

LBA

85°C Snap-Mount Aluminum Electrolytic Capacitors



Applications

- Filtering
- Switching power supplies

Features

- High Voltage
- RoHS Compliant

Specifications

| | | | | | | | | | | | | | | | | |
|--|-----------------------|---|----------------------------------|------------------|-----------|------------|-----------|-------------------------|------------|------------|------------|------------|------------|------------|------------|--|
| Operating Temperature Range | | -40°C to +85°C | | | | | | | | | | | | | | |
| Capacitance Tolerance | | +20% at 120 Hz, 20°C | | | | | | | | | | | | | | |
| Surge voltage | WVDC | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 | 500 | |
| | SVDC | 20 | 32 | 44 | 63 | 79 | 100 | 120 | 200 | 250 | 300 | 400 | 450 | 500 | 550 | |
| Dissipation Factor (120 Hz) | WVDC | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 | 500 | |
| | tan δ | .5 | .4 | .25 | .2 | .15 | .15 | .15 | .1* | .1* | .1* | .15 | .15 | .15 | .15 | |
| *Note: .15 for 35 mm Diameter | | | | | | | | | | | | | | | | |
| Leakage current @20°C, Rated WVDC applied | | Time | | 5 Minutes | | | | | | | | | | | | |
| | | .02CV or 2000uA, whichever is less | | | | | | | | | | | | | | |
| Impedance ratio (120 Hz) | WVDC | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 | 500 | |
| | -25°C/+20°C | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | |
| | -40°C/+20°C | 15 | 10 | 8 | 6 | 6 | 5 | 5 | 9 | 9 | 9 | 12 | 12 | 12 | 12 | |
| Load Life | | 2000 hours with rated voltage applied at 85°C with full rated ripple current applied | | | | | | | | | | | | | | |
| | | Capacitance change | <20% of initial measured value | | | | | | | | | | | | | |
| | | Dissipation factor | <175% of maximum specified value | | | | | | | | | | | | | |
| | | Leakage current | <100% of maximum specified value | | | | | | | | | | | | | |
| Shelf Life | | 1000 hours at 85°C with no voltage applied | | | | | | | | | | | | | | |
| | | Capacitance change | <20% initial measured value | | | | | | | | | | | | | |
| | | Dissipation factor | <175% of maximum specified value | | | | | | | | | | | | | |
| | | Insulation resistance | <100% of maximum specified value | | | | | | | | | | | | | |
| Ripple Current Multipliers | Frequency (Hz) | | | | | | | Temperature (°C) | | | | | | | | |
| | WVDC | 60 | 120 | 400 | 1k | 10k | 40 | 60 | 70 | 85 | | | | | | |
| | <100 | 0.8 | 1.0 | 1.1 | 1.2 | 1.2 | 1.8 | 1.4 | 1.2 | 1.0 | | | | | | |
| | >160 | 0.8 | 1.0 | 1.1 | 1.3 | 1.4 | 1.8 | 1.4 | 1.2 | 1.0 | | | | | | |



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| Cap (uF) | WVDC | IC PART # | Maximum ESR (Ω) 120 Hz 20°C | Ripple current (mA) 120Hz, 85°C | Dimensions DxL (mm) |
|----------|------|---------------|-----------------------------------|---------------------------------------|---------------------------|
| 47 | 450 | 476LBA450M2BC | 5.294 | 0.46 | 22x25 |
| 68 | 450 | 686LBA450M2CC | 3.659 | 0.6 | 22x25 |
| 100 | 350 | 107LBA350M2BD | 3.317 | 0.65 | 22x30 |
| 100 | 350 | 107LBA350M2CC | 3.317 | 0.63 | 25x25 |
| 100 | 400 | 107LBA400M2BD | 3.317 | 0.68 | 22x30 |
| 100 | 450 | 107LBA450M2BE | 3.317 | 0.77 | 22x35 |
| 100 | 500 | 107LBA500M2BF | 2.488 | 0.85 | 22x40 |
| 100 | 500 | 107LBA500M2CD | 2.488 | 0.81 | 25x30 |
| 100 | 500 | 107LBA500M2DC | 2.488 | 0.84 | 30x25 |
| 150 | 250 | 157LBA250M2CA | 1.106 | 0.85 | 25x20 |
| 150 | 350 | 157LBA350M2CD | 1.659 | 0.97 | 25x30 |
| 150 | 400 | 157LBA400M2BF | 1.659 | 0.94 | 22x40 |
| 150 | 400 | 157LBA400M2CD | 1.659 | 0.89 | 25x30 |
| 150 | 450 | 157LBA450M2CF | 1.659 | 1.08 | 25x40 |
| 150 | 500 | 157LBA500M2BH | 1.659 | 1.15 | 22x50 |
| 150 | 500 | 157LBA500M2CF | 1.659 | 1.12 | 25x40 |
| 150 | 500 | 157LBA500M2DE | 1.659 | 1.18 | 30x35 |
| 150 | 500 | 157LBA500M2ED | 1.659 | 1.22 | 35x30 |
| 220 | 160 | 227LBA160M2BA | 0.754 | 1 | 22x20 |
| 220 | 200 | 227LBA200M2BC | 0.754 | 1.14 | 22x25 |
| 220 | 200 | 227LBA200M2CA | 0.754 | 1.1 | 25x20 |
| 220 | 250 | 227LBA250M2BD | 0.754 | 1.2 | 22x30 |
| 220 | 250 | 227LBA250M2CC | 0.754 | 1.15 | 25x25 |
| 220 | 250 | 227LBA250M2DA | 0.754 | 1.1 | 30x20 |
| 220 | 350 | 227LBA350M2DD | 1.131 | 1.29 | 30x30 |
| 220 | 400 | 227LBA400M2BH | 1.131 | 1.26 | 22x50 |
| 220 | 400 | 227LBA400M2CF | 1.131 | 1.22 | 25x40 |
| 220 | 450 | 227LBA450M2DF | 1.131 | 1.44 | 30x40 |
| 220 | 500 | 227LBA500M2CH | 1.131 | 1.5 | 25x50 |
| 220 | 500 | 227LBA500M2DG | 1.131 | 1.59 | 30x45 |
| 220 | 500 | 227LBA500M2EE | 1.131 | 1.57 | 35x35 |
| 330 | 160 | 337LBA160M2BC | 0.503 | 1.2 | 22x25 |
| 330 | 200 | 337LBA200M2BD | 0.503 | 1.48 | 22x30 |
| 330 | 200 | 337LBA200M2CC | 0.503 | 1.48 | 25x25 |
| 330 | 250 | 337LBA250M2BF | 0.503 | 1.72 | 22x40 |
| 330 | 250 | 337LBA250M2CD | 0.503 | 1.67 | 25x30 |
| 330 | 250 | 337LBA250M2DC | 0.503 | 1.61 | 30x25 |
| 330 | 350 | 337LBA350M2DF | 0.754 | 1.72 | 30x40 |
| 330 | 350 | 337LBA350M2ED | 0.754 | 1.88 | 35x30 |
| 330 | 400 | 337LBA400M2DG | 0.754 | 1.74 | 30x45 |
| 330 | 450 | 337LBA450M2EF | 0.754 | 1.92 | 35x40 |
| 330 | 500 | 337LBA500M2EG | 0.754 | 2.13 | 35x45 |
| 470 | 160 | 477LBA160M2CC | 0.353 | 1.52 | 25x25 |
| 470 | 200 | 477LBA200M2BF | 0.353 | 2.02 | 22x40 |
| 470 | 200 | 477LBA200M2CD | 0.353 | 1.91 | 25x30 |

| Cap (uF) | WVDC | IC PART # | Maximum ESR (Ω) 120 Hz 20°C | Ripple current (mA) 120Hz, 85°C | Dimensions DxL (mm) |
|----------|------|---------------|-----------------------------------|---------------------------------------|---------------------------|
| 470 | 250 | 477LBA250M2BH | 0.353 | 2.08 | 22x50 |
| 470 | 250 | 477LBA250M2CF | 0.353 | 2.03 | 25x40 |
| 470 | 250 | 477LBA250M2DD | 0.353 | 1.97 | 30x30 |
| 470 | 350 | 477LBA350M2EF | 0.529 | 2.3 | 35x40 |
| 470 | 400 | 477LBA400M2EG | 0.529 | 2.23 | 35x45 |
| 470 | 400 | 477LBA400M2FE | 0.529 | 2.16 | 40x35 |
| 470 | 450 | 477LBA450M2EH | 0.529 | 2.5 | 35x50 |
| 560 | 200 | 567LBA200M2CE | 0.296 | 2.22 | 25x35 |
| 560 | 250 | 567LBA250M2DE | 0.296 | 2.3 | 30x35 |
| 680 | 100 | 687LBA100M2BC | 0.366 | 1.85 | 22x25 |
| 680 | 160 | 687LBA160M2DC | 0.244 | 2.1 | 30x25 |
| 680 | 200 | 687LBA200M2CF | 0.244 | 2.43 | 25x40 |
| 680 | 200 | 687LBA200M2EC | 0.366 | 2.3 | 35x25 |
| 680 | 250 | 687LBA250M2DE | 0.244 | 2.4 | 30x35 |
| 680 | 250 | 687LBA250M2DF | 0.244 | 2.55 | 30x40 |
| 680 | 250 | 687LBA250M2ED | 0.366 | 2.48 | 35x30 |
| 820 | 200 | 827LBA200M2DF | 0.202 | 2.85 | 30x40 |
| 820 | 250 | 827LBA250M2DG | 0.202 | 2.9 | 30x45 |
| 820 | 250 | 827LBA250M2EE | 0.303 | 2.83 | 35x35 |
| 1000 | 80 | 108LBA080M2BC | 0.249 | 1.65 | 22x25 |
| 1000 | 100 | 108LBA100M2BE | 0.249 | 2.08 | 22x35 |
| 1000 | 100 | 108LBA100M2CC | 0.249 | 2.03 | 25x25 |
| 1000 | 160 | 108LBA160M2DE | 0.166 | 2.77 | 30x35 |
| 1000 | 160 | 108LBA160M2DD | 0.166 | 2.8 | 30x30 |
| 1000 | 160 | 108LBA160M2EC | 0.249 | 2.8 | 35x25 |
| 1000 | 200 | 108LBA200M2DG | 0.166 | 3.42 | 30x45 |
| 1000 | 200 | 108LBA200M2EE | 0.249 | 3.35 | 35x35 |
| 1000 | 200 | 108LBA200M2ED | 0.249 | 3.42 | 35x30 |
| 1000 | 250 | 108LBA250M2DH | 0.166 | 3.65 | 30x50 |
| 1000 | 250 | 108LBA250M2DG | 0.166 | 3 | 30x45 |
| 1000 | 250 | 108LBA250M2EF | 0.249 | 3.58 | 35x40 |
| 1200 | 160 | 128LBA160M2DE | 0.138 | 3.2 | 30x35 |
| 1200 | 160 | 128LBA160M2ED | 0.207 | 3.2 | 35x30 |
| 1200 | 200 | 128LBA200M2DH | 0.138 | 3.4 | 30x50 |
| 1200 | 200 | 128LBA200M2DG | 0.138 | 3.4 | 30x45 |
| 1200 | 200 | 128LBA200M2EF | 0.207 | 3.47 | 35x40 |
| 1200 | 200 | 128LBA200M2EE | 0.207 | 3.54 | 35x35 |
| 1200 | 250 | 128LBA250M2EG | 0.207 | 3.5 | 35x45 |
| 1500 | 63 | 158LBA063M2BC | 0.166 | 2 | 22x25 |
| 1500 | 80 | 158LBA080M2CC | 0.166 | 2.15 | 25x25 |
| 1500 | 100 | 158LBA100M2CE | 0.166 | 2.76 | 25x35 |
| 1500 | 160 | 158LBA160M2EE | 0.166 | 3.48 | 35x35 |
| 1500 | 200 | 158LBA200M2EF | 0.166 | 3.8 | 35x40 |
| 1500 | 200 | 158LBA200M2EG | 0.166 | 4.1 | 35x45 |
| 1500 | 250 | 158LBA250M2EH | 0.166 | 4 | 35x50 |

Additional lead styles available. See last page.



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| Cap (uF) | WVDC | IC PART # | Maximum ESR (Ω) 120 Hz 20°C | Ripple current (A) 120Hz, 85°C | Dimensions DxL (mm) |
|----------|------|---------------|-----------------------------------|--------------------------------------|---------------------------|
| 1800 | 200 | 188LBA200M2EH | 0.138 | 4.38 | 35x50 |
| 1800 | 200 | 188LBA200M2EG | 0.138 | 4.2 | 35x45 |
| 2200 | 35 | 228LBA035M2CA | 0.188 | 1.7 | 25x20 |
| 2200 | 50 | 228LBA050M2BC | 0.151 | 2 | 22x25 |
| 2200 | 63 | 228LBA063M2CC | 0.113 | 2.3 | 25x25 |
| 2200 | 80 | 228LBA080M2BF | 0.113 | 2.71 | 22x40 |
| 2200 | 80 | 228LBA080M2CE | 0.113 | 2.66 | 25x35 |
| 2200 | 100 | 228LBA100M2CG | 0.113 | 3.41 | 25x45 |
| 2200 | 100 | 228LBA100M2DE | 0.113 | 3.35 | 30x35 |
| 2200 | 100 | 228LBA100M2ED | 0.113 | 3.28 | 35x30 |
| 2200 | 160 | 228LBA160M2EH | 0.113 | 4.97 | 35x50 |
| 2200 | 160 | 228LBA160M4FF | 0.113 | 4.57 | 40x40 |
| 2200 | 200 | 228LBA200M2EH | 0.113 | 4.7 | 35x50 |
| 3300 | 35 | 338LBA035M2BC | 0.126 | 2.2 | 22x25 |
| 3300 | 50 | 338LBA050M2BC | 0.101 | 1.8 | 22x25 |
| 3300 | 50 | 338LBA050M2BD | 0.101 | 2.4 | 22x30 |
| 3300 | 50 | 338LBA050M2CC | 0.101 | 2.35 | 25x25 |
| 3300 | 63 | 338LBA063M2CE | 0.075 | 2.81 | 25x35 |
| 3300 | 80 | 338LBA080M2CG | 0.075 | 3.41 | 25x45 |
| 3300 | 80 | 338LBA080M2ED | 0.075 | 3.28 | 35x30 |
| 3300 | 100 | 338LBA100M2EE | 0.075 | 3.58 | 35x35 |
| 3300 | 100 | 338LBA100M2FD | 0.075 | 3.5 | 40x30 |
| 4700 | 25 | 478LBA025M2BC | 0.106 | 2.2 | 22x25 |
| 4700 | 35 | 478LBA035M2BD | 0.088 | 2.4 | 22x30 |
| 4700 | 35 | 478LBA035M2CC | 0.088 | 2.35 | 25x25 |
| 4700 | 50 | 478LBA050M2BF | 0.071 | 2.91 | 22x40 |
| 4700 | 50 | 478LBA050M2CE | 0.071 | 2.86 | 25x35 |
| 4700 | 50 | 478LBA050M2DC | 0.071 | 2.8 | 30x25 |
| 4700 | 63 | 478LBA063M2CG | 0.053 | 3.25 | 25x45 |
| 4700 | 63 | 478LBA063M2CE | 0.053 | 3.59 | 25x35 |
| 4700 | 63 | 478LBA063M2DD | 0.053 | 3.2 | 30x30 |
| 4700 | 63 | 478LBA063M2EC | 0.053 | 3.13 | 35x25 |
| 4700 | 80 | 478LBA080M2BE | 0.053 | 3.5 | 22x35 |
| 4700 | 80 | 478LBA080M2ED | 0.053 | 3.3 | 35x30 |
| 4700 | 80 | 478LBA080M2EE | 0.053 | 3.73 | 35x35 |
| 4700 | 100 | 478LBA100M2EG | 0.053 | 4.3 | 35x45 |
| 4700 | 100 | 478LBA100M2FE | 0.053 | 4.22 | 40x35 |
| 5600 | 25 | 568LBA025M2BD | 0.089 | 2.4 | 22x30 |
| 6800 | 25 | 688LBA025M2BE | 0.073 | 2.6 | 22x35 |
| 6800 | 25 | 688LBA025M2CC | 0.073 | 2.55 | 25x25 |
| 6800 | 35 | 688LBA035M2BF | 0.061 | 3.06 | 22x40 |

| Cap (uF) | WVDC | IC PART # | Maximum ESR (Ω) 120 Hz 20°C | Ripple current (A) 120Hz, 85°C | Dimensions DxL (mm) |
|----------|------|---------------|-----------------------------------|--------------------------------------|---------------------------|
| 6800 | 35 | 688LBA035M2BE | 0.061 | 2.9 | 22x35 |
| 6800 | 35 | 688LBA035M2CD | 0.061 | 3.01 | 25x30 |
| 6800 | 35 | 688LBA035M2DC | 0.061 | 2.95 | 30x25 |
| 6800 | 50 | 688LBA050M2CG | 0.061 | 3.86 | 25x45 |
| 6800 | 50 | 688LBA050M2ED | 0.061 | 3.73 | 35x30 |
| 6800 | 63 | 688LBA063M2EE | 0.037 | 4.15 | 35x35 |
| 6800 | 80 | 688LBA080M2EG | 0.037 | 4.8 | 35x45 |
| 8200 | 16 | 828LBA016M2BC | 0.081 | 2.37 | 22x25 |
| 8200 | 25 | 828LBA025M2BE | 0.061 | 3.31 | 22x35 |
| 8200 | 35 | 828LBA035M2CE | 0.051 | 3.45 | 25x35 |
| 8200 | 50 | 828LBA050M2DF | 0.040 | 4.35 | 30x40 |
| 10000 | 16 | 109LBA016M2BD | 0.066 | 2.84 | 22x30 |
| 10000 | 16 | 109LBA016M2CC | 0.066 | 2.76 | 25x25 |
| 10000 | 25 | 109LBA025M2BG | 0.050 | 3.4 | 22x45 |
| 10000 | 25 | 109LBA025M2CE | 0.050 | 3.32 | 25x35 |
| 10000 | 25 | 109LBA025M2DC | 0.050 | 3.31 | 30x25 |
| 10000 | 35 | 109LBA035M2CF | 0.041 | 4.06 | 25x40 |
| 10000 | 35 | 109LBA035M2DD | 0.041 | 4 | 30x30 |
| 10000 | 35 | 109LBA035M2EC | 0.041 | 3.93 | 35x25 |
| 10000 | 50 | 109LBA050M2EE | 0.033 | 4.7 | 35x35 |
| 10000 | 63 | 109LBA063M2EG | 0.025 | 5.2 | 35x45 |
| 15000 | 10 | 159LBA010M2CC | 0.055 | 2.76 | 25x25 |
| 15000 | 16 | 159LBA016M2BF | 0.044 | 3.94 | 22x40 |
| 15000 | 16 | 159LBA016M2DC | 0.044 | 3.51 | 30x25 |
| 15000 | 25 | 159LBA025M2CG | 0.033 | 4.5 | 25x45 |
| 15000 | 25 | 159LBA025M2ED | 0.033 | 4.39 | 35x30 |
| 15000 | 35 | 159LBA035M2DF | 0.028 | 5.07 | 30x40 |
| 15000 | 35 | 159LBA035M2EE | 0.028 | 5 | 35x35 |
| 15000 | 50 | 159LBA050M2EG | 0.022 | 5.9 | 35x45 |
| 22000 | 10 | 229LBA010M2DC | 0.038 | 3.49 | 30x25 |
| 22000 | 16 | 229LBA016M2BH | 0.030 | 5.23 | 22x50 |
| 22000 | 16 | 229LBA016M2DD | 0.030 | 4.45 | 30x30 |
| 22000 | 16 | 229LBA016M2EC | 0.030 | 4.13 | 35x25 |
| 22000 | 25 | 229LBA025M2EE | 0.023 | 5.73 | 35x35 |
| 22000 | 25 | 229LBA025M2FD | 0.023 | 5.65 | 40x30 |
| 22000 | 35 | 229LBA035M2EG | 0.019 | 6.25 | 35x45 |
| 33000 | 16 | 339LBA016M2DF | 0.020 | 5.8 | 30x40 |
| 33000 | 16 | 339LBA016M2ED | 0.020 | 5.15 | 35x30 |
| 33000 | 25 | 339LBA025M2EH | 0.015 | 7.2 | 35x50 |
| 47000 | 16 | 479LBA016M2DH | 0.014 | 6.78 | 30x50 |
| 47000 | 16 | 479LBA016M2EF | 0.014 | 6.71 | 35x40 |

Additional lead styles available. See last page.



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Lead style options

