



FEATURES

Multiple Case Sizes - High Voltage – High Current

APPLICATIONS

Filtering – Switching Power Supplies

| | | | | | | | | | | | | | | | | | |
|---|-------------|---|----------------------------------|-----|------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Operating Temperature Range | | -40°C to +85°C (10VDC to 250VDC) -25°C to +85°C (350VDC to 500VDC) | | | | | | | | | | | | | | | |
| Capacitance Tolerance | | +20% at 120 Hz, 20°C | | | | | | | | | | | | | | | |
| Surge Voltage | WVDC | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 | 500 | |
| | SVDC | 13 | 20 | 32 | 44 | 63 | 79 | 100 | 120 | 200 | 250 | 300 | 400 | 450 | 500 | 550 | |
| Dissipation Factor (120 Hz) | WVDC | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 | 500 | |
| | tan δ | .55 | .5 | .45 | .4 | .35 | .3 | .25 | .2 | .15 | .15 | .15 | .15 | .15 | .2 | .2 | |
| | | For capacitance values above 33000µF the following to the Dissipation factors values above $\frac{(\text{capacitance}-33000 \mu\text{F}) \cdot 0.1}{10000 \mu\text{F}}$ | | | | | | | | | | | | | | | |
| Leakage Current @20°C, Rated WVDC applied | | Time | 5 Minutes | | | | | | | | | | | | | | |
| | | | $3\sqrt{CV}$ | | | | | | | | | | | | | | |
| Impedance Ratio (120 Hz) | WVDC | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 | 500 | |
| | -25°C/+20°C | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 8 | 8 | 8 | |
| | -40°C/+20°C | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | - | - | - | - | |
| 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 | ≤200% 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% of initial measured value | | | | | | | | | | | | | | |
| | | Dissipation Factor | ≤200% of maximum specified value | | | | | | | | | | | | | | |
| | | Leakage Current | ≤100% of maximum specified value | | | | | | | | | | | | | | |
| Ripple Current Multipliers | | Frequency (Hz) | | | | | | | | | | | | | | | |
| | | WVDC | 60 | 120 | 1k | 10k | | | | | | | | | | | |
| | | 10 to 100 | 0.9 | 1.0 | 1.15 | 1.25 | | | | | | | | | | | |
| | | 160 to 250 | 0.8 | 1.0 | 1.15 | 1.47 | | | | | | | | | | | |
| | | 350 to 500 | 0.8 | 1.0 | 1.15 | 1.47 | | | | | | | | | | | |



Lead style options

| | | | | | | | | | | | | | |
|---|--|----|----|----|----|----|----|---|----|----|----|----|----|
| <p>Code 2 (Standard)</p> <p>Diameter 20 to 40 mm</p> | <p>Code Z</p> <p>Diameter 20 to 40 mm</p> | | | | | | | | | | | | |
| <p>Code P</p> <p>Diameter 22 to 35 mm</p> | <p>Code D</p> <p>Diameter 30 to 40 mm</p> | | | | | | | | | | | | |
| <p>Code 9</p> <p>Diameter 25 to 35 mm</p> | <p>Code T</p> <p>Diameter 25 to 35 mm</p> | | | | | | | | | | | | |
| <p>Code 4</p> <p>Diameter 35 to 45 mm</p> | <p>Code 4S (straight leads)</p> <p>Diameter 35 to 45 mm</p> | | | | | | | | | | | | |
| <p>Code 5</p> <p>Diameter 40 to 50 mm</p> | <p>Code G</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>D</td> <td>35</td> <td>40</td> <td>50</td> <td>63</td> <td>76</td> </tr> <tr> <td>P</td> <td>14</td> <td>14</td> <td>18</td> <td>25</td> <td>25</td> </tr> </tbody> </table> <p>Diameter 35 to 76 mm</p> | D | 35 | 40 | 50 | 63 | 76 | P | 14 | 14 | 18 | 25 | 25 |
| D | 35 | 40 | 50 | 63 | 76 | | | | | | | | |
| P | 14 | 14 | 18 | 25 | 25 | | | | | | | | |

LBA

+85°C Standard, 2000 hrs

| WVDC | Capacitance (µF) | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Maximum RMS Ripple Current (A) 120 Hz, +85°C | Dims DxDL (mm) |
|------|------------------|----------------|--------------------------------------|--|----------------|
| 10 | 12000 | 129LBA010M2AD | 75.99 | 2.44 | 20x30 |
| 10 | 12000 | 129LBA010M2BC | 75.99 | 2.41 | 22x25 |
| 10 | 15000 | 159LBA010M2AE | 60.79 | 2.9 | 20x35 |
| 10 | 15000 | 159LBA010M2BD | 60.79 | 2.88 | 22x30 |
| 10 | 18000 | 189LBA010M2AF | 50.66 | 3.31 | 20x40 |
| 10 | 18000 | 189LBA010M2BE | 50.66 | 3.22 | 22x35 |
| 10 | 18000 | 189LBA010M2CD | 50.66 | 3.08 | 25x30 |
| 10 | 22000 | 229LBA010M2BF | 41.45 | 3.79 | 22x40 |
| 10 | 22000 | 229LBA010M2CD | 41.45 | 3.66 | 25x30 |
| 10 | 27000 | 279LBA010M2CE | 33.77 | 4.04 | 25x35 |
| 10 | 27000 | 279LBA010M2DD | 33.77 | 3.99 | 30x30 |
| 10 | 33000 | 339LBA010M2BH | 27.63 | 4.58 | 22x50 |
| 10 | 33000 | 339LBA010M2CF | 27.63 | 4.56 | 25x40 |
| 10 | 33000 | 339LBA010M2DD | 27.63 | 4.58 | 30x30 |
| 10 | 39000 | 399LBA010M2CG | 25.93 | 5.29 | 25x45 |
| 10 | 39000 | 399LBA010M2DE | 25.93 | 5.21 | 30x35 |
| 10 | 39000 | 399LBA010M2ED | 25.93 | 5.5 | 35x30 |
| 10 | 47000 | 479LBA010M2CH | 24.34 | 5.78 | 25x50 |
| 10 | 47000 | 479LBA010M2DF | 24.34 | 5.78 | 30x40 |
| 10 | 47000 | 479LBA010M2EE | 24.34 | 5.55 | 35x35 |
| 10 | 56000 | 569LBA010M2DG | 23.09 | 6.59 | 30x45 |
| 10 | 56000 | 569LBA010M2EE | 23.09 | 6.4 | 35x35 |
| 10 | 68000 | 689LBA010M2DH | 21.94 | 7.5 | 30x50 |
| 10 | 68000 | 689LBA010M2EF | 21.94 | 7.48 | 35x40 |
| 10 | 82000 | 829LBA010M2EH | 21.03 | 8.5 | 35x50 |
| 16 | 6800 | 688LBA016M2AC | 121.9 | 2.33 | 20x25 |
| 16 | 8200 | 828LBA016M2AD | 101.09 | 2.56 | 20x30 |
| 16 | 10000 | 109LBA016M2AE | 82.89 | 2.85 | 20x35 |
| 16 | 10000 | 109LBA016M2BD | 82.89 | 2.84 | 22x30 |
| 16 | 10000 | 109LBA016M2CC | 82.89 | 2.76 | 25x25 |
| 16 | 12000 | 129LBA016M2AF | 69.08 | 3.2 | 20x40 |
| 16 | 12000 | 129LBA016M2BD | 69.08 | 3.13 | 22x30 |
| 16 | 12000 | 129LBA016M2CC | 69.08 | 3.01 | 25x25 |
| 16 | 15000 | 159LBA016M2BE | 55.26 | 3.69 | 22x35 |
| 16 | 15000 | 159LBA016M2BF | 55.26 | 3.94 | 22x40 |
| 16 | 15000 | 159LBA016M2CD | 55.26 | 3.64 | 25x30 |
| 16 | 15000 | 159LBA016M2DC | 55.26 | 3.51 | 30x25 |
| 16 | 18000 | 189LBA016M2BF | 46.05 | 3.98 | 22x40 |
| 16 | 18000 | 189LBA016M2CE | 46.05 | 3.98 | 25x35 |
| 16 | 18000 | 189LBA016M2DD | 46.05 | 3.88 | 30x30 |
| 16 | 22000 | 229LBA016M2BH | 37.68 | 5.23 | 22x50 |
| 16 | 22000 | 229LBA016M2CF | 37.68 | 4.44 | 25x40 |
| 16 | 22000 | 229LBA016M2CH | 37.68 | 4.52 | 25x50 |
| 16 | 22000 | 229LBA016M2DD | 37.68 | 4.45 | 30x30 |
| 16 | 22000 | 229LBA016M2EC | 37.68 | 4.13 | 35x25 |
| 16 | 27000 | 279LBA016M2CG | 30.7 | 4.98 | 25x45 |
| 16 | 27000 | 279LBA016M2DE | 30.7 | 4.95 | 30x35 |
| 16 | 27000 | 279LBA016M2ED | 30.7 | 4.82 | 35x30 |
| 16 | 33000 | 339LBA016M2CH | 25.12 | 5.49 | 25x50 |
| 16 | 33000 | 339LBA016M2DF | 25.12 | 5.8 | 30x40 |
| 16 | 33000 | 339LBA016M2ED | 25.12 | 5.15 | 35x30 |
| 16 | 39000 | 399LBA016M2DG | 0.02 | 6.21 | 30x45 |
| 16 | 39000 | 399LBA016M2EE | 0.02 | 6.12 | 35x35 |
| 16 | 47000 | 479LBA016M2DH | 22.58 | 6.78 | 30x50 |
| 16 | 47000 | 479LBA016M2EF | 22.58 | 6.71 | 35x40 |
| 16 | 56000 | 569LBA016M2EG | 21.61 | 7.69 | 35x45 |
| 25 | 4700 | 478LBA025M2AC | 158.73 | 2.18 | 20x25 |
| 25 | 4700 | 478LBA025M2BC | 158.73 | 2.2 | 22x25 |

| WVDC | Capacitance (µF) | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Maximum RMS Ripple Current (A) 120 Hz, +85°C | Dims DxDL (mm) |
|------|------------------|----------------|--------------------------------------|--|----------------|
| 25 | 5600 | 568LBA025M2AD | 133.22 | 2.33 | 20x30 |
| 25 | 5600 | 568LBA025M2BC | 133.22 | 2.31 | 22x25 |
| 25 | 6800 | 688LBA025M2AE | 109.71 | 2.56 | 20x35 |
| 25 | 6800 | 688LBA025M2BD | 109.71 | 2.56 | 22x30 |
| 25 | 6800 | 688LBA025M2CC | 109.71 | 2.55 | 25x25 |
| 25 | 8200 | 828LBA025M2AF | 90.98 | 2.91 | 20x40 |
| 25 | 8200 | 828LBA025M2CC | 90.98 | 2.78 | 25x25 |
| 25 | 10000 | 109LBA025M2BE | 74.6 | 3.31 | 22x35 |
| 25 | 10000 | 109LBA025M2CD | 74.6 | 3.16 | 25x30 |
| 25 | 10000 | 109LBA025M2DC | 74.6 | 3.31 | 30x25 |
| 25 | 12000 | 129LBA025M2BF | 62.17 | 3.77 | 22x40 |
| 25 | 12000 | 129LBA025M2CE | 62.17 | 3.63 | 25x35 |
| 25 | 12000 | 129LBA025M2DC | 62.17 | 3.8 | 30x25 |
| 25 | 15000 | 159LBA025M2BH | 49.74 | 4.21 | 22x50 |
| 25 | 15000 | 159LBA025M2CF | 49.74 | 4.1 | 25x40 |
| 25 | 15000 | 159LBA025M2DD | 49.74 | 4 | 30x30 |
| 25 | 18000 | 189LBA025M2CG | 41.45 | 4.68 | 25x45 |
| 25 | 18000 | 189LBA025M2DE | 41.45 | 4.66 | 30x35 |
| 25 | 18000 | 189LBA025M2ED | 41.45 | 4.68 | 35x30 |
| 25 | 22000 | 229LBA025M2DF | 33.91 | 5.33 | 30x40 |
| 25 | 22000 | 229LBA025M2EE | 33.91 | 5.73 | 35x35 |
| 25 | 27000 | 279LBA025M2DG | 27.63 | 6.02 | 30x45 |
| 25 | 27000 | 279LBA025M2EF | 27.63 | 6.02 | 35x40 |
| 25 | 33000 | 339LBA025M2EG | 22.61 | 6.75 | 35x45 |
| 25 | 33000 | 339LBA025M2EH | 22.61 | 7.2 | 35x50 |
| 25 | 39000 | 399LBA025M2EH | 0.02 | 7.56 | 35x50 |
| 35 | 2200 | 228LBA035M2CA | 301.43 | 1.7 | 25x20 |
| 35 | 2700 | 278LBA035M2AC | 245.61 | 1.76 | 20x25 |
| 35 | 3300 | 338LBA035M2AD | 200.95 | 2.14 | 20x30 |
| 35 | 3300 | 338LBA035M2BC | 200.95 | 2.2 | 22x25 |
| 35 | 3900 | 398LBA035M2AD | 170.14 | 2.28 | 20x30 |
| 35 | 3900 | 398LBA035M2BC | 170.14 | 2.22 | 22x25 |
| 35 | 4700 | 478LBA035M2AE | 141.09 | 2.46 | 20x35 |
| 35 | 4700 | 478LBA035M2BD | 141.09 | 2.4 | 22x30 |
| 35 | 4700 | 478LBA035M2CC | 141.09 | 2.35 | 25x25 |
| 35 | 5600 | 568LBA035M2BE | 118.42 | 2.79 | 22x35 |
| 35 | 5600 | 568LBA035M2CD | 118.42 | 2.75 | 25x30 |
| 35 | 6800 | 688LBA035M2BE | 60.95 | 2.9 | 22x35 |
| 35 | 6800 | 688LBA035M2CD | 97.52 | 2.89 | 25x30 |
| 35 | 8200 | 828LBA035M2BG | 80.87 | 3.47 | 22x45 |
| 35 | 8200 | 828LBA035M2CE | 80.87 | 3.45 | 25x35 |
| 35 | 8200 | 828LBA035M2DD | 80.87 | 3.29 | 30x30 |
| 35 | 10000 | 109LBA035M2BH | 66.31 | 3.75 | 22x50 |
| 35 | 10000 | 109LBA035M2CF | 66.31 | 3.65 | 25x40 |
| 35 | 10000 | 109LBA035M2DD | 66.31 | 4 | 30x30 |
| 35 | 12000 | 129LBA035M2CG | 55.26 | 4.15 | 25x45 |
| 35 | 12000 | 129LBA035M2DE | 55.26 | 4.14 | 30x35 |
| 35 | 12000 | 129LBA035M2ED | 55.26 | 4.27 | 35x30 |
| 35 | 15000 | 159LBA035M2DF | 44.21 | 5.07 | 30x40 |
| 35 | 15000 | 159LBA035M2EE | 44.21 | 5 | 35x35 |
| 35 | 18000 | 189LBA035M2DG | 36.84 | 5.3 | 30x45 |
| 35 | 18000 | 189LBA035M2EF | 36.84 | 5.71 | 35x40 |
| 35 | 22000 | 229LBA035M2EG | 30.14 | 6.25 | 35x45 |
| 35 | 27000 | 279LBA035M2EH | 24.56 | 6.9 | 35x50 |
| 50 | 1800 | 188LBA050M2AC | 322.36 | 1.7 | 20x25 |
| 50 | 2200 | 228LBA050M2AD | 263.75 | 2.07 | 20x30 |
| 50 | 2200 | 228LBA050M2BC | 263.75 | 2 | 22x25 |
| 50 | 2700 | 278LBA050M2AE | 214.91 | 2.21 | 20x35 |

LBA

+85°C Standard, 2000 hrs

| WVDC | Capacitance (µF) | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Maximum RMS Ripple Current (A) 120 Hz, +85°C | Dims DxL (mm) |
|------|------------------|----------------|--------------------------------------|--|---------------|
| 50 | 2700 | 278LBA050M2BD | 214.91 | 2.21 | 22x30 |
| 50 | 3300 | 338LBA050M2AF | 175.83 | 2.41 | 20x40 |
| 50 | 3300 | 338LBA050M2BC | 401.9 | 1.8 | 22x25 |
| 50 | 3300 | 338LBA050M2BD | 175.83 | 2.4 | 22x30 |
| 50 | 3300 | 338LBA050M2CC | 175.83 | 2.35 | 25x25 |
| 50 | 3900 | 398LBA050M2BE | 148.78 | 2.72 | 22x35 |
| 50 | 3900 | 398LBA050M2CD | 148.78 | 2.68 | 25x30 |
| 50 | 4700 | 478LBA050M2BF | 123.46 | 2.91 | 22x40 |
| 50 | 4700 | 478LBA050M2CD | 123.46 | 3.07 | 25x30 |
| 50 | 4700 | 478LBA050M2CE | 123.46 | 2.86 | 25x35 |
| 50 | 4700 | 478LBA050M2DC | 123.46 | 2.8 | 30x25 |
| 50 | 5600 | 568LBA050M2BG | 103.62 | 3.43 | 22x45 |
| 50 | 5600 | 568LBA050M2CE | 103.62 | 3.47 | 25x35 |
| 50 | 5600 | 568LBA050M2DD | 103.62 | 3.43 | 30x30 |
| 50 | 6800 | 688LBA050M2BH | 85.33 | 3.94 | 22x50 |
| 50 | 6800 | 688LBA050M2CF | 85.33 | 3.87 | 25x40 |
| 50 | 6800 | 688LBA050M2DD | 85.33 | 3.69 | 30x30 |
| 50 | 6800 | 688LBA050M2DE | 85.33 | 3.93 | 30x35 |
| 50 | 6800 | 688LBA050M2ED | 85.33 | 3.73 | 35x30 |
| 50 | 8200 | 828LBA050M2CG | 70.76 | 4.44 | 25x45 |
| 50 | 8200 | 828LBA050M2DE | 70.76 | 4.47 | 30x35 |
| 50 | 8200 | 828LBA050M2ED | 70.76 | 4.41 | 35x30 |
| 50 | 10000 | 109LBA050M2DF | 58.03 | 5.08 | 30x40 |
| 50 | 10000 | 109LBA050M2EE | 58.03 | 4.7 | 35x35 |
| 50 | 12000 | 129LBA050M2DH | 48.35 | 5.72 | 30x50 |
| 50 | 12000 | 129LBA050M2EF | 48.35 | 5.69 | 35x40 |
| 50 | 15000 | 159LBA050M2EG | 38.68 | 5.9 | 35x45 |
| 50 | 18000 | 189LBA050M2EH | 32.24 | 7.14 | 35x50 |
| 63 | 1500 | 158LBA063M2AC | 331.57 | 1.69 | 20x25 |
| 63 | 1500 | 158LBA063M2BC | 331.57 | 2 | 22x25 |
| 63 | 1800 | 188LBA063M2AD | 276.31 | 2.04 | 20x30 |
| 63 | 1800 | 188LBA063M2BC | 276.31 | 1.9 | 22x25 |
| 63 | 2200 | 228LBA063M2AE | 226.07 | 2.4 | 20x35 |
| 63 | 2200 | 228LBA063M2BD | 226.07 | 2.35 | 22x30 |
| 63 | 2200 | 228LBA063M2CC | 226.07 | 2.3 | 25x25 |
| 63 | 2700 | 278LBA063M2AF | 184.21 | 2.52 | 20x40 |
| 63 | 2700 | 278LBA063M2BE | 184.21 | 2.5 | 22x35 |
| 63 | 2700 | 278LBA063M2CD | 184.21 | 2.52 | 25x30 |
| 63 | 3300 | 338LBA063M2BF | 150.71 | 2.72 | 22x40 |
| 63 | 3300 | 338LBA063M2CD | 150.71 | 2.74 | 25x30 |
| 63 | 3300 | 338LBA063M2DC | 150.71 | 2.78 | 30x25 |
| 63 | 3900 | 398LBA063M2BG | 127.53 | 3.09 | 22x45 |
| 63 | 3900 | 398LBA063M2CE | 127.53 | 3.13 | 25x35 |
| 63 | 3900 | 398LBA063M2DD | 127.53 | 3.09 | 30x30 |
| 63 | 4700 | 478LBA063M2BH | 105.82 | 3.69 | 22x50 |
| 63 | 4700 | 478LBA063M2CE | 105.82 | 3.59 | 25x35 |
| 63 | 4700 | 478LBA063M2CF | 105.82 | 3.59 | 25x40 |
| 63 | 4700 | 478LBA063M2DD | 105.82 | 3.2 | 30x30 |
| 63 | 5600 | 568LBA063M2CG | 88.81 | 4.01 | 25x45 |
| 63 | 5600 | 568LBA063M2DE | 88.81 | 4 | 30x35 |
| 63 | 5600 | 568LBA063M2ED | 88.81 | 3.75 | 35x30 |
| 63 | 6800 | 688LBA063M2CH | 73.14 | 4.52 | 25x50 |
| 63 | 6800 | 688LBA063M2DF | 73.14 | 4.55 | 30x40 |
| 63 | 8200 | 828LBA063M2DG | 60.65 | 5.12 | 30x45 |
| 63 | 8200 | 828LBA063M2EE | 60.65 | 5.05 | 35x35 |
| 63 | 10000 | 109LBA063M2DH | 49.74 | 5.78 | 30x50 |
| 63 | 10000 | 109LBA063M2EG | 49.74 | 5.2 | 35x45 |
| 80 | 1000 | 108LBA080M2AC | 414.47 | 1.56 | 20x25 |

| WVDC | Capacitance (µF) | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Maximum RMS Ripple Current (A) 120 Hz, +85°C | Dims DxL (mm) |
|------|------------------|----------------|--------------------------------------|--|---------------|
| 80 | 1000 | 108LBA080M2BC | 414.47 | 1.65 | 22x25 |
| 80 | 1200 | 128LBA080M2AD | 345.39 | 1.8 | 20x30 |
| 80 | 1200 | 128LBA080M2BC | 345.39 | 1.77 | 22x25 |
| 80 | 1500 | 158LBA080M2AE | 276.31 | 2.1 | 20x35 |
| 80 | 1500 | 158LBA080M2BD | 276.31 | 2.01 | 22x30 |
| 80 | 1800 | 188LBA080M2AF | 230.26 | 2.3 | 20x40 |
| 80 | 1800 | 188LBA080M2BD | 230.26 | 2.11 | 22x30 |
| 80 | 1800 | 188LBA080M2CC | 230.26 | 2.26 | 25x25 |
| 80 | 2200 | 228LBA080M2CD | 188.39 | 2.53 | 25x30 |
| 80 | 2200 | 228LBA080M2DC | 188.39 | 2.56 | 30x25 |
| 80 | 2700 | 278LBA080M2BG | 153.51 | 2.93 | 22x45 |
| 80 | 2700 | 278LBA080M2CE | 153.51 | 2.93 | 25x35 |
| 80 | 2700 | 278LBA080M2DD | 153.51 | 2.91 | 30x30 |
| 80 | 3300 | 338LBA080M2BH | 125.6 | 3.23 | 22x50 |
| 80 | 3300 | 338LBA080M2CF | 125.6 | 3.29 | 25x40 |
| 80 | 3300 | 338LBA080M2DD | 125.6 | 3.25 | 30x30 |
| 80 | 3900 | 398LBA080M2CG | 106.27 | 3.62 | 25x45 |
| 80 | 3900 | 398LBA080M2DE | 106.27 | 3.7 | 30x35 |
| 80 | 4700 | 478LBA080M2CH | 88.18 | 4.28 | 25x50 |
| 80 | 4700 | 478LBA080M2DF | 88.18 | 4.23 | 30x40 |
| 80 | 4700 | 478LBA080M2ED | 88.18 | 3.3 | 35x30 |
| 80 | 5600 | 568LBA080M2EE | 74.01 | 4.64 | 35x35 |
| 80 | 6800 | 688LBA080M2DH | 60.95 | 5.27 | 30x50 |
| 80 | 6800 | 688LBA080M2EF | 60.95 | 5.24 | 35x40 |
| 80 | 6800 | 688LBA080M2EG | 60.95 | 4.8 | 35x45 |
| 80 | 8200 | 828LBA080M2EG | 50.54 | 5.89 | 35x45 |
| 80 | 10000 | 109LBA080M2EH | 41.45 | 6.63 | 35x50 |
| 100 | 680 | 687LBA100M2AC | 487.61 | 1.66 | 20x25 |
| 100 | 680 | 687LBA100M2BC | 487.61 | 1.85 | 22x25 |
| 100 | 820 | 827LBA100M2AD | 404.36 | 1.85 | 20x30 |
| 100 | 820 | 827LBA100M2BC | 404.36 | 1.86 | 22x25 |
| 100 | 1000 | 108LBA100M2AE | 331.57 | 2.02 | 20x35 |
| 100 | 1000 | 108LBA100M2BD | 331.57 | 2.02 | 22x30 |
| 100 | 1000 | 108LBA100M2CC | 331.57 | 2.03 | 25x25 |
| 100 | 1200 | 128LBA100M2AF | 276.31 | 2.12 | 20x40 |
| 100 | 1200 | 128LBA100M2BD | 276.31 | 2.12 | 22x30 |
| 100 | 1200 | 128LBA100M2CC | 276.31 | 2.11 | 25x25 |
| 100 | 1500 | 158LBA100M2BE | 221.05 | 2.45 | 22x35 |
| 100 | 1500 | 158LBA100M2CD | 221.05 | 2.47 | 25x30 |
| 100 | 1800 | 188LBA100M2BF | 184.21 | 2.77 | 22x40 |
| 100 | 1800 | 188LBA100M2CE | 184.21 | 2.81 | 25x35 |
| 100 | 1800 | 188LBA100M2DC | 184.21 | 2.65 | 30x25 |
| 100 | 2200 | 228LBA100M2BG | 150.71 | 3.15 | 22x45 |
| 100 | 2200 | 228LBA100M2CF | 150.71 | 3.21 | 25x40 |
| 100 | 2200 | 228LBA100M2CG | 150.71 | 3.41 | 25x45 |
| 100 | 2200 | 228LBA100M2DD | 150.71 | 3.17 | 30x30 |
| 100 | 2700 | 278LBA100M2DE | 122.8 | 3.65 | 30x35 |
| 100 | 2700 | 278LBA100M2ED | 122.8 | 3.77 | 35x30 |
| 100 | 2700 | 278LBA100M2EG | 122.8 | 3.66 | 35x45 |
| 100 | 3300 | 338LBA100M2CH | 100.48 | 4.15 | 25x50 |
| 100 | 3300 | 338LBA100M2DF | 100.48 | 4.18 | 30x40 |
| 100 | 3300 | 338LBA100M2EE | 100.48 | 3.58 | 35x35 |
| 100 | 3900 | 398LBA100M2DG | 85.02 | 4.64 | 30x45 |
| 100 | 3900 | 398LBA100M2EE | 85.02 | 4.61 | 35x35 |
| 100 | 4700 | 478LBA100M2DH | 70.55 | 5.26 | 30x50 |
| 100 | 4700 | 478LBA100M2EF | 70.55 | 5.23 | 35x40 |
| 100 | 4700 | 478LBA100M2EG | 70.55 | 4.3 | 35x45 |
| 100 | 5600 | 568LBA100M2EG | 59.21 | 5.88 | 35x45 |

LBA

+85°C Standard, 2000 hrs

| WVDC | Capacitance (µF) | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Maximum RMS Ripple Current (A) 120 Hz, +85°C | Dims DxL (mm) |
|------|------------------|----------------|--------------------------------------|--|---------------|
| 100 | 6800 | 688LBA100M2EH | 48.76 | 6.01 | 35x50 |
| 160 | 220 | 227LBA160M2BA | 1130.36 | 1 | 22x20 |
| 160 | 270 | 277LBA160M2AC | 921.04 | 1.28 | 20x25 |
| 160 | 330 | 337LBA160M2AC | 753.57 | 1.55 | 20x25 |
| 160 | 390 | 397LBA160M2AD | 637.64 | 1.63 | 20x30 |
| 160 | 390 | 397LBA160M2BC | 637.64 | 1.63 | 22x25 |
| 160 | 470 | 477LBA160M2AE | 529.11 | 1.9 | 20x35 |
| 160 | 470 | 477LBA160M2BD | 529.11 | 1.86 | 22x30 |
| 160 | 470 | 477LBA160M2CC | 529.11 | 1.52 | 25x25 |
| 160 | 560 | 567LBA160M2AF | 444.07 | 2.14 | 20x40 |
| 160 | 560 | 567LBA160M2BD | 444.07 | 2.15 | 22x30 |
| 160 | 560 | 567LBA160M2CD | 444.07 | 2.15 | 25x30 |
| 160 | 680 | 687LBA160M2BF | 365.71 | 2.35 | 22x40 |
| 160 | 680 | 687LBA160M2CD | 365.71 | 2.33 | 25x30 |
| 160 | 680 | 687LBA160M2DC | 365.71 | 2.1 | 30x25 |
| 160 | 820 | 827LBA160M2BG | 303.27 | 2.68 | 22x45 |
| 160 | 820 | 827LBA160M2CE | 303.27 | 2.65 | 25x35 |
| 160 | 820 | 827LBA160M2DD | 303.27 | 2.64 | 30x30 |
| 160 | 1000 | 108LBA160M2BH | 248.68 | 3.02 | 22x50 |
| 160 | 1000 | 108LBA160M2CF | 248.68 | 3 | 25x40 |
| 160 | 1000 | 108LBA160M2DD | 248.68 | 2.8 | 30x30 |
| 160 | 1200 | 128LBA160M2CG | 207.23 | 3.43 | 25x45 |
| 160 | 1200 | 128LBA160M2DE | 209.23 | 3.2 | 30x35 |
| 160 | 1200 | 128LBA160M2ED | 207.23 | 3.2 | 35x30 |
| 160 | 1500 | 158LBA160M2DF | 165.79 | 3.96 | 30x40 |
| 160 | 1500 | 158LBA160M2EE | 165.79 | 3.48 | 35x35 |
| 160 | 1800 | 188LBA160M2DG | 184.21 | 4.31 | 30x45 |
| 160 | 1800 | 188LBA160M2EE | 184.21 | 4.28 | 35x35 |
| 160 | 2200 | 228LBA160M2EF | 113.04 | 4.96 | 35x40 |
| 160 | 2700 | 278LBA160M2EH | 92.1 | 5.57 | 35x50 |
| 200 | 220 | 227LBA200M2AC | 1130.36 | 1.19 | 20x25 |
| 200 | 220 | 227LBA200M2BC | 1130.36 | 1.14 | 22x25 |
| 200 | 220 | 227LBA200M2CA | 1130.36 | 1.1 | 25x20 |
| 200 | 270 | 277LBA200M2AD | 921.04 | 1.39 | 20x30 |
| 200 | 270 | 277LBA200M2BC | 921.04 | 1.37 | 22x25 |
| 200 | 330 | 337LBA200M2AD | 753.57 | 1.56 | 20x30 |
| 200 | 330 | 337LBA200M2BC | 753.57 | 1.51 | 22x25 |
| 200 | 390 | 397LBA200M2AE | 637.64 | 1.74 | 20x35 |
| 200 | 390 | 397LBA200M2BD | 637.64 | 1.73 | 22x30 |
| 200 | 390 | 397LBA200M2CC | 637.64 | 1.71 | 25x25 |
| 200 | 470 | 477LBA200M2AF | 529.11 | 2.03 | 20x40 |
| 200 | 470 | 477LBA200M2BD | 529.11 | 1.97 | 22x30 |
| 200 | 470 | 477LBA200M2BF | 529.11 | 2.02 | 22x40 |
| 200 | 470 | 477LBA200M2CD | 529.11 | 1.91 | 25x30 |
| 200 | 470 | 477LBA200M2CE | 529.11 | 1.8 | 25x35 |
| 200 | 560 | 567LBA200M2BF | 444.07 | 2.18 | 22x40 |
| 200 | 560 | 567LBA200M2CD | 444.07 | 2.15 | 25x30 |
| 200 | 560 | 567LBA200M2DC | 444.07 | 2.15 | 30x25 |
| 200 | 680 | 687LBA200M2BH | 365.71 | 2.48 | 22x50 |
| 200 | 680 | 687LBA200M2CE | 365.71 | 2.48 | 25x35 |
| 200 | 680 | 687LBA200M2DD | 365.71 | 2.48 | 30x30 |
| 200 | 820 | 827LBA200M2BH | 303.27 | 2.81 | 22x50 |
| 200 | 820 | 827LBA200M2CF | 303.27 | 2.79 | 25x40 |
| 200 | 820 | 827LBA200M2DD | 303.27 | 2.75 | 30x30 |
| 200 | 1000 | 108LBA200M2CG | 248.68 | 3.28 | 25x45 |
| 200 | 1000 | 108LBA200M2DE | 248.68 | 3.15 | 30x35 |
| 200 | 1000 | 108LBA200M2DG | 248.68 | 3.42 | 30x45 |
| 200 | 1000 | 108LBA200M2EE | 248.68 | 3.35 | 35x35 |

| WVDC | Capacitance (µF) | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Maximum RMS Ripple Current (A) 120 Hz, +85°C | Dims DxL (mm) |
|------|------------------|----------------|--------------------------------------|--|---------------|
| 200 | 1200 | 128LBA200M2CH | 207.23 | 3.61 | 25x50 |
| 200 | 1200 | 128LBA200M2DF | 207.23 | 3.61 | 30x40 |
| 200 | 1500 | 158LBA200M2DG | 165.79 | 4.13 | 30x45 |
| 200 | 1500 | 158LBA200M2EG | 165.79 | 4.1 | 35x45 |
| 200 | 1800 | 188LBA200M2EG | 138.16 | 4.59 | 35x45 |
| 200 | 1800 | 188LBA200M2EH | 138.16 | 4.38 | 35x50 |
| 200 | 2200 | 228LBA200M2EH | 113.04 | 4.7 | 35x50 |
| 250 | 150 | 157LBA250M2CA | 1657.86 | 0.85 | 25x20 |
| 250 | 180 | 187LBA250M2AC | 1381.55 | 1.2 | 20x25 |
| 250 | 220 | 227LBA250M2AD | 1130.36 | 1.26 | 20x30 |
| 250 | 220 | 227LBA250M2BC | 1130.36 | 1.24 | 22x25 |
| 250 | 270 | 277LBA250M2AD | 921.04 | 1.42 | 20x30 |
| 250 | 270 | 277LBA250M2BD | 921.04 | 1.5 | 22x30 |
| 250 | 330 | 337LBA250M2AE | 753.57 | 1.68 | 20x35 |
| 250 | 330 | 337LBA250M2BD | 753.57 | 1.66 | 22x30 |
| 250 | 330 | 337LBA250M2CC | 753.57 | 1.61 | 25x25 |
| 250 | 330 | 337LBA250M2CD | 753.57 | 1.67 | 25x30 |
| 250 | 390 | 397LBA250M2AF | 637.64 | 1.92 | 20x40 |
| 250 | 390 | 397LBA250M2BE | 637.64 | 1.88 | 22x35 |
| 250 | 390 | 397LBA250M2CD | 637.64 | 1.88 | 25x30 |
| 250 | 470 | 477LBA250M2BF | 529.11 | 2.15 | 22x40 |
| 250 | 470 | 477LBA250M2BH | 529.11 | 2.08 | 22x50 |
| 250 | 470 | 477LBA250M2CE | 529.11 | 2.15 | 25x35 |
| 250 | 470 | 477LBA250M2CF | 529.11 | 2.03 | 25x40 |
| 250 | 470 | 477LBA250M2DC | 529.11 | 2.04 | 30x25 |
| 250 | 470 | 477LBA250M2DD | 529.11 | 1.97 | 30x30 |
| 250 | 560 | 567LBA250M2BG | 444.07 | 2.48 | 22x45 |
| 250 | 560 | 567LBA250M2CE | 444.07 | 2.35 | 25x35 |
| 250 | 560 | 567LBA250M2DD | 444.07 | 2.35 | 30x30 |
| 250 | 680 | 687LBA250M2CF | 365.71 | 2.67 | 25x40 |
| 250 | 680 | 687LBA250M2DE | 365.71 | 2.4 | 30x35 |
| 250 | 820 | 827LBA250M2CH | 303.27 | 3.1 | 25x50 |
| 250 | 820 | 827LBA250M2DE | 303.27 | 2.98 | 30x35 |
| 250 | 820 | 827LBA250M2ED | 303.27 | 2.96 | 35x30 |
| 250 | 1000 | 108LBA250M2DG | 248.68 | 3 | 30x45 |
| 250 | 1000 | 108LBA250M2DH | 248.68 | 3.65 | 30x50 |
| 250 | 1000 | 108LBA250M2EF | 248.68 | 3.58 | 35x40 |
| 250 | 1200 | 128LBA250M2DH | 207.23 | 3.99 | 30x50 |
| 250 | 1200 | 128LBA250M2EF | 207.23 | 3.84 | 35x40 |
| 250 | 1500 | 158LBA250M2EH | 165.79 | 4 | 35x50 |
| 350 | 100 | 107LBA350M2CC | 2486.8 | 0.63 | 25x25 |
| 350 | 120 | 127LBA350M2AD | 2072.33 | 0.96 | 20x30 |
| 350 | 120 | 127LBA350M2BC | 2072.33 | 1.04 | 22x25 |
| 350 | 150 | 157LBA350M2AD | 1657.86 | 1.1 | 20x30 |
| 350 | 150 | 157LBA350M2BD | 1657.86 | 1.2 | 22x30 |
| 350 | 150 | 157LBA350M2CC | 1657.86 | 1.22 | 25x25 |
| 350 | 180 | 187LBA350M2AE | 1381.55 | 1.24 | 20x35 |
| 350 | 180 | 187LBA350M2BD | 1381.55 | 1.34 | 22x30 |
| 350 | 180 | 187LBA350M2CC | 1381.55 | 1.37 | 25x25 |
| 350 | 220 | 227LBA350M2BE | 1130.36 | 1.47 | 22x35 |
| 350 | 220 | 227LBA350M2CD | 1130.36 | 1.53 | 25x30 |
| 350 | 220 | 227LBA350M2DC | 1130.36 | 1.54 | 30x25 |
| 350 | 220 | 227LBA350M2DD | 1130.36 | 1.29 | 30x30 |
| 350 | 270 | 277LBA350M2BF | 921.04 | 1.7 | 22x40 |
| 350 | 270 | 277LBA350M2CE | 921.04 | 1.73 | 25x35 |
| 350 | 270 | 277LBA350M2DC | 921.04 | 1.8 | 30x25 |
| 350 | 330 | 337LBA350M2BG | 753.57 | 1.87 | 22x45 |
| 350 | 330 | 337LBA350M2CF | 753.57 | 1.97 | 25x40 |

LBA

+85°C Standard, 2000 hrs

| WVDC | Capacitance (µF) | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Maximum RMS Ripple Current (A) 120 Hz, +85°C | Dims DxL (mm) |
|------|------------------|----------------|--------------------------------------|--|---------------|
| 350 | 330 | 337LBA350M2DD | 753.57 | 2.03 | 30x30 |
| 350 | 390 | 397LBA350M2CF | 637.64 | 2.14 | 25x40 |
| 350 | 390 | 397LBA350M2DE | 637.64 | 2.23 | 30x35 |
| 350 | 390 | 397LBA350M2ED | 637.64 | 2.3 | 35x30 |
| 350 | 470 | 477LBA350M2DE | 529.11 | 2.53 | 30x35 |
| 350 | 470 | 477LBA350M2ED | 529.11 | 2.55 | 35x30 |
| 350 | 560 | 567LBA350M2DF | 444.07 | 2.73 | 30x40 |
| 350 | 560 | 567LBA350M2EE | 444.07 | 2.75 | 35x35 |
| 350 | 680 | 687LBA350M2EF | 365.71 | 3.15 | 35x40 |
| 350 | 820 | 827LBA350M2EG | 303.27 | 3.47 | 35x45 |
| 350 | 1000 | 108LBA350M2EH | 248.68 | 3.6 | 35x50 |
| 400 | 68 | 686LBA400M2AC | 3657.05 | 0.75 | 20x25 |
| 400 | 82 | 826LBA400M2AD | 3032.68 | 0.82 | 20x30 |
| 400 | 82 | 826LBA400M2BC | 3032.68 | 0.84 | 22x25 |
| 400 | 100 | 107LBA400M2AD | 2486.8 | 0.95 | 20x30 |
| 400 | 100 | 107LBA400M2BD | 2486.8 | 0.68 | 22x30 |
| 400 | 100 | 107LBA400M2CC | 2486.8 | 0.99 | 25x25 |
| 400 | 120 | 127LBA400M2AE | 2072.33 | 1.07 | 20x35 |
| 400 | 120 | 127LBA400M2BD | 2072.33 | 1.09 | 22x30 |
| 400 | 120 | 127LBA400M2CC | 2072.33 | 1.13 | 25x25 |
| 400 | 150 | 157LBA400M2AF | 1657.86 | 1.22 | 20x40 |
| 400 | 150 | 157LBA400M2BF | 1657.86 | 0.94 | 22x40 |
| 400 | 150 | 157LBA400M2CD | 1657.86 | 1.27 | 25x30 |
| 400 | 180 | 187LBA400M2BF | 1381.55 | 1.41 | 22x40 |
| 400 | 180 | 187LBA400M2CD | 1381.55 | 1.44 | 25x30 |
| 400 | 180 | 187LBA400M2DC | 1381.55 | 1.52 | 30x25 |
| 400 | 220 | 227LBA400M2BG | 1130.36 | 1.58 | 22x45 |
| 400 | 220 | 227LBA400M2CE | 1130.36 | 1.64 | 25x35 |
| 400 | 220 | 227LBA400M2DD | 1130.36 | 1.66 | 30x30 |
| 400 | 270 | 277LBA400M2CF | 921.04 | 1.79 | 25x40 |
| 400 | 270 | 277LBA400M2DD | 921.04 | 1.82 | 30x30 |
| 400 | 330 | 337LBA400M2CG | 753.57 | 2 | 25x45 |
| 400 | 330 | 337LBA400M2DE | 753.57 | 2.05 | 30x35 |
| 400 | 330 | 337LBA400M2ED | 753.57 | 2.05 | 35x30 |
| 400 | 390 | 397LBA400M2DF | 637.64 | 2.26 | 30x40 |
| 400 | 390 | 397LBA400M2EE | 637.64 | 2.28 | 35x35 |
| 400 | 470 | 477LBA400M2DG | 529.11 | 2.51 | 30x45 |
| 400 | 470 | 477LBA400M2EF | 529.11 | 2.54 | 35x40 |
| 400 | 470 | 477LBA400M2EG | 529.11 | 2.23 | 35x45 |
| 400 | 560 | 567LBA400M2EF | 444.07 | 2.85 | 35x40 |
| 400 | 680 | 687LBA400M2EH | 365.71 | 3.1 | 35x50 |
| 400 | 820 | 827LBA400M2EH | 303.27 | 4 | 35x50 |
| 450 | 47 | 476LBA450M2BC | 7054.74 | 0.46 | 22x25 |

| WVDC | Capacitance (µF) | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Maximum RMS Ripple Current (A) 120 Hz, +85°C | Dims DxL (mm) |
|------|------------------|----------------|--------------------------------------|--|---------------|
| 450 | 56 | 566LBA450M2AC | 5920.94 | 0.61 | 20x25 |
| 450 | 68 | 686LBA450M2AD | 4876.07 | 0.7 | 20x30 |
| 450 | 68 | 686LBA450M2BC | 4876.07 | 0.71 | 22x25 |
| 450 | 68 | 686LBA450M2CC | 4876.07 | 0.6 | 25x25 |
| 450 | 82 | 826LBA450M2AE | 4043.57 | 0.8 | 20x35 |
| 450 | 82 | 826LBA450M2BC | 4043.57 | 0.86 | 22x25 |
| 450 | 100 | 107LBA450M2BD | 3315.73 | 0.95 | 22x30 |
| 450 | 100 | 107LBA450M2BE | 3315.73 | 0.77 | 22x35 |
| 450 | 100 | 107LBA450M2CC | 3315.73 | 0.97 | 25x25 |
| 450 | 120 | 127LBA450M2AF | 2763.11 | 0.99 | 20x40 |
| 450 | 120 | 127LBA450M2BE | 2763.11 | 1.07 | 22x35 |
| 450 | 120 | 127LBA450M2CD | 2763.11 | 1.09 | 25x30 |
| 450 | 150 | 157LBA450M2BF | 2210.49 | 1.18 | 22x40 |
| 450 | 150 | 157LBA450M2CD | 2210.49 | 1.25 | 25x30 |
| 450 | 150 | 157LBA450M2DC | 2210.49 | 1.29 | 30x25 |
| 450 | 180 | 187LBA450M2BG | 1842.07 | 1.32 | 22x45 |
| 450 | 180 | 187LBA450M2CE | 1842.07 | 1.4 | 25x35 |
| 450 | 180 | 187LBA450M2DD | 1842.07 | 1.45 | 30x30 |
| 450 | 220 | 227LBA450M2CF | 1507.15 | 1.59 | 25x40 |
| 450 | 220 | 227LBA450M2DD | 1507.15 | 1.64 | 30x30 |
| 450 | 220 | 227LBA450M2DF | 1507.15 | 1.44 | 30x40 |
| 450 | 220 | 227LBA450M2ED | 1507.15 | 1.66 | 35x30 |
| 450 | 270 | 277LBA450M2CG | 1228.05 | 1.73 | 25x45 |
| 450 | 270 | 277LBA450M2DE | 1228.05 | 1.89 | 30x35 |
| 450 | 270 | 277LBA450M2ED | 1228.05 | 1.9 | 35x30 |
| 450 | 330 | 337LBA450M2DF | 1004.77 | 2.12 | 30x40 |
| 450 | 330 | 337LBA450M2EE | 1004.77 | 2.15 | 35x35 |
| 450 | 390 | 397LBA450M2DG | 850.19 | 2.35 | 30x45 |
| 450 | 390 | 397LBA450M2EF | 850.19 | 2.38 | 35x40 |
| 450 | 470 | 477LBA450M2EG | 529.11 | 2.68 | 35x45 |
| 450 | 470 | 477LBA450M2EH | 529.11 | 2.5 | 35x50 |
| 500 | 100 | 107LBA500M2CC | 3315.73 | 0.8 | 25x25 |
| 500 | 100 | 107LBA500M2DC | 3315.73 | 0.84 | 30x25 |
| 500 | 120 | 127LBA500M2CD | 2763.11 | 0.89 | 25x30 |
| 500 | 120 | 127LBA500M2DC | 2763.11 | 0.9 | 30x25 |
| 500 | 150 | 157LBA500M2CE | 2210.49 | 1.07 | 25x35 |
| 500 | 180 | 187LBA500M2DE | 1842.07 | 1.3 | 30x35 |
| 500 | 220 | 227LBA500M2CG | 1507.15 | 1.4 | 25x45 |
| 500 | 270 | 277LBA500M2CH | 1228.05 | 1.6 | 25x50 |
| 500 | 270 | 277LBA500M2DF | 1228.05 | 1.55 | 30x40 |
| 500 | 330 | 337LBA500M2DG | 1004.77 | 1.8 | 30x45 |
| 500 | 390 | 397LBA500M2DH | 850.19 | 2.1 | 30x50 |