 30x40 | 955 | | 663 | | 1.18 | 2.95 | ALC40A101CD450 |
| | 120 | 35x35 | 810 | | 565 | | 1.36 | 3.11 | ALC40A121DC450 |
| | 150 | 30x50 | 642 | | 446 | | 1.54 | 3.67 | ALC40A151CF450 |
| | 150 | 35x40 | 651 | | 454 | | 1.57 | 3.53 | ALC40A151DD450 |
| | 150 | 40x30 | 642 | | 447 | | 1.73 | 4.14 | ALC40A151EB450 |
| | 180 | 35x50 | 541 | | 377 | | 1.88 | 4.27 | ALC40A181DF450 |
| | 180 | 40x35 | 538 | | 374 | | 2.01 | 4.70 | ALC40A181EC450 |
| | 220 | 35x50 | 449 | | 315 | | 2.28 | 4.71 | ALC40A221DF450 |
| | 220 | 40x40 | 440 | | 306 | | 2.34 | 5.47 | ALC40A221ED450 |
| | 270 | 40x50 | 356 | | 248 | | 2.80 | 6.74 | ALC40A271EF450 |
| | 330 | 35x60 | 285 | | 198 | | 2.91 | 5.53 | ALC40A331DH450 |
| | 330 | 40x55 | 293 | | 204 | | 3.14 | 7.29 | ALC40A331EG450 |
| | 390 | 40x60 | 249 | | 174 | | 3.50 | 8.04 | ALC40A391EH450 |
| 470 | 35x80 | 203 | | 138 | | 3.51 | 6.68 | ALC40A471DL450 | |
| 560 | 40x80 | 175 | | 122 | | 4.32 | 9.57 | ALC40A561EL450 | |
| 820 | 40x105 | 121 | | 85 | | 5.34 | 11.05 | ALC40A821EP450 | |

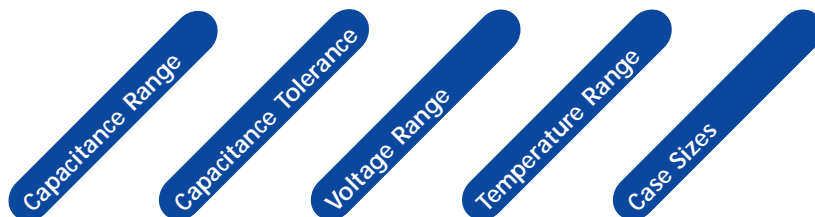
Note: Values of E.S.R. and Impedance quoted above are maximum

PCB Snap-In Capacitors

ALC12/42 series

Introducing the new high CV ranges of snap-in capacitors available from BHC Aerovox.

Both series are designed for applications where high reliability and compact case sizes are important such as switch mode power supplies and frequency converters. For more specific technical data relating to the ALC12 and ALC42 ranges listed, or if a specific rating is required not listed, then please contact BHC Aerovox Technical Sales.



| | | | | | |
|---------------------|------------------|------|-------------------|-----------------|-------------------------|
| ALC12 series | 150µF to 5,600µF | ±20% | 200V to 450V d.c. | -40°C to +85°C | 30 x 30mm to 40 x 105mm |
| ALC42 series | 120µF to 4,700µF | ±20% | 200V to 450V d.c. | -40°C to +105°C | 30 x 30mm to 40 x 105mm |

Case Sizes 22, 25, 45 and 50mm diameter available upon request.

TECHNICAL DATA

Related documents

IEC 384-4

Temperature range

ALC12

Storage -55°C to +85°C

Operating -40°C to +85°C

Environmental classification 40/085/56

ALC42

Storage -55°C to +105°C

Operating -40°C to +105°C

Environmental classification 40/105/56

Surge voltage

1000 surges (30 seconds) at 85°C (ALC12) and 105°C (ALC42) with surge voltage applied. See electrical characteristics for more details.

Charge/discharge

10⁶ cycles at 25°C and rated voltage. One cycle per second with a time constant of 0.1.

D.C. leakage current

After application of rated d.c. voltage for 5 minutes at 20°C, the d.c. leakage current shall not exceed (0.006 C_r U_r) µA. Where C_r is the rated capacitance in µF and U_r is the rated d.c. voltage.

Vibration

10Hz to 500Hz at 0.75mm or 10g for 3x2hrs duration.

Insulation resistance

≥ 100MΩ at 100V d.c., across insulating sleeve.

Voltage proof

≥ 2500V d.c., across insulating sleeve.

Life expectancy

2000 hours at rated temperature with rated voltage and ripple current applied.

Capacitor marking

The capacitors are marked with items 1 to 6 from the following list as a minimum, and as much of the remaining information as is practical.

1. Rated capacitance in µF
2. Rated voltage d.c.
3. Polarity of terminations
4. Tolerance on rated capacitance
5. Date code/Batch number
6. BHC part number
7. Environmental classification

CAPACITANCE μF

Rated Voltage d.c.(Surge voltage in brackets)

| Range | Diameter x Length | Rated Voltage d.c.(Surge voltage in brackets) | | | | |
|-------|----------------------|---|--------------|--------------|--------------|--------------|
| | | 200 (230) | 250 (287) | 350 (385) | 400 (440) | 450 (495) |
| ALC12 | 30x30 | 560 | 390 | 220 | 180 | 150 |
| ALC12 | 30x35 | 680 | 470 | 270 | 220 | 220 |
| ALC12 | 30x40 | 1000 | 560 | 390 | 270 | 270 |
| ALC12 | 30x50 | 1200 | 820 | 470 | 390 | 330 |
| ALC12 | 35x35 | 1000 | 680 | 390 | 330 | 270 |
| ALC12 | 35x40 | 1200 | 820 | 560 | 390 | 330 |
| ALC12 | 35x50 | 1800 | 1200 | 680 | 560 | 470 |
| ALC12 | 35x60 | 2200 | 1500 | 1000 | 680 | 680 |
| ALC12 | 35x80 | 2700 | 2200 | 1500 | 1000 | 820 |
| ALC12 | 40x30 | 1200 | 680 | 470 | 330 | 330 |
| ALC12 | 40x35 | 1500 | 1000 | 560 | 470 | 390 |
| ALC12 | 40x40 | 1800 | 1200 | 680 | 560 | 470 |
| ALC12 | 40x45 | 2200 | 1500 | 820 | 680 | 560 |
| ALC12 | 40x50 | 2200 | 1500 | 1000 | 820 | 680 |
| ALC12 | 40x55 | 2700 | 1800 | 1000 | 820 | 680 |
| ALC12 | 40x60 | 3300 | 2200 | 1200 | 1000 | 820 |
| ALC12 | 40x80 | 3900 | 2700 | 1800 | 1500 | 1000 |
| ALC12 | 40x105 | 5600 | 3900 | 2200 | 1800 | 1500 |

Rated Voltage d.c.(Surge voltage in brackets)

| Range | Diameter x Length | Rated Voltage d.c.(Surge voltage in brackets) | | | | |
|-------|----------------------|---|--------------|--------------|--------------|--------------|
| | | 200 (230) | 250 (287) | 350 (385) | 400 (440) | 450 (495) |
| ALC42 | 30x30 | 560 | 390 | 220 | 180 | 120 |
| ALC42 | 30x35 | 680 | 470 | 270 | 220 | 180 |
| ALC42 | 30x40 | 820 | 560 | 330 | 270 | 220 |
| ALC42 | 30x50 | 1200 | 820 | 470 | 390 | 270 |
| ALC42 | 35x35 | 1000 | 680 | 390 | 330 | 220 |
| ALC42 | 35x40 | 1200 | 820 | 470 | 390 | 270 |
| ALC42 | 35x50 | 1500 | 1200 | 680 | 560 | 470 |
| ALC42 | 35x60 | 2200 | 1500 | 820 | 680 | 470 |
| ALC42 | 35x80 | 2700 | 1800 | 1200 | 1000 | 680 |
| ALC42 | 40x30 | 1000 | 680 | 390 | 330 | 270 |
| ALC42 | 40x35 | 1200 | 820 | 560 | 390 | 330 |
| ALC42 | 40x40 | 1500 | 1000 | 680 | 470 | 390 |
| ALC42 | 40x45 | 1800 | 1200 | 680 | 560 | 470 |
| ALC42 | 40x50 | 2200 | 1500 | 820 | 680 | 560 |
| ALC42 | 40x55 | 2200 | 1800 | 1000 | 820 | 560 |
| ALC42 | 40x60 | 2700 | 1800 | 1200 | 820 | 680 |
| ALC42 | 40x80 | 3300 | 2700 | 1500 | 1200 | 820 |
| ALC42 | 40x105 | 4700 | 3300 | 2200 | 1800 | 1200 |