

# LBB

## 85°C Snap-Mount Aluminum Electrolytic Capacitors



### Applications

- Filtering
- Switching power supplies
- High Voltage

### Features

- Long Life
- Multiple lead styles

| 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 |
|                                             | SVDC        | 20                                                                                                    | 32  | 44                               | 63   | 79   | 100 | 120              | 200 | 250 | 300 | 400 | 450 | 500 |
| Dissipation Factor<br>tan δ<br>(120 Hz)     | WVDC        | 16                                                                                                    | 25  | 35                               | 50   | 63   | 80  | 100              | 160 | 200 | 250 | 350 | 400 | 450 |
|                                             | D<30        | .4                                                                                                    | .3  | .25                              | .2   | .15  | .15 | .15              | .1  | .1  | .1  | .15 | .15 | .15 |
|                                             | D=35        | .4                                                                                                    | .3  | .25                              | .2   | .15  | .15 | .15              | .15 | .15 | .15 | .15 | .15 | .15 |
|                                             | D>40        | .5                                                                                                    | .45 | .4                               | .35  | .3   | .25 | .2               | --  | --  | --  | --  | --  | --  |
|                                             |             | For capacitances above 33000uF, add to DF value $\frac{(\text{Capacitance}-33000)}{10000} \times 0.1$ |     |                                  |      |      |     |                  |     |     |     |     |     |     |
| Leakage current<br>@20C, Rated WVDC applied |             | Time                                                                                                  |     | 5 Minutes                        |      |      |     |                  |     |     |     |     |     |     |
|                                             |             |                                                                                                       |     | $3\sqrt{CV}$                     |      |      |     |                  |     |     |     |     |     |     |
| Impedance ratio<br>(120 Hz)                 | WVDC        | 16                                                                                                    | 25  | 35                               | 50   | 63   | 80  | 100              | 160 | 200 | 250 | 350 | 400 | 450 |
|                                             | -25°C/+20°C | 4                                                                                                     | 3   | 3                                | 2    | 2    | 2   | 2                | 6   | 6   | 6   | 8   | 8   | 8   |
|                                             | -40°C/+20°C | 15                                                                                                    | 10  | 8                                | 6    | 6    | 5   | 5                | 9   | 9   | 9   | 12  | 12  | 12  |
| Load Life                                   |             | 3000 hours with rated voltage and rated ripple current applied at 85°C                                |     |                                  |      |      |     |                  |     |     |     |     |     |     |
|                                             |             | 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% initial measured value      |      |      |     |                  |     |     |     |     |     |     |
|                                             |             | Dissipation factor                                                                                    |     | <200% 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                              | 1.15 | 1.25 | 1.8 | 1.4              | 1.2 | 1.2 |     |     |     |     |
|                                             | >160        | 0.8                                                                                                   | 1.0 | 1.1                              | 1.15 | 1.47 | 1.8 | 1.4              | 1.2 | 1.2 |     |     |     |     |



# LBB

85°C snap-mount  
aluminum electrolytic  
capacitors

| Cap<br>(uF) | WVDC | IC PART #     | Maximum<br>ESR (Ω)<br>120 Hz<br>20°C | Ripple<br>current<br>(A)<br>120Hz,<br>85°C | Dimensions<br>DxL<br>(mm) |
|-------------|------|---------------|--------------------------------------|--------------------------------------------|---------------------------|
| 82          | 400  | 826LBB400M2BC | 3.0342                               | 0.76                                       | 22x25                     |
| 82          | 450  | 826LBB450M2BD | 3.0342                               | 0.83                                       | 22x30                     |
| 100         | 350  | 107LBB350M2BC | 2.4881                               | 0.86                                       | 22x25                     |
| 100         | 400  | 107LBB400M2BD | 2.4881                               | 0.91                                       | 22x30                     |
| 100         | 400  | 107LBB400M2CC | 2.4881                               | 0.91                                       | 25x25                     |
| 100         | 450  | 107LBB450M2BE | 2.4881                               | 0.97                                       | 22x35                     |
| 100         | 450  | 107LBB450M2CC | 2.4881                               | 0.9                                        | 25x25                     |
| 100         | 450  | 107LBB450M2CD | 2.4881                               | 0.98                                       | 25x30                     |
| 100         | 450  | 107LBB450M2DC | 2.4881                               | 1.02                                       | 30x25                     |
| 120         | 350  | 127LBB350M2BD | 2.0734                               | 0.86                                       | 22x30                     |
| 120         | 350  | 127LBB350M2CC | 2.0734                               | 0.86                                       | 25x25                     |
| 120         | 400  | 127LBB400M2BD | 2.0734                               | 1                                          | 22x30                     |
| 120         | 400  | 127LBB400M2CC | 2.0734                               | 1                                          | 25x25                     |
| 120         | 450  | 127LBB450M2BF | 2.0734                               | 1.13                                       | 22x40                     |
| 120         | 450  | 127LBB450M2CD | 2.0734                               | 1.08                                       | 25x30                     |
| 120         | 450  | 127LBB450M2DC | 2.0734                               | 1.12                                       | 30x25                     |
| 150         | 350  | 157LBB350M2BD | 1.6587                               | 0.96                                       | 22x30                     |
| 150         | 350  | 157LBB350M2CC | 1.6587                               | 1.1                                        | 25x25                     |
| 150         | 400  | 157LBB400M2BE | 1.6587                               | 1.19                                       | 22x35                     |
| 150         | 400  | 157LBB400M2CD | 1.6587                               | 1.2                                        | 25x30                     |
| 150         | 400  | 157LBB400M2DC | 1.6587                               | 1.25                                       | 30x25                     |
| 150         | 450  | 157LBB450M2BG | 1.6587                               | 1.33                                       | 22x45                     |
| 150         | 450  | 157LBB450M2CE | 1.6587                               | 1.28                                       | 25x35                     |
| 150         | 450  | 157LBB450M2DD | 1.6587                               | 1.34                                       | 30x30                     |
| 180         | 350  | 187LBB350M2BE | 1.3823                               | 1.13                                       | 22x35                     |
| 180         | 350  | 187LBB350M2CD | 1.3823                               | 1.14                                       | 25x30                     |
| 180         | 350  | 187LBB350M2DC | 1.3823                               | 1.18                                       | 30x25                     |
| 180         | 400  | 187LBB400M2BF | 1.3823                               | 1.38                                       | 22x40                     |
| 180         | 400  | 187LBB400M2CE | 1.3823                               | 1.4                                        | 25x35                     |
| 180         | 400  | 187LBB400M2DC | 1.3823                               | 1.37                                       | 30x25                     |
| 180         | 450  | 187LBB450M2BH | 1.3823                               | 1.53                                       | 22x50                     |
| 180         | 450  | 187LBB450M2CF | 1.3823                               | 1.49                                       | 25x40                     |
| 180         | 450  | 187LBB450M2DD | 1.3823                               | 1.47                                       | 30x30                     |
| 180         | 450  | 187LBB450M2EC | 1.3823                               | 1.5                                        | 35x25                     |
| 220         | 200  | 227LBB200M2BC | 0.7540                               | 1.25                                       | 22x25                     |
| 220         | 250  | 227LBB250M2BC | 0.7540                               | 1.31                                       | 22x25                     |
| 220         | 350  | 227LBB350M2BF | 1.1309                               | 1.32                                       | 22x40                     |
| 220         | 350  | 227LBB350M2CE | 1.1309                               | 1.44                                       | 25x35                     |
| 220         | 350  | 227LBB350M2DC | 1.1309                               | 1.3                                        | 30x25                     |
| 220         | 400  | 227LBB400M2BH | 1.1309                               | 1.69                                       | 22x50                     |
| 220         | 400  | 227LBB400M2CF | 1.1309                               | 1.64                                       | 25x40                     |
| 220         | 400  | 227LBB400M2DD | 1.1309                               | 1.62                                       | 30x30                     |

| Cap<br>(uF) | WVDC | IC PART #     | Maximum<br>ESR (Ω)<br>120 Hz<br>20°C | Ripple<br>current<br>(A)<br>120Hz,<br>85°C | Dimensions<br>DxL<br>(mm) |
|-------------|------|---------------|--------------------------------------|--------------------------------------------|---------------------------|
| 220         | 400  | 227LBB400M2EC | 1.1309                               | 1.66                                       | 35x25                     |
| 220         | 450  | 227LBB450M2CG | 1.1309                               | 1.73                                       | 25x45                     |
| 220         | 450  | 227LBB450M2DE | 1.1309                               | 1.72                                       | 30x35                     |
| 220         | 450  | 227LBB450M2ED | 1.1309                               | 1.78                                       | 35x30                     |
| 270         | 200  | 277LBB200M2BC | 0.6143                               | 1.67                                       | 22x25                     |
| 270         | 250  | 277LBB250M2BD | 0.6143                               | 1.57                                       | 22x30                     |
| 270         | 250  | 277LBB250M2CC | 0.6143                               | 1.57                                       | 25x25                     |
| 270         | 350  | 277LBB350M2BH | 0.9215                               | 1.61                                       | 22x50                     |
| 270         | 350  | 277LBB350M2CF | 0.9215                               | 1.57                                       | 25x40                     |
| 270         | 350  | 277LBB350M2DD | 0.9215                               | 1.55                                       | 30x30                     |
| 270         | 350  | 277LBB350M2EC | 0.9215                               | 1.59                                       | 35x25                     |
| 270         | 400  | 277LBB400M2CG | 0.9215                               | 1.92                                       | 25x45                     |
| 270         | 400  | 277LBB400M2DE | 0.9215                               | 1.91                                       | 30x35                     |
| 270         | 400  | 277LBB400M2ED | 0.9215                               | 1.97                                       | 35x30                     |
| 270         | 450  | 277LBB450M2DF | 0.9215                               | 2.02                                       | 30x40                     |
| 270         | 450  | 277LBB450M2EE | 0.9215                               | 2.1                                        | 35x35                     |
| 330         | 160  | 337LBB160M2BC | 0.5026                               | 1.4                                        | 22x25                     |
| 330         | 200  | 337LBB200M2BD | 0.5026                               | 1.66                                       | 22x30                     |
| 330         | 200  | 337LBB200M2CC | 0.5026                               | 1.66                                       | 25x25                     |
| 330         | 250  | 337LBB250M2BE | 0.5026                               | 1.85                                       | 22x35                     |
| 330         | 250  | 337LBB250M2CD | 0.5026                               | 1.87                                       | 25x30                     |
| 330         | 350  | 337LBB350M2CG | 0.7540                               | 1.82                                       | 25x45                     |
| 330         | 350  | 337LBB350M2DE | 0.7540                               | 1.83                                       | 30x35                     |
| 330         | 350  | 337LBB350M2ED | 0.7540                               | 1.88                                       | 35x30                     |
| 330         | 400  | 337LBB400M2CH | 0.7540                               | 2.22                                       | 25x50                     |
| 330         | 400  | 337LBB400M2DF | 0.7540                               | 2.23                                       | 30x40                     |
| 330         | 400  | 337LBB400M2ED | 0.7540                               | 2.18                                       | 35x30                     |
| 330         | 450  | 337LBB450M2DG | 0.7540                               | 2.35                                       | 30x45                     |
| 330         | 450  | 337LBB450M2EE | 0.7540                               | 2.32                                       | 35x35                     |
| 390         | 160  | 397LBB160M2BC | 0.4253                               | 1.44                                       | 22x25                     |
| 390         | 200  | 397LBB200M2BD | 0.4253                               | 1.8                                        | 22x30                     |
| 390         | 200  | 397LBB200M2CC | 0.4253                               | 1.8                                        | 25x25                     |
| 390         | 250  | 397LBB250M2BE | 0.4253                               | 2.01                                       | 22x35                     |
| 390         | 250  | 397LBB250M2CD | 0.4253                               | 2.03                                       | 25x30                     |
| 390         | 250  | 397LBB250M2DC | 0.4253                               | 2.1                                        | 30x25                     |
| 390         | 350  | 397LBB350M2CH | 0.6380                               | 2.08                                       | 25x50                     |
| 390         | 350  | 397LBB350M2DF | 0.6380                               | 2.1                                        | 30x40                     |
| 390         | 350  | 397LBB350M2ED | 0.6380                               | 2.04                                       | 35x30                     |
| 390         | 400  | 397LBB400M2DG | 0.6380                               | 2.55                                       | 30x45                     |
| 390         | 400  | 397LBB400M2EE | 0.6380                               | 2.52                                       | 35x35                     |
| 390         | 450  | 397LBB450M2EF | 0.6380                               | 2.66                                       | 35x40                     |
| 470         | 160  | 477LBB160M2BD | 0.3529                               | 1.73                                       | 22x30                     |

Additional lead styles available upon request. See below for options.



3757 W. Touhy Ave., Lincolnwood, IL 60712 • (847)675-1760 • Fax (847) 675-2850 • [www.illcap.com](http://www.illcap.com)

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85°C snap-mount  
aluminum electrolytic  
capacitors

| Cap<br>(uF) | WVDC | IC PART #     | Maximum<br>ESR (Ω)<br>120 Hz<br>20°C | Ripple<br>current<br>(A)<br>120Hz,<br>85°C | Dimensions<br>DxL<br>(mm) |
|-------------|------|---------------|--------------------------------------|--------------------------------------------|---------------------------|
| 470         | 160  | 477LBB160M2CC | 0.3529                               | 1.74                                       | 25x25                     |
| 470         | 200  | 477LBB200M2BE | 0.3529                               | 1.78                                       | 22x35                     |
| 470         | 200  | 477LBB200M2CD | 0.3529                               | 2.13                                       | 25x30                     |
| 470         | 200  | 477LBB200M2DC | 0.3529                               | 2.21                                       | 30x25                     |
| 470         | 250  | 477LBB250M2BF | 0.3529                               | 2.34                                       | 22x40                     |
| 470         | 250  | 477LBB250M2CE | 0.3529                               | 2.38                                       | 25x35                     |
| 470         | 250  | 477LBB250M2DC | 0.3529                               | 2.31                                       | 30x25                     |
| 470         | 250  | 477LBB250M2EC | 0.5294                               | 2.54                                       | 35x25                     |
| 470         | 350  | 477LBB350M2DF | 0.5294                               | 2.3                                        | 30x40                     |
| 470         | 350  | 477LBB350M2EE | 0.5294                               | 2.38                                       | 35x35                     |
| 470         | 400  | 477LBB400M2EF | 0.5294                               | 2.92                                       | 35x40                     |
| 470         | 450  | 477LBB450M2EG | 0.5294                               | 3.07                                       | 35x45                     |
| 560         | 160  | 567LBB160M2BE | 0.2962                               | 1.99                                       | 22x35                     |
| 560         | 160  | 567LBB160M2CC | 0.2962                               | 1.95                                       | 25x25                     |
| 560         | 200  | 567LBB200M2BF | 0.2962                               | 2.44                                       | 22x40                     |
| 560         | 200  | 567LBB200M2CE | 0.2962                               | 2.48                                       | 25x35                     |
| 560         | 200  | 567LBB200M2DC | 0.2962                               | 2.41                                       | 30x25                     |
| 560         | 250  | 567LBB250M2BH | 0.2962                               | 2.82                                       | 22x50                     |
| 560         | 250  | 567LBB250M2CF | 0.2962                               | 2.74                                       | 25x40                     |
| 560         | 250  | 567LBB250M2DD | 0.2962                               | 2.71                                       | 30x30                     |
| 560         | 250  | 567LBB250M2EC | 0.4443                               | 2.78                                       | 35x25                     |
| 560         | 350  | 567LBB350M2DH | 0.4443                               | 2.76                                       | 30x50                     |
| 560         | 350  | 567LBB350M2EF | 0.4443                               | 2.75                                       | 35x40                     |
| 560         | 400  | 567LBB400M2EG | 0.4443                               | 3.34                                       | 35x45                     |
| 680         | 160  | 687LBB160M2BF | 0.2439                               | 2.32                                       | 22x40                     |
| 680         | 160  | 687LBB160M2CD | 0.2439                               | 2.21                                       | 25x30                     |
| 680         | 160  | 687LBB160M2DC | 0.2439                               | 2.29                                       | 30x25                     |
| 680         | 200  | 687LBB200M2BG | 0.2439                               | 2.83                                       | 22x45                     |
| 680         | 200  | 687LBB200M2CE | 0.2439                               | 2.73                                       | 25x35                     |
| 680         | 200  | 687LBB200M2DD | 0.2439                               | 2.85                                       | 30x30                     |
| 680         | 200  | 687LBB200M2EC | 0.3659                               | 2.92                                       | 35x25                     |
| 680         | 250  | 687LBB250M2CG | 0.2439                               | 3.19                                       | 25x45                     |
| 680         | 250  | 687LBB250M2DE | 0.2439                               | 3.18                                       | 30x35                     |
| 680         | 250  | 687LBB250M2ED | 0.3659                               | 3.28                                       | 35x30                     |
| 680         | 350  | 687LBB350M2EG | 0.3659                               | 3.18                                       | 35x45                     |
| 680         | 400  | 687LBB400M2EH | 0.3659                               | 3.85                                       | 35x50                     |
| 820         | 160  | 827LBB160M2BG | 0.2023                               | 2.68                                       | 22x45                     |
| 820         | 160  | 827LBB160M2CE | 0.2023                               | 2.58                                       | 25x35                     |
| 820         | 160  | 827LBB160M2DD | 0.2023                               | 2.7                                        | 30x30                     |
| 820         | 200  | 827LBB200M2CF | 0.2023                               | 3.17                                       | 25x40                     |
| 820         | 200  | 827LBB200M2DD | 0.2023                               | 3.13                                       | 30x30                     |
| 820         | 200  | 827LBB200M2EC | 0.3034                               | 3.21                                       | 35x25                     |

| Cap<br>(uF) | WVDC | IC PART #     | Maximum<br>ESR (Ω)<br>120 Hz<br>20°C | Ripple<br>current<br>(A)<br>120Hz,<br>85°C | Dimensions<br>DxL<br>(mm) |
|-------------|------|---------------|--------------------------------------|--------------------------------------------|---------------------------|
| 820         | 250  | 827LBB250M2CH | 0.2023                               | 3.67                                       | 25x50                     |
| 820         | 250  | 827LBB250M2DF | 0.2023                               | 3.69                                       | 30x40                     |
| 820         | 250  | 827LBB250M2ED | 0.3034                               | 3.6                                        | 35x30                     |
| 1000        | 80   | 108LBB080M2BC | 0.2488                               | 1.5                                        | 22x25                     |
| 1000        | 100  | 108LBB100M2BD | 0.2488                               | 2                                          | 22x30                     |
| 1000        | 100  | 108LBB100M2CC | 0.2488                               | 2                                          | 25x25                     |
| 1000        | 160  | 108LBB160M2BH | 0.1659                               | 3.11                                       | 22x50                     |
| 1000        | 160  | 108LBB160M2CF | 0.1659                               | 3.02                                       | 25x40                     |
| 1000        | 160  | 108LBB160M2DD | 0.1659                               | 2.98                                       | 30x30                     |
| 1000        | 160  | 108LBB160M2EC | 0.2488                               | 3.05                                       | 35x25                     |
| 1000        | 200  | 108LBB200M2CH | 0.1659                               | 3.87                                       | 25x50                     |
| 1000        | 200  | 108LBB200M2DE | 0.1659                               | 3.68                                       | 30x35                     |
| 1000        | 200  | 108LBB200M2ED | 0.2488                               | 3.8                                        | 35x30                     |
| 1000        | 250  | 108LBB250M2DG | 0.1659                               | 4.28                                       | 30x45                     |
| 1000        | 250  | 108LBB250M2EE | 0.2488                               | 4.22                                       | 35x35                     |
| 1200        | 100  | 128LBB100M2BD | 0.2073                               | 2.1                                        | 22x30                     |
| 1200        | 100  | 128LBB100M2CC | 0.2073                               | 2.1                                        | 25x25                     |
| 1200        | 160  | 128LBB160M2CG | 0.1382                               | 3.49                                       | 25x45                     |
| 1200        | 160  | 128LBB160M2DE | 0.1382                               | 3.48                                       | 30x35                     |
| 1200        | 160  | 128LBB160M2ED | 0.2073                               | 3.59                                       | 35x30                     |
| 1200        | 200  | 128LBB200M2DF | 0.1382                               | 4.26                                       | 30x40                     |
| 1200        | 200  | 128LBB200M2EE | 0.2073                               | 4.42                                       | 35x35                     |
| 1200        | 250  | 128LBB250M2DH | 0.1382                               | 4.91                                       | 30x50                     |
| 1200        | 250  | 128LBB250M2EF | 0.2073                               | 4.88                                       | 35x40                     |
| 1500        | 63   | 158LBB063M2BC | 0.1659                               | 1.66                                       | 22x25                     |
| 1500        | 80   | 158LBB080M2BD | 0.1659                               | 2                                          | 22x30                     |
| 1500        | 80   | 158LBB080M2CC | 0.1659                               | 2                                          | 25x25                     |
| 1500        | 100  | 158LBB100M2BE | 0.1659                               | 2.41                                       | 22x35                     |
| 1500        | 100  | 158LBB100M2CD | 0.1659                               | 2.43                                       | 25x30                     |
| 1500        | 100  | 158LBB100M2DC | 0.1659                               | 2.46                                       | 30x25                     |
| 1500        | 160  | 158LBB160M2DF | 0.1106                               | 4.11                                       | 30x40                     |
| 1500        | 160  | 158LBB160M2EE | 0.1659                               | 4.26                                       | 35x35                     |
| 1500        | 200  | 158LBB200M2EF | 0.1659                               | 5.02                                       | 35x40                     |
| 1500        | 250  | 158LBB250M2EH | 0.1659                               | 5.74                                       | 35x50                     |
| 1800        | 100  | 188LBB100M2BF | 0.1382                               | 2.77                                       | 22x40                     |
| 1800        | 100  | 188LBB100M2CE | 0.1382                               | 2.75                                       | 25x35                     |
| 1800        | 100  | 188LBB100M2DD | 0.1382                               | 2.35                                       | 30x30                     |
| 1800        | 160  | 188LBB160M2DG | 0.0922                               | 4.73                                       | 30x45                     |
| 1800        | 160  | 188LBB160M2EE | 0.1382                               | 4.67                                       | 35x35                     |
| 1800        | 200  | 188LBB200M2EG | 0.1382                               | 4.32                                       | 35x45                     |
| 2200        | 50   | 228LBB050M2BC | 0.1508                               | 1.91                                       | 22x25                     |
| 2200        | 63   | 228LBB063M2BD | 0.1131                               | 2.31                                       | 22x30                     |

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85°C snap-mount  
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| Cap<br>(uF) | WVDC | IC PART #     | Maximum<br>ESR (Ω)<br>120 Hz<br>20°C | Ripple<br>current<br>(A)<br>120Hz,<br>85°C | Dimensions<br>DxL<br>(mm) |
|-------------|------|---------------|--------------------------------------|--------------------------------------------|---------------------------|
| 2200        | 63   | 228LBB063M2CC | 0.1131                               | 2.3                                        | 25x25                     |
| 2200        | 80   | 228LBB080M2BF | 0.1131                               | 2.44                                       | 22x40                     |
| 2200        | 80   | 228LBB080M2CD | 0.1131                               | 2.46                                       | 25x30                     |
| 2200        | 80   | 228LBB080M2DC | 0.1131                               | 2.49                                       | 30x25                     |
| 2200        | 100  | 228LBB100M2BH | 0.1131                               | 3.08                                       | 22x50                     |
| 2200        | 100  | 228LBB100M2CF | 0.1131                               | 3.13                                       | 25x40                     |
| 2200        | 100  | 228LBB100M2DD | 0.1131                               | 3.09                                       | 30x30                     |
| 2200        | 100  | 228LBB100M2EC | 0.1131                               | 3.14                                       | 35x25                     |
| 2200        | 160  | 228LBB160M2EG | 0.1131                               | 4.96                                       | 35x45                     |
| 2200        | 200  | 228LBB200M2EH | 0.1131                               | 4.92                                       | 35x50                     |
| 3300        | 35   | 338LBB035M2BC | 0.1257                               | 2.05                                       | 22x25                     |
| 3300        | 50   | 338LBB050M2BD | 0.1005                               | 2.37                                       | 22x30                     |
| 3300        | 50   | 338LBB050M2CC | 0.1005                               | 2.38                                       | 25x25                     |
| 3300        | 63   | 338LBB063M2BE | 0.0754                               | 2.62                                       | 22x35                     |
| 3300        | 63   | 338LBB063M2CD | 0.0754                               | 2.64                                       | 25x30                     |
| 3300        | 63   | 338LBB063M2DC | 0.0754                               | 2.78                                       | 30x25                     |
| 3300        | 80   | 338LBB080M2BH | 0.0754                               | 3.16                                       | 22x50                     |
| 3300        | 80   | 338LBB080M2CF | 0.0754                               | 3.21                                       | 25x40                     |
| 3300        | 80   | 338LBB080M2DD | 0.0754                               | 3.17                                       | 30x30                     |
| 3300        | 80   | 338LBB080M2EC | 0.0754                               | 3.5                                        | 35x25                     |
| 3300        | 100  | 338LBB100M2CH | 0.0754                               | 4.06                                       | 25x50                     |
| 3300        | 100  | 338LBB100M2DF | 0.0754                               | 4.05                                       | 30x40                     |
| 3300        | 100  | 338LBB100M2ED | 0.0754                               | 4.05                                       | 35x30                     |
| 4700        | 25   | 478LBB025M2BC | 0.1059                               | 2.25                                       | 22x25                     |
| 4700        | 35   | 478LBB035M2BD | 0.0882                               | 2.41                                       | 22x30                     |
| 4700        | 35   | 478LBB035M2CC | 0.0882                               | 2.42                                       | 25x25                     |
| 4700        | 50   | 478LBB050M2BE | 0.0706                               | 2.72                                       | 22x35                     |
| 4700        | 50   | 478LBB050M2CD | 0.0706                               | 2.98                                       | 25x30                     |
| 4700        | 50   | 478LBB050M2DC | 0.0706                               | 2.81                                       | 30x25                     |
| 4700        | 63   | 478LBB063M2BG | 0.0529                               | 3.04                                       | 22x45                     |
| 4700        | 63   | 478LBB063M2CE | 0.0529                               | 2.79                                       | 25x35                     |
| 4700        | 63   | 478LBB063M2DD | 0.0529                               | 3.32                                       | 30x30                     |
| 4700        | 63   | 478LBB063M2EC | 0.0529                               | 3.36                                       | 35x25                     |
| 4700        | 80   | 478LBB080M2CH | 0.0529                               | 4.05                                       | 25x50                     |
| 4700        | 80   | 478LBB080M2DH | 0.0529                               | 4.05                                       | 30x40                     |
| 4700        | 80   | 478LBB080M2ED | 0.0529                               | 4.09                                       | 35x30                     |
| 4700        | 100  | 478LBB100M2DH | 0.0529                               | 5.13                                       | 30x50                     |
| 4700        | 100  | 478LBB100M2EF | 0.0529                               | 5.11                                       | 35x40                     |
| 6800        | 16   | 688LBB016M2BC | 0.1220                               | 2.4                                        | 22x25                     |
| 6800        | 25   | 688LBB025M2BD | 0.0732                               | 2.4                                        | 22x30                     |
| 6800        | 25   | 688LBB025M2CC | 0.0732                               | 2.56                                       | 25x25                     |
| 6800        | 35   | 688LBB035M2BE | 0.0610                               | 2.82                                       | 22x35                     |

| Cap<br>(uF) | WVDC | IC PART #     | Maximum<br>ESR (Ω)<br>120 Hz<br>20°C | Ripple<br>current<br>(A)<br>120Hz,<br>85°C | Dimensions<br>DxL<br>(mm) |
|-------------|------|---------------|--------------------------------------|--------------------------------------------|---------------------------|
| 6800        | 35   | 688LBB035M2CD | 0.0610                               | 2.74                                       | 25x30                     |
| 6800        | 35   | 688LBB035M2DC | 0.0610                               | 2.97                                       | 30x25                     |
| 6800        | 50   | 688LBB050M2BH | 0.0488                               | 3.81                                       | 22x50                     |
| 6800        | 50   | 688LBB050M2CF | 0.0488                               | 3.81                                       | 25x40                     |
| 6800        | 50   | 688LBB050M2DD | 0.0488                               | 3                                          | 30x30                     |
| 6800        | 50   | 688LBB050M2EC | 0.0488                               | 3.23                                       | 35x25                     |
| 6800        | 63   | 688LBB063M2CH | 0.0366                               | 4.27                                       | 25x50                     |
| 6800        | 63   | 688LBB063M2DE | 0.0366                               | 3.46                                       | 30x35                     |
| 6800        | 63   | 688LBB063M2ED | 0.0366                               | 4.15                                       | 35x30                     |
| 6800        | 80   | 688LBB080M2DH | 0.0366                               | 5.16                                       | 30x50                     |
| 6800        | 80   | 688LBB080M2EF | 0.0366                               | 5.14                                       | 35x40                     |
| 6800        | 100  | 688LBB100M2EH | 0.0366                               | 6.5                                        | 35x50                     |
| 6800        | 100  | 682LBB100M4FH | 0.0488                               | 7.4                                        | 40x50                     |
| 8200        | 80   | 828LBB080M4FG | 0.0506                               | 5.83                                       | 40x45                     |
| 8200        | 100  | 828LBB100M4FJ | 0.0405                               | 8.4                                        | 40x65                     |
| 10000       | 16   | 109LBB016M2BC | 0.0829                               | 2.77                                       | 22x25                     |
| 10000       | 16   | 109LBB016M2CC | 0.0663                               | 2.67                                       | 25x25                     |
| 10000       | 25   | 109LBB025M2BE | 0.0498                               | 3.2                                        | 22x35                     |
| 10000       | 25   | 109LBB025M2CD | 0.0498                               | 3.12                                       | 25x30                     |
| 10000       | 25   | 109LBB025M2DC | 0.0498                               | 3.21                                       | 30x25                     |
| 10000       | 35   | 109LBB035M2BG | 0.0415                               | 3.34                                       | 22x45                     |
| 10000       | 35   | 109LBB035M2CE | 0.0415                               | 3.06                                       | 25x35                     |
| 10000       | 35   | 109LBB035M2DD | 0.0415                               | 3.46                                       | 30x30                     |
| 10000       | 35   | 109LBB035M2EC | 0.0415                               | 3.02                                       | 35x25                     |
| 10000       | 50   | 109LBB050M2CH | 0.0332                               | 3.7                                        | 25x50                     |
| 10000       | 50   | 109LBB050M2DE | 0.0332                               | 3.35                                       | 30x35                     |
| 10000       | 50   | 109LBB050M2ED | 0.0332                               | 3.64                                       | 35x30                     |
| 10000       | 63   | 109LBB063M2DG | 0.0249                               | 3.72                                       | 30x45                     |
| 10000       | 63   | 109LBB063M2EF | 0.0249                               | 5.47                                       | 35x40                     |
| 10000       | 63   | 109LBB063M4FF | 0.0498                               | 6.6                                        | 40x40                     |
| 10000       | 100  | 109LBB100M4FK | 0.0332                               | 8                                          | 40x70                     |
| 10000       | 100  | 109LBB100M4HJ | 0.0332                               | 8.82                                       | 50x65                     |
| 12000       | 35   | 129LBB035M4FF | 0.0553                               | 7.15                                       | 40x40                     |
| 12000       | 80   | 129LBB080M4FZ | 0.0346                               | 7.5                                        | 40x60                     |
| 12000       | 100  | 129LBB100M4FR | 0.0276                               | 8.65                                       | 40x85                     |
| 15000       | 16   | 159LBB016M2BE | 0.0553                               | 3.29                                       | 22x35                     |
| 15000       | 16   | 159LBB016M2CD | 0.0553                               | 3.46                                       | 25x30                     |
| 15000       | 16   | 159LBB016M2DC | 0.0553                               | 3.66                                       | 30x25                     |
| 15000       | 25   | 159LBB025M2BG | 0.0332                               | 3.7                                        | 22x45                     |
| 15000       | 25   | 159LBB025M2CE | 0.0332                               | 3.45                                       | 25x35                     |
| 15000       | 25   | 159LBB025M2DD | 0.0332                               | 4                                          | 30x30                     |
| 15000       | 25   | 159LBB025M2EC | 0.0332                               | 3.95                                       | 35x25                     |

Additional lead styles available upon request. See below for options.



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# LBB

85°C snap-mount  
aluminum electrolytic  
capacitors

| Cap (uF) | WVDC | IC PART #      | Maximum ESR (Ω)<br>120 Hz<br>20°C | Ripple current (A)<br>120Hz,<br>85°C | Dimensions<br>DxL<br>(mm) |
|----------|------|----------------|-----------------------------------|--------------------------------------|---------------------------|
| 15000    | 35   | 159LBB035M2CH  | 0.0276                            | 4.54                                 | 25x50                     |
| 15000    | 35   | 159LBB035M2DE  | 0.0276                            | 3.67                                 | 30x35                     |
| 15000    | 35   | 159LBB035M2ED  | 0.0276                            | 3.98                                 | 35x30                     |
| 15000    | 50   | 159LBB050M2DH  | 0.0221                            | 4.61                                 | 30x50                     |
| 15000    | 50   | 159LBB050M2EF  | 0.0221                            | 4.83                                 | 35x40                     |
| 15000    | 63   | 159LBB063M2EH  | 0.0166                            | 5.3                                  | 35x50                     |
| 15000    | 80   | 159LBB080M4FQ  | 0.0310                            | 8.5                                  | 40x75                     |
| 15000    | 100  | 159LBB100M4FV  | 0.0221                            | 10.12                                | 40x105                    |
| 15000    | 100  | 159LBB100M4HN  | 0.0221                            | 10.07                                | 50x90                     |
| 18000    | 35   | 189LBB035M4FJ  | 0.0369                            | 9.25                                 | 40x65                     |
| 18000    | 50   | 189LBB050M4FF  | 0.0323                            | 6.94                                 | 40x40                     |
| 18000    | 80   | 189LBB080M4FR  | 0.0230                            | 10.3                                 | 40x85                     |
| 18000    | 80   | 189LBB080M4HR  | 0.0230                            | 10                                   | 50x80                     |
| 18000    | 100  | 189LBB100M4HV  | 0.0184                            | 11                                   | 50x105                    |
| 22000    | 16   | 229LBB016M2BH  | 0.0377                            | 4.37                                 | 22x50                     |
| 22000    | 16   | 229LBB016M2CF  | 0.0377                            | 4.26                                 | 25x40                     |
| 22000    | 16   | 229LBB016M2DD  | 0.0377                            | 4.21                                 | 30x30                     |
| 22000    | 16   | 229LBB016M2EC  | 0.0377                            | 4.15                                 | 35x25                     |
| 22000    | 25   | 229LBB025M2CG  | 0.0226                            | 4.48                                 | 25x45                     |
| 22000    | 25   | 229LBB025M2DE  | 0.0226                            | 4.52                                 | 30x35                     |
| 22000    | 25   | 229LBB025M2ED  | 0.0226                            | 4.61                                 | 35x30                     |
| 22000    | 35   | 229LBB035M2DG  | 0.0188                            | 4.94                                 | 30x45                     |
| 22000    | 35   | 229LBB035M2EF  | 0.0188                            | 5.41                                 | 35x40                     |
| 22000    | 80   | 229LBB080M4HW  | 0.0188                            | 11.08                                | 50x95                     |
| 22000    | 100  | 229LBB100M4HLD | 0.0151                            | 11.76                                | 50x130                    |
| 27000    | 35   | 279LBB035M4FF  | 0.0246                            | 6.8                                  | 40x40                     |
| 27000    | 50   | 279LBB050M4FJ  | 0.0215                            | 9                                    | 40x65                     |
| 27000    | 63   | 279LBB063M4FR  | 0.0184                            | 10                                   | 40x80                     |
| 27000    | 63   | 279LBB063M4HK  | 0.0184                            | 10.86                                | 50x70                     |
| 27000    | 80   | 279LBB080M4FLD | 0.0154                            | 11.35                                | 40x130                    |
| 27000    | 80   | 279LBB080M4HS  | 0.0154                            | 12.33                                | 50x110                    |
| 27000    | 100  | 279LBB100M4HLH | 0.0123                            | 12.53                                | 50x150                    |
| 33000    | 16   | 339LBB016M2DF  | 0.0251                            | 5.36                                 | 30x40                     |
| 33000    | 16   | 339LBB016M2ED  | 0.0251                            | 5.15                                 | 35x30                     |
| 33000    | 25   | 339LBB025M2DH  | 0.0151                            | 6.15                                 | 30x50                     |
| 33000    | 25   | 339LBB025M2EF  | 0.0151                            | 6.33                                 | 35x40                     |
| 33000    | 25   | 339LBB025M4FF  | 0.0226                            | 7.3                                  | 40x40                     |
| 33000    | 35   | 339LBB035M2EH  | 0.0126                            | 7.27                                 | 35x50                     |
| 33000    | 35   | 339LBB035M4FV  | 0.0201                            | 11.76                                | 40x105                    |
| 33000    | 35   | 339LBB035M4HR  | 0.0201                            | 11.57                                | 50x80                     |
| 33000    | 50   | 339LBB050M4FJ  | 0.0176                            | 9.1                                  | 40x65                     |
| 33000    | 50   | 339LBB050M4HZ  | 0.0176                            | 10.48                                | 50x60                     |

| Cap (uF) | WVDC | IC PART #      | Maximum ESR (Ω)<br>120 Hz<br>20°C | Ripple current (A)<br>120Hz,<br>85°C | Dimensions<br>DxL<br>(mm) |
|----------|------|----------------|-----------------------------------|--------------------------------------|---------------------------|
| 33000    | 80   | 339LBB080M4LD  | 0.0126                            | 13.37                                | 50x130                    |
| 39000    | 25   | 399LBB025M4FF  | 0.0191                            | 8                                    | 40x40                     |
| 39000    | 35   | 399LBB035M4FP  | 0.0170                            | 8                                    | 40x55                     |
| 39000    | 80   | 399LBB080M4LH  | 0.0106                            | 14.34                                | 50x150                    |
| 47000    | 16   | 479LBB016M2DH  | 0.0071                            | 6.79                                 | 30x50                     |
| 47000    | 16   | 479LBB016M2EF  | 0.0071                            | 6.76                                 | 35x40                     |
| 47000    | 35   | 479LBB035M4FJ  | 0.0071                            | 9.6                                  | 40x65                     |
| 47000    | 35   | 479LBB035M4HS  | 0.0071                            | 12.78                                | 50x110                    |
| 47000    | 50   | 479LBB050M4HR  | 0.0071                            | 11.54                                | 50x80                     |
| 51000    | 63   | 519LBB035M4HU  | 0.0065                            | 13.34                                | 50x115                    |
| 56000    | 16   | 569LBB016M4FF  | 0.0074                            | 9                                    | 40x40                     |
| 56000    | 25   | 569LBB025M4FJ  | 0.0074                            | 9.5                                  | 40x65                     |
| 56000    | 35   | 569LBB035M4FR  | 0.0074                            | 10.3                                 | 40x80                     |
| 56000    | 35   | 569LBB035M4HK  | 0.0074                            | 10.94                                | 50x70                     |
| 56000    | 50   | 569LBB050M4FV  | 0.0074                            | 11.47                                | 40x105                    |
| 56000    | 50   | 569LBB050M4HW  | 0.0074                            | 12.46                                | 50x95                     |
| 56000    | 63   | 569LBB035M4HLD | 0.0074                            | 13.93                                | 50x130                    |
| 68000    | 25   | 689LBB025M4FJ  | 0.0085                            | 10.25                                | 40x65                     |
| 68000    | 35   | 689LBB035M4HR  | 0.0085                            | 11.93                                | 50x80                     |
| 68000    | 50   | 689LBB050M4HS  | 0.0085                            | 13.17                                | 50x110                    |
| 82000    | 16   | 829LBB016M4FH  | 0.0101                            | 10.3                                 | 40x50                     |
| 82000    | 25   | 829LBB025M4HK  | 0.0101                            | 12.29                                | 50x70                     |
| 82000    | 35   | 829LBB035M4FV  | 0.0101                            | 12.02                                | 40x105                    |
| 82000    | 35   | 829LBB035M4HW  | 0.0101                            | 13.06                                | 50x95                     |
| 82000    | 50   | 829LBB050M4HLD | 0.0101                            | 13.87                                | 50x130                    |
| 100000   | 16   | 104LBB016M4FJ  | 0.0083                            | 11.4                                 | 40x65                     |
| 100000   | 25   | 104LBB025M4FR  | 0.0075                            | 12                                   | 40x85                     |
| 100000   | 25   | 104LBB025M4HR  | 0.0075                            | 13.45                                | 50x80                     |
| 100000   | 35   | 104LBB035M4HS  | 0.0066                            | 13.97                                | 50x110                    |
| 120000   | 16   | 124LBB016M4FR  | 0.0120                            | 12.4                                 | 40x80                     |
| 120000   | 16   | 124LBB016M4HJ  | 0.0120                            | 13.17                                | 50x65                     |
| 120000   | 25   | 124LBB025M4HN  | 0.0120                            | 15.29                                | 50x90                     |
| 120000   | 35   | 124LBB035M4HLD | 0.0120                            | 14.86                                | 50x130                    |
| 150000   | 25   | 154LBB025M4FLA | 0.0129                            | 14.07                                | 40x120                    |
| 150000   | 25   | 154LBB025M4HS  | 0.0129                            | 16.01                                | 50x110                    |
| 180000   | 16   | 184LBB016M4FV  | 0.0135                            | 14.85                                | 40x105                    |
| 180000   | 16   | 184LBB016M4HR  | 0.0135                            | 15.69                                | 50x85                     |
| 180000   | 16   | 184LBB016M4HQ  | 0.0135                            | 14.4                                 | 50x75                     |
| 180000   | 25   | 184LBB025M4HLD | 0.0135                            | 16.89                                | 50x130                    |
| 220000   | 16   | 224LBB016M4HV  | 0.0141                            | 16.73                                | 50x105                    |
| 270000   | 16   | 274LBB016M4HLA | 0.0146                            | 17.79                                | 50x120                    |

Additional lead styles available upon request. See below for options.



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# LBB

85°C snap-mount  
aluminum electrolytic capacitors

## Lead Style Options

|                                                             |                                                                                                                                                                                                                      |    |    |    |    |    |    |   |    |    |    |    |    |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|----|---|----|----|----|----|----|
| <p><b>Code 2 (standard)</b></p> <p>Diameter 20 to 40 mm</p> | <p><b>Code W</b></p> <p>Diameter 20 to 40 mm</p>                                                                                                                                                                     |    |    |    |    |    |    |   |    |    |    |    |    |
| <p><b>Code P</b></p> <p>Diameter 22 to 35 mm</p>            | <p><b>Code D</b></p> <p>Diameter 30 to 40 mm</p>                                                                                                                                                                     |    |    |    |    |    |    |   |    |    |    |    |    |
| <p><b>Code 9</b></p> <p>Diameter 25 to 35 mm</p>            | <p><b>Code T</b></p> <p>Diameter 25 to 35 mm</p>                                                                                                                                                                     |    |    |    |    |    |    |   |    |    |    |    |    |
| <p><b>Code 4</b></p> <p>Diameter 35 to 45 mm</p>            | <p><b>Code 4S (straight leads)</b></p> <p>Diameter 35 to 45 mm</p>                                                                                                                                                   |    |    |    |    |    |    |   |    |    |    |    |    |
| <p><b>Code 5</b></p> <p>Diameter 40 to 50 mm</p>            | <p><b>Code G</b></p> <table><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></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 |    |    |   |    |    |    |    |    |