

## Aluminum Capacitors +85 °C, Large Can



## FEATURES

- Useful life: 2000 h at +85 °C
- The industry standard for large can aluminum capacitors
- Ideal for high wattage power supplies and energy storage applications
- Capacitance values to 2.2 F
- Largest CV available
- Highest voltage available
- Screw terminal
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT

## QUICK REFERENCE DATA

| DESCRIPTION                                 | VALUE                                                                                                                           |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Nominal case size<br>Ø D x L in inches (mm) | 1.375 x 1.625 (35.0 x 41.3)<br>to 3.00 x 8.675 (76.2 x 220.3)                                                                   |
| Operating temperature                       | -40 °C to +85 °C                                                                                                                |
| Rated capacitance<br>range, C <sub>R</sub>  | 100 µF to 2.2 F                                                                                                                 |
| Tolerance on C <sub>R</sub>                 | -10 % to 50 %                                                                                                                   |
| Rated voltage range, U <sub>R</sub>         | 6.3 WV <sub>DC</sub> to 450 WV <sub>DC</sub>                                                                                    |
| Termination                                 | Screw thread                                                                                                                    |
| Life validation test<br>at 85 °C            | 2000 h: ΔCAP ≤ 15 % from initial<br>measurement.<br>ΔESR ≤ 1.5 x initial specified limit<br>ΔDCL ≤ initial specified limit      |
| Shelf life at 85 °C                         | 500 h: ΔCAP ≤ 15 % from initial<br>measurement.<br>ΔESR ≤ 1.2 x initial specified limit.<br>ΔDCL ≤ 2 x initial specified limit. |
| DC leakage current                          | $I = k \sqrt{CV}$<br>k = 4.0 at +25 °C; k = 32.0 at +85 °C<br>I in µA, C in µF, V in Volts                                      |

## RIPPLE CURRENT MULTIPLIERS

| TEMPERATURE            |             |      |             |
|------------------------|-------------|------|-------------|
| AMBIENT TEMPERATURE    | MULTIPLIERS |      |             |
| +85 °C                 | 1.0         |      |             |
| +75 °C                 | 1.4         |      |             |
| +65 °C                 | 1.7         |      |             |
| +55 °C and below       | 2.0         |      |             |
| FREQUENCY (Hz)         |             |      |             |
| RATED WV <sub>DC</sub> | 120         | 400  | 1000 AND UP |
| 0 to 50                | 1.0         | 1.05 | 1.10        |
| 51 to 100              | 1.0         | 1.10 | 1.15        |
| 150 to 300             | 1.0         | 1.15 | 1.25        |
| 301 to 450             | 1.0         | 1.20 | 1.30        |

**DIMENSIONS** in inches (millimeters)

| LARGE CAN CAPACITORS |                    |                    |                        |               |                        |                                     |                       |
|----------------------|--------------------|--------------------|------------------------|---------------|------------------------|-------------------------------------|-----------------------|
| CASE CODE            | NOMINAL            |                    | WITH INSULATION SLEEVE |               |                        | TERMINAL SPACING<br>M ± 0.016 (0.4) | TYPICAL WEIGHT<br>(g) |
|                      | D<br>± 0.032 (0.8) | L<br>± 0.063 (1.6) | D<br>(Max.)            | L<br>(Max.)   | P TERMINAL<br>H (Max.) |                                     |                       |
| AN                   | 1.375 (35.0)       | 1.625 (41.0)       | 1.453 (36.9)           | 1.750 (44.5)  | 1.849 (47.0)           | 0.500 (12.7)                        | 43.0                  |
| AY                   | 1.375 (35.0)       | 1.875 (48.0)       | 1.453 (36.9)           | 2.000 (50.8)  | 1.099 (53.3)           | 0.500 (12.7)                        | 54.0                  |
| AA                   | 1.375 (35.0)       | 2.125 (54.0)       | 1.453 (36.9)           | 2.250 (57.2)  | 1.349 (59.7)           | 0.500 (12.7)                        | 63.0                  |
| AM                   | 1.375 (35.0)       | 2.625 (67.0)       | 1.453 (36.9)           | 2.750 (69.9)  | 1.849 (72.4)           | 0.500 (12.7)                        | 82.0                  |
| AB                   | 1.375 (35.0)       | 3.125 (79.0)       | 1.453 (36.9)           | 3.250 (82.6)  | 1.349 (85.1)           | 0.500 (12.7)                        | 105.0                 |
| AL                   | 1.375 (35.0)       | 3.625 (92.0)       | 1.453 (36.9)           | 3.750 (95.3)  | 1.849 (97.8)           | 0.500 (12.7)                        | 122.0                 |
| AC                   | 1.375 (35.0)       | 4.125 (105.0)      | 1.453 (36.9)           | 4.250 (108.0) | 1.349 (110.5)          | 0.500 (12.7)                        | 129.0                 |
| AD                   | 1.375 (35.0)       | 4.625 (117.0)      | 1.453 (36.9)           | 4.750 (120.7) | 1.849 (123.2)          | 0.500 (12.7)                        | 162.0                 |
| AE                   | 1.375 (35.0)       | 5.125 (130.0)      | 1.453 (36.9)           | 5.250 (133.4) | 1.349 (125.9)          | 0.500 (12.7)                        | 179.0                 |
| AF                   | 1.375 (35.0)       | 5.625 (143.0)      | 1.453 (36.9)           | 5.750 (146.1) | 1.849 (148.6)          | 0.500 (12.7)                        | 201.0                 |
| EN                   | 1.750 (44.0)       | 1.625 (41.0)       | 1.828 (46.4)           | 1.750 (44.5)  | 1.849 (47.0)           | 0.750 (19.1)                        | 71.0                  |

**DIMENSIONS** in inches (millimeters)

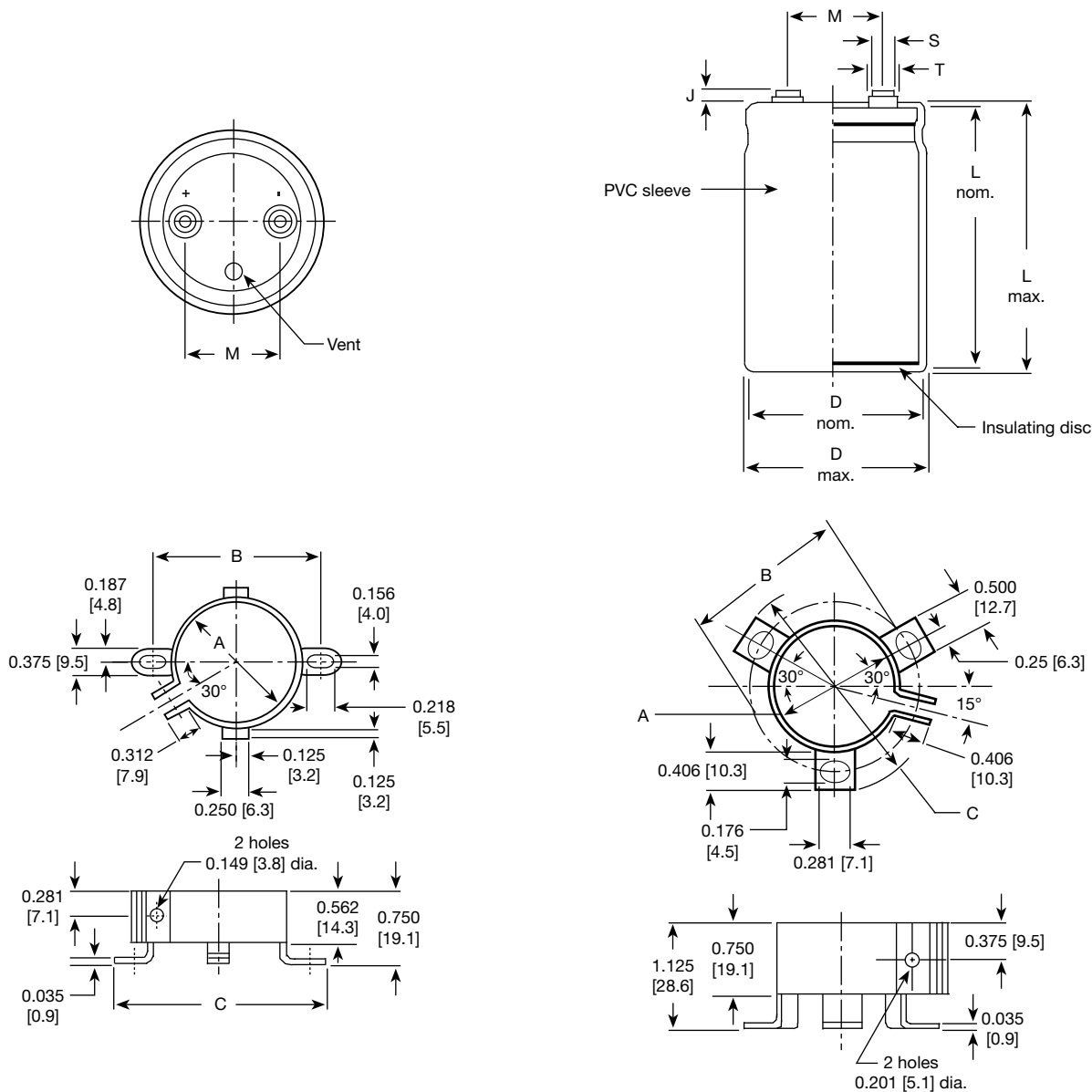
| LARGE CAN CAPACITORS |                    |                    |                        |               |                        |                                     |                       |
|----------------------|--------------------|--------------------|------------------------|---------------|------------------------|-------------------------------------|-----------------------|
| CASE CODE            | NOMINAL            |                    | WITH INSULATION SLEEVE |               |                        | TERMINAL SPACING<br>M ± 0.016 (0.4) | TYPICAL WEIGHT<br>(g) |
|                      | D<br>± 0.032 (0.8) | L<br>± 0.063 (1.6) | D<br>(Max.)            | L<br>(Max.)   | P TERMINAL<br>H (Max.) |                                     |                       |
| EY                   | 1.750 (44.0)       | 1.875 (48.0)       | 1.828 (46.4)           | 2.000 (50.8)  | 2.099 (53.3)           | 0.750 (19.1)                        | 88.0                  |
| EA                   | 1.750 (44.0)       | 2.125 (54.0)       | 1.828 (46.4)           | 2.250 (57.2)  | 2.349 (59.7)           | 0.750 (19.1)                        | 102.0                 |
| EM                   | 1.750 (44.0)       | 2.625 (67.0)       | 1.828 (46.4)           | 2.750 (69.9)  | 2.849 (72.4)           | 0.750 (19.1)                        | 133.0                 |
| EB                   | 1.750 (44.0)       | 3.125 (79.0)       | 1.828 (46.4)           | 3.250 (82.6)  | 3.349 (85.1)           | 0.750 (19.1)                        | 167.0                 |
| EL                   | 1.750 (44.0)       | 3.625 (92.0)       | 1.828 (46.4)           | 3.750 (95.3)  | 3.849 (97.8)           | 0.750 (19.1)                        | 198.0                 |
| EC                   | 1.750 (44.0)       | 4.125 (105.0)      | 1.828 (46.4)           | 4.250 (108.0) | 4.349 (110.5)          | 0.750 (19.1)                        | 230.0                 |
| ED                   | 1.750 (44.0)       | 4.625 (117.0)      | 1.828 (46.4)           | 4.750 (120.7) | 4.849 (123.2)          | 0.750 (19.1)                        | 252.0                 |
| EE                   | 1.750 (44.0)       | 5.125 (130.0)      | 1.828 (46.4)           | 5.250 (133.4) | 5.349 (135.9)          | 0.750 (19.1)                        | 269.0                 |
| EF                   | 1.750 (44.0)       | 5.625 (143.0)      | 1.828 (46.4)           | 5.750 (146.1) | 5.849 (148.6)          | 0.750 (19.1)                        | 318.0                 |
| BY                   | 2.000 (51.0)       | 1.875 (48.0)       | 2.078 (52.8)           | 2.000 (50.8)  | 2.099 (53.3)           | 0.875 (22.2)                        | 113.0                 |
| BA                   | 2.000 (51.0)       | 2.125 (54.0)       | 2.078 (52.8)           | 2.250 (57.2)  | 2.349 (59.7)           | 0.875 (22.2)                        | 133.0                 |
| BM                   | 2.000 (51.0)       | 2.625 (67.0)       | 2.078 (52.8)           | 2.750 (69.9)  | 2.849 (72.4)           | 0.875 (22.2)                        | 176.0                 |
| BB                   | 2.000 (51.0)       | 3.125 (79.0)       | 2.078 (52.8)           | 3.250 (82.6)  | 3.349 (85.1)           | 0.875 (22.2)                        | 213.0                 |
| BL                   | 2.000 (51.0)       | 3.625 (92.0)       | 2.078 (52.8)           | 3.750 (95.3)  | 3.849 (97.8)           | 0.875 (22.2)                        | 261.0                 |
| BC                   | 2.000 (51.0)       | 4.125 (105.0)      | 2.078 (52.8)           | 4.250 (108.0) | 4.349 (110.5)          | 0.875 (22.2)                        | 381.0                 |
| BD                   | 2.000 (51.0)       | 4.625 (117.0)      | 2.078 (52.8)           | 4.750 (120.7) | 4.849 (123.2)          | 0.875 (22.2)                        | 326.0                 |
| BE                   | 2.000 (51.0)       | 5.125 (130.0)      | 2.078 (52.8)           | 5.250 (133.4) | 5.349 (135.9)          | 0.875 (22.2)                        | 337.0                 |
| BF                   | 2.000 (51.0)       | 5.625 (143.0)      | 2.078 (52.8)           | 5.750 (146.1) | 5.849 (148.6)          | 0.875 (22.2)                        | 408.0                 |
| CB                   | 2.500 (64.0)       | 3.125 (79.0)       | 2.578 (65.5)           | 3.250 (82.6)  | n/a                    | 1.125 (28.6)                        | 329.0                 |
| CL                   | 2.500 (64.0)       | 3.625 (92.0)       | 2.578 (65.5)           | 3.750 (95.3)  | n/a                    | 1.125 (28.6)                        | 400.0                 |
| CC                   | 2.500 (64.0)       | 4.125 (105.0)      | 2.578 (65.5)           | 4.250 (108.0) | n/a                    | 1.125 (28.6)                        | 473.0                 |
| CD                   | 2.500 (64.0)       | 4.625 (117.0)      | 2.578 (65.5)           | 4.750 (120.7) | n/a                    | 1.125 (28.6)                        | 562.0                 |
| CE                   | 2.500 (64.0)       | 5.125 (130.0)      | 2.578 (65.5)           | 5.250 (133.4) | n/a                    | 1.125 (28.6)                        | 607.0                 |
| CF                   | 2.500 (64.0)       | 5.625 (143.0)      | 2.578 (65.5)           | 5.750 (146.1) | n/a                    | 1.125 (28.6)                        | 675.0                 |
| DB                   | 3.000 (76.0)       | 3.125 (79.0)       | 3.078 (78.2)           | 3.250 (82.6)  | n/a                    | 1.250 (31.8)                        | 496.0                 |
| DL                   | 3.000 (76.0)       | 3.625 (92.0)       | 3.078 (78.2)           | 3.750 (95.3)  | n/a                    | 1.250 (31.8)                        | 598.0                 |
| DC                   | 3.000 (76.0)       | 4.125 (105.0)      | 3.078 (78.2)           | 4.250 (108.0) | n/a                    | 1.250 (31.8)                        | 700.0                 |
| DD                   | 3.000 (76.0)       | 4.625 (117.0)      | 3.078 (78.2)           | 4.750 (120.7) | n/a                    | 1.250 (31.8)                        | 802.0                 |
| DE                   | 3.000 (76.0)       | 5.125 (130.0)      | 3.078 (78.2)           | 5.250 (133.4) | n/a                    | 1.250 (31.8)                        | 944.0                 |
| DF                   | 3.000 (76.0)       | 5.625 (143.0)      | 3.078 (78.2)           | 5.750 (146.1) | n/a                    | 1.250 (31.8)                        | 1004.0                |
| DJ                   | 3.000 (76.0)       | 8.625 (219.0)      | 3.078 (78.2)           | 8.750 (222.3) | n/a                    | 1.250 (31.8)                        | 1403.0                |

**DIMENSIONS** in inches (millimeters)

| BRACKETS (RoHS COMPLIANT)        |              |              |                           |                              |                              |                         |
|----------------------------------|--------------|--------------|---------------------------|------------------------------|------------------------------|-------------------------|
| TYPE                             | PART NUMBER  | A            | B                         | C                            | FIGURE NUMBER                |                         |
| 2 feet                           | 1245860035A  | 1.375 (34.9) | 1.781 (45.2)              | 2.218 (56.3)                 | 1                            |                         |
| 3 feet                           | 1245860036A  | 2.000 (50.8) | 2.500 (63.5)              | 2.875 (73.0)                 | 2                            |                         |
| 3 feet                           | 1245860037A  | 2.500 (63.5) | 3.000 (76.2)              | 3.375 (85.7)                 | 2                            |                         |
| 3 feet                           | 1245860038A  | 3.000 (76.2) | 3.500 (88.9)              | 3.875 (98.4)                 | 2                            |                         |
| SCREW INSERT TERMINAL DIMENSIONS |              |              |                           |                              |                              |                         |
| TERMINAL CODE                    | THREAD       | THREAD DEPTH | HEIGHT<br>J ± 0.032 (0.8) | DIAMETER<br>S ± 0.010 (0.25) | DIAMETER<br>T ± 0.010 (0.25) | NOTES                   |
| A                                | 10-32 NF-28  | 0.219 (5.6)  | 0.063 (1.6)               | 0.313 (8.0)                  | 0.438 (11.1)                 | All cases codes         |
| B                                | 10-32 NF-28  | 0.375 (9.5)  | 0.250 (6.4)               | 0.313 (8.0)                  | 0.438 (11.1)                 | All cases codes         |
| D                                | 1/4-28 NF-28 | 0.344 (8.7)  | 0.093 (2.4)               | 0.688 (17.5)                 | -                            | C and D dia. codes only |

## DIMENSIONS AND AVAILABLE FORMS

### Screw Insert Terminals



### ORDERING EXAMPLE

Electrolytic capacitor 36DY series: 36DY 683 F 6R3 AA 2 A

| DESCRIPTION |                                                  |
|-------------|--------------------------------------------------|
| CODE        | EXPLANATION                                      |
| 36DY        | Product type                                     |
| 683         | Capacitance value (68 000 µF)                    |
| F           | Tolerance (G = -10 % / +75 %; F = -10 % / +50 %) |
| 6R3         | Voltage rating at 85 °C (6.3 V)                  |
| AA          | Can size (see Dimensions table)                  |
| 2           | PVC insulating sleeve                            |
| A           | Terminal code (low insert 10-32 screw thread)    |

**ELECTRICAL DATA AND ORDERING INFORMATION**

| CAPACITANCE<br>( $\mu$ F)                         | PART NUMBER     | NOMINAL CASE SIZE<br>D x L   | MAX. ESR AT 25 °C<br>(m $\Omega$ )<br>120 Hz | MAX. RIPPLE AT +85 °C<br>(A)<br>120 Hz |
|---------------------------------------------------|-----------------|------------------------------|----------------------------------------------|----------------------------------------|
| <b>6.3 WV<sub>DC</sub> AT +85 °C, SURGE = 8 V</b> |                 |                              |                                              |                                        |
| 68 000.0                                          | 36DY683F6R3AA2A | 1.375 x 2.125 (35.0 x 54.0)  | 32.0                                         | 5.92                                   |
| 120 000.0                                         | 36DY124F6R3AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 20.0                                         | 8.70                                   |
| 220 000.0                                         | 36DY224F6R3BB2A | 2.000 x 3.125 (51.0 x 79.0)  | 11.2                                         | 14.4                                   |
| 560 000.0                                         | 36DY564F6R3BF2A | 2.000 x 5.625 (51.0 x 143.0) | 6.6                                          | 23.8                                   |
| 820 000.0                                         | 36DY824F6R3CF2A | 2.500 x 5.625 (64.0 x 143.0) | 4.1                                          | 34.4                                   |
| 1 000 000.0                                       | 36DY105F6R3DD2A | 3.000 x 4.625 (76.0 x 117.0) | 14.5                                         | 34.0                                   |
| <b>10 WV<sub>DC</sub> AT +85 °C, SURGE = 12 V</b> |                 |                              |                                              |                                        |
| 82 000.0                                          | 36DY823F010AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 19.8                                         | 8.65                                   |
| 150 000.0                                         | 36DY154F010AD2A | 1.375 x 4.625 (35.0 x 117.0) | 14.0                                         | 12.2                                   |
| 220 000.0                                         | 36DY224F010BL2A | 2.000 x 3.625 (51.0 x 92.0)  | 9.6                                          | 16.5                                   |
| 390 000.0                                         | 36DY394F010BF2A | 2.000 x 5.625 (51.0 x 143.0) | 6.7                                          | 23.7                                   |
| 470 000.0                                         | 36DY474F010CC2A | 2.500 x 4.125 (64.0 x 105.0) | 5.0                                          | 27.6                                   |
| 680 000.0                                         | 36DY684F010DC2A | 3.000 x 4.125 (76.0 x 105.0) | 5.0                                          | 30.9                                   |
| <b>15 WV<sub>DC</sub> AT +85 °C, SURGE = 18 V</b> |                 |                              |                                              |                                        |
| 47 000.0                                          | 36DY473F015AM2A | 1.375 x 2.625 (35.0 x 67.0)  | 25.0                                         | 7.19                                   |
| 68 000.0                                          | 36DY683F015AL2A | 1.375 x 3.625 (35.0 x 92.0)  | 17.5                                         | 9.79                                   |
| 100 000.0                                         | 36DY104F015AD2A | 1.375 x 4.625 (35.0 x 117.0) | 14.2                                         | 12.1                                   |
| 56 000.0                                          | 36DY563F015BA2A | 2.000 x 2.125 (51.0 x 54.0)  | 20.0                                         | 9.40                                   |
| 100 000.0                                         | 36DY104F015BB2A | 2.000 x 3.125 (51.0 x 79.0)  | 11.6                                         | 14.2                                   |
| 150 000.0                                         | 36DY154F015BC2A | 2.000 x 4.125 (51.0 x 105.0) | 8.7                                          | 18.3                                   |
| 220 000.0                                         | 36DY224F015BF2A | 2.000 x 5.625 (51.0 x 143.0) | 6.7                                          | 23.6                                   |
| 470 000.0                                         | 36DY474F015CF2A | 2.500 x 5.625 (64.0 x 143.0) | 4.2                                          | 34.0                                   |
| 680 000.0                                         | 36DY684F015DF2A | 3.000 x 5.625 (76.0 x 143.0) | 4.1                                          | 38.4                                   |
| <b>25 WV<sub>DC</sub> AT +85 °C, SURGE = 30 V</b> |                 |                              |                                              |                                        |
| 18 000.0                                          | 36DY183F025AM2A | 1.375 x 2.625 (35.0 x 67.0)  | 25.0                                         | 7.12                                   |
| 22 000.0                                          | 36DY223F025AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 21.0                                         | 8.42                                   |
| 47 000.0                                          | 36DY473F025AF2A | 1.375 x 5.625 (35.0 x 143.0) | 12.6                                         | 14.0                                   |
| 33 000.0                                          | 36DY333F025BM2A | 2.000 x 2.625 (51.0 x 67.0)  | 15.4                                         | 11.5                                   |
| 47 000.0                                          | 36DY473F025BB2A | 2.000 x 3.125 (51.0 x 79.0)  | 12.3                                         | 13.8                                   |
| 100 000.0                                         | 36DY104F025BF2A | 2.000 x 5.625 (51.0 x 143.0) | 7.2                                          | 22.8                                   |
| 120 000.0                                         | 36DY124F025CC2A | 2.500 x 4.125 (64.0 x 105.0) | 6.7                                          | 23.8                                   |
| 220 000.0                                         | 36DY224F025DE2A | 3.000 x 5.125 (76.0 x 130.0) | 4.5                                          | 35.3                                   |
| 390 000.0                                         | 36DY394F025DJ2A | 3.000 x 8.625 (76.0 x 219.0) | 3.5                                          | 49.5                                   |
| <b>40 WV<sub>DC</sub> AT +85 °C, SURGE = 50 V</b> |                 |                              |                                              |                                        |
| 4700.0                                            | 36DY472F040AN2A | 1.375 x 1.625 (35.0 x 41.0)  | 59.0                                         | 3.89                                   |
| 10 000.0                                          | 36DY103F040AM2A | 1.375 x 2.625 (35.0 x 67.0)  | 28.0                                         | 6.84                                   |
| 12 000.0                                          | 36DY123F040AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 23.0                                         | 8.10                                   |
| 15 000.0                                          | 36DY153F040AL2A | 1.375 x 3.625 (35.0 x 92.0)  | 19.4                                         | 9.30                                   |
| 10 000.0                                          | 36DY103F040BY2A | 2.000 x 1.875 (51.0 x 48.0)  | 30.0                                         | 7.40                                   |
| 27 000.0                                          | 36DY273F040BB2A | 2.000 x 3.125 (51.0 x 79.0)  | 12.8                                         | 13.5                                   |
| 33 000.0                                          | 36DY333F040BL2A | 2.000 x 3.625 (51.0 x 92.0)  | 10.9                                         | 15.5                                   |
| 39 000.0                                          | 36DY393F040BC2A | 2.000 x 4.125 (51.0 x 105.0) | 9.6                                          | 17.4                                   |
| 47 000.0                                          | 36DY473F040CB2A | 2.500 x 3.125 (64.0 x 79.0)  | 9.1                                          | 18.4                                   |
| 100 000.0                                         | 36DY104F040DC2A | 3.000 x 4.125 (76.0 x 105.0) | 5.4                                          | 29.7                                   |
| 8200.0                                            | 36DY822F040AM2A | 1.375 x 2.625 (35.0 x 67.0)  | 29.0                                         | 6.66                                   |
| 10 000.0                                          | 36DY103F040AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 24.0                                         | 7.79                                   |
| 15 000.0                                          | 36DY153F040AC2A | 1.375 x 4.125 (35.0 x 105.0) | 18.2                                         | 10.1                                   |

**ELECTRICAL DATA AND ORDERING INFORMATION**

| CAPACITANCE<br>( $\mu$ F)                           | PART NUMBER     | NOMINAL CASE SIZE<br>D x L   | MAX. ESR AT 25 °C<br>(m $\Omega$ )<br>120 Hz | MAX. RIPPLE AT +85 °C<br>(A)<br>120 Hz |
|-----------------------------------------------------|-----------------|------------------------------|----------------------------------------------|----------------------------------------|
| <b>50 WV<sub>DC</sub> AT +85 °C, SURGE = 65 V</b>   |                 |                              |                                              |                                        |
| 5600.0                                              | 36DY562F050AA2A | 1.375 x 2.125 (35.0 x 54.0)  | 40.0                                         | 5.25                                   |
| 8200.0                                              | 36DY822F050AM2A | 1.375 x 2.625 (35.0 x 67.0)  | 29.0                                         | 6.66                                   |
| 10 000.0                                            | 36DY103F050AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 24.0                                         | 8.60                                   |
| 47 000.0                                            | 36DY473F050BF2A | 2.000 x 5.625 (51.0 x 143.0) | 7.7                                          | 22.1                                   |
| 100 000.0                                           | 36DY104F050DE2A | 3.000 x 5.125 (76.0 x 130.0) | 4.8                                          | 34.2                                   |
| 180 000.0                                           | 36DY184F050DJ2A | 3.000 x 8.625 (76.0 x 219.0) | 3.6                                          | 48.8                                   |
| <b>60 WV<sub>DC</sub> AT +85 °C, SURGE = 75 V</b>   |                 |                              |                                              |                                        |
| 2700.0                                              | 36DY272F060AN2A | 1.375 x 1.625 (35.0 x 41.0)  | 69.0                                         | 3.62                                   |
| 4700.0                                              | 36DY472F060AA2A | 1.375 x 2.125 (35.0 x 54.0)  | 42.0                                         | 5.10                                   |
| 8200.0                                              | 36DY822F060AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 25.0                                         | 7.72                                   |
| 10 000.0                                            | 36DY103F060AL2A | 1.375 x 3.625 (35.0 x 92.0)  | 22.0                                         | 8.75                                   |
| 15 000.0                                            | 36DY153F060BB2A | 2.000 x 3.125 (51.0 x 79.0)  | 13.9                                         | 13.0                                   |
| 22 000.0                                            | 36DY223F060BL2A | 2.000 x 3.625 (51.0 x 92.0)  | 11.7                                         | 15.0                                   |
| 47 000.0                                            | 36DY473F060CD2A | 2.500 x 4.625 (64.0 x 117.0) | 6.6                                          | 25.1                                   |
| 100 000.0                                           | 36DY104F060DF2A | 3.000 x 5.625 (76.0 x 143.0) | 4.5                                          | 36.7                                   |
| <b>75 WV<sub>DC</sub> AT +85 °C, SURGE = 95 V</b>   |                 |                              |                                              |                                        |
| 1800.0                                              | 36DY182F075AN2A | 1.375 x 1.625 (35.0 x 41.0)  | 104.0                                        | 2.95                                   |
| 3300.0                                              | 36DY332F075AA2A | 1.375 x 2.125 (35.0 x 54.0)  | 62.0                                         | 4.19                                   |
| 5600.0                                              | 36DY562F075AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 36.0                                         | 6.45                                   |
| 6800.0                                              | 36DY682F075AL2A | 1.375 x 3.625 (35.0 x 92.0)  | 30.0                                         | 7.50                                   |
| 10 000.0                                            | 36DY103F075AD2A | 1.375 x 4.625 (35.0 x 117.0) | 24.0                                         | 9.26                                   |
| 12 000.0                                            | 36DY123F075BB2A | 2.000 x 3.125 (51.0 x 79.0)  | 18.8                                         | 11.1                                   |
| 18 000.0                                            | 36DY183F075BC2A | 2.000 x 4.125 (51.0 x 105.0) | 13.7                                         | 14.5                                   |
| 47 000.0                                            | 36DY473F075CF2A | 2.500 x 5.625 (64.0 x 143.0) | 6.7                                          | 26.9                                   |
| 47 000.0                                            | 36DY473F075DC2A | 3.000 x 4.125 (76.0 x 105.0) | 8.9                                          | 23.2                                   |
| 120 000.0                                           | 36DY124F075DJ2A | 3.000 x 8.625 (76.0 x 219.0) | 5.0                                          | 41.5                                   |
| <b>100 WV<sub>DC</sub> AT +85 °C, SURGE = 125 V</b> |                 |                              |                                              |                                        |
| 1800.0                                              | 36DY182F100AM2A | 1.375 x 2.625 (35.0 x 67.0)  | 56.0                                         | 4.82                                   |
| 4700.0                                              | 36DY472F100AC2A | 1.375 x 4.125 (35.0 x 105.0) | 32.0                                         | 7.68                                   |
| 4700.0                                              | 36DY472F100BM2A | 2.000 x 2.625 (51.0 x 67.0)  | 30.0                                         | 8.29                                   |
| 10 000.0                                            | 36DY103F100BC2A | 2.000 x 4.125 (51.0 x 105.0) | 16.3                                         | 13.3                                   |
| 10 000.0                                            | 36DY103F100CB2A | 2.500 x 3.125 (64.0 x 79.0)  | 14.8                                         | 14.5                                   |
| 18 000.0                                            | 36DY183F100DL2A | 3.000 x 3.625 (76.0 x 92.0)  | 11.2                                         | 19.7                                   |
| 33 000.0                                            | 36DY333F100DE2A | 3.000 x 5.125 (76.0 x 130.0) | 7.9                                          | 26.7                                   |
| <b>150 WV<sub>DC</sub> AT +85 °C, SURGE = 175 V</b> |                 |                              |                                              |                                        |
| 2700.0                                              | 36DY272F150AF2A | 1.375 x 5.625 (35.0 x 143.0) | 35.0                                         | 6.84                                   |
| 2200.0                                              | 36DY222F150BB2A | 2.000 x 3.125 (51.0 x 79.0)  | 57.0                                         | 5.22                                   |
| 5600.0                                              | 36DY562F150BF2A | 2.000 x 5.625 (51.0 x 143.0) | 22.0                                         | 10.66                                  |
| 10 000.0                                            | 36DY103F150CF2A | 2.500 x 5.625 (64.0 x 143.0) | 12.0                                         | 16.43                                  |
| 10 000.0                                            | 36DY103F150DC2A | 3.000 x 4.125 (76.0 x 105.0) | 17.0                                         | 13.68                                  |
| <b>200 WV<sub>DC</sub> AT +85 °C, SURGE = 250 V</b> |                 |                              |                                              |                                        |
| 1000.0                                              | 36DY102F200AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 84.0                                         | 1.5                                    |
| 1500.0                                              | 36DY152F200BM2A | 2.000 x 2.625 (51.0 x 67.0)  | 72.0                                         | 4.36                                   |
| 2200.0                                              | 36DY222F200BL2A | 2.000 x 3.625 (51.0 x 92.0)  | 49.0                                         | 5.97                                   |
| 2700.0                                              | 36DY272F200BC2A | 2.000 x 4.125 (51.0 x 105.0) | 40.0                                         | 6.95                                   |
| 3300.0                                              | 36DY332F200CB2A | 2.500 x 3.125 (64.0 x 79.0)  | 32.0                                         | 8.03                                   |
| 4700.0                                              | 36DY472F200CC2A | 2.500 x 4.125 (64.0 x 105.0) | 22.0                                         | 10.73                                  |
| 10 000.0                                            | 36DY103F200DE2A | 3.000 x 5.125 (76.0 x 130.0) | 14.0                                         | 16.36                                  |

**ELECTRICAL DATA AND ORDERING INFORMATION**

| CAPACITANCE<br>( $\mu$ F)                           | PART NUMBER     | NOMINAL CASE SIZE<br>D x L   | MAX. ESR AT 25 °C<br>(m $\Omega$ )<br>120 Hz | MAX. RIPPLE AT +85 °C<br>(A)<br>120 Hz |
|-----------------------------------------------------|-----------------|------------------------------|----------------------------------------------|----------------------------------------|
| <b>250 WV<sub>DC</sub> AT +85 °C, SURGE = 300 V</b> |                 |                              |                                              |                                        |
| 560.0                                               | 36DY561F250AM2A | 1.375 x 2.625 (35.0 x 67.0)  | 132.0                                        | 2.55                                   |
| 1000.0                                              | 36DY102F250AL2A | 1.375 x 3.625 (35.0 x 92.0)  | 74.0                                         | 3.89                                   |
| 2700.0                                              | 36DY272F250BD2A | 2.000 x 4.625 (51.0 x 117.0) | 34.0                                         | 7.90                                   |
| 3300.0                                              | 36DY332F250BF2A | 2.000 x 5.625 (51.0 x 143.0) | 29.0                                         | 9.44                                   |
| 2700.0                                              | 36DY272F250CB2A | 2.500 x 3.125 (64.0 x 79.0)  | 34.0                                         | 7.79                                   |
| 4700.0                                              | 36DY472F250DL2A | 3.000 x 3.625 (76.0 x 92.0)  | 24.0                                         | 10.99                                  |
| 10 000.0                                            | 36DY103F250DF2A | 3.000 x 5.625 (76.0 x 143.0) | 11.0                                         | 19.14                                  |
| <b>350 WV<sub>DC</sub> AT +85 °C, SURGE = 400 V</b> |                 |                              |                                              |                                        |
| 470.0                                               | 36DY471F350AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 272.0                                        | 1.91                                   |
| 1000.0                                              | 36DY102F350AF2A | 1.375 x 5.625 (35.0 x 143.0) | 128.0                                        | 3.58                                   |
| 1000.0                                              | 36DY102F350BL2A | 2.000 x 3.625 (51.0 x 92.0)  | 136.0                                        | 3.58                                   |
| 1800.0                                              | 36DY182F350BF2A | 2.000 x 5.625 (51.0 x 143.0) | 76.0                                         | 5.73                                   |
| 3300.0                                              | 36DY332F350DC2A | 3.000 x 4.125 (76.0 x 105.0) | 44.0                                         | 8.50                                   |
| 4700.0                                              | 36DY472F350DE2A | 3.000 x 5.125 (76.0 x 130.0) | 31.0                                         | 10.99                                  |
| <b>400 WV<sub>DC</sub> AT +85 °C, SURGE = 450 V</b> |                 |                              |                                              |                                        |
| 270.0                                               | 36DY271F400AM2A | 1.375 x 2.625 (35.0 x 67.0)  | 429.0                                        | 1.41                                   |
| 680.0                                               | 36DY681F400AE2A | 1.375 x 5.125 (35.0 x 130.0) | 170.0                                        | 2.98                                   |
| 1000.0                                              | 36DY102F400BC2A | 2.000 x 4.125 (51.0 x 105.0) | 123.0                                        | 3.96                                   |
| 2200.0                                              | 36DY222F400CD2A | 2.500 x 4.625 (64.0 x 117.0) | 55.0                                         | 7.09                                   |
| 2700.0                                              | 36DY272F400DC2A | 3.000 x 4.125 (76.0 x 105.0) | 48.0                                         | 8.14                                   |
| 6800.0                                              | 36DY682F400DJ2A | 3.000 x 8.625 (76.0 x 219.0) | 19.0                                         | 17.36                                  |
| <b>450 WV<sub>DC</sub> AT +85 °C, SURGE = 525 V</b> |                 |                              |                                              |                                        |
| 330.0                                               | 36DY331F450AB2A | 1.375 x 3.125 (35.0 x 79.0)  | 317.0                                        | 1.77                                   |
| 680.0                                               | 36DY681F450AE2A | 1.375 x 5.125 (35.0 x 130.0) | 164.0                                        | 3.13                                   |
| 1000.0                                              | 36DY102F450BC2A | 2.000 x 4.125 (51.0 x 105.0) | 113.0                                        | 4.13                                   |
| 2700.0                                              | 36DY272F450CF2A | 2.500 x 5.625 (64.0 x 143.0) | 42.0                                         | 8.78                                   |
| 3300.0                                              | 36DY332F450DD2A | 3.000 x 4.625 (76.0 x 117.0) | 36.0                                         | 10.20                                  |
| 5600.0                                              | 36DY562F450DJ2A | 3.000 x 8.625 (76.0 x 219.0) | 21.0                                         | 16.51                                  |

Statements about product lifetime are based on calculations and internal testing. They should only be interpreted as estimations. Also due to external factors, the lifetime in the field application may deviate from the calculated lifetime. In general, nothing stated herein shall be construed as a guarantee of durability.



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