

## Aluminum Capacitors Standard - 85 °C Snap-In



### FEATURES

- Useful life: 2000 h at +85 °C
- Polarized aluminum electrolytic capacitors
- Small dimension
- High C x U product
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



RoHS  
COMPLIANT

### APPLICATIONS

- General purpose audio / video systems, industrial electronics
- Smoothing and filtering
- Standard and switch mode power supplies



| QUICK REFERENCE DATA                    |                         |
|---|-------------------------|
| DESCRIPTION                             | VALUE                   |
| Nominal case size (Ø D x L in mm)       | 22 x 25 to 40 x 60      |
| Rated capacitance range, C <sub>R</sub> | 1200 µF to 100 000 µF   |
| Capacitance tolerance                   | ± 20 %                  |
| Rated voltage range, U <sub>R</sub>     | 6.3 V to 100 V          |
| Category temperature range              | -40 °C to +85 °C        |
| Load life at 85 °C                      | 2000 h                  |
| Shelf life at 0 V, 85 °C                | 1000 h                  |
| Based on sectional specification        | IEC 60384-4 / EN 130300 |
| Climatic category IEC 60068             | 40 / 85 / 56            |

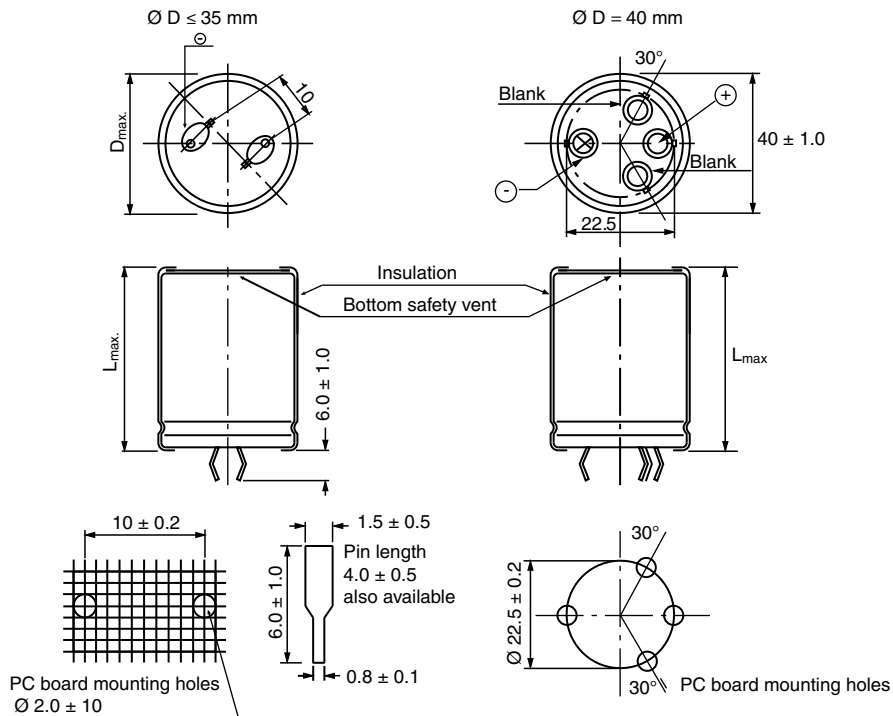
| SELECTION CHART FOR C <sub>R</sub> , U <sub>R</sub> , AND RELEVANT NOMINAL CASE SIZES (Ø D x L in mm) |                    |    |    |    |    |                    |                               |                               |                               |
|---|--------------------|----|----|----|----|--------------------|-------------------------------|-------------------------------|-------------------------------|
| C <sub>R</sub><br>(µF)  | U <sub>R</sub> (V) |    |    |    |    |                    |                               |                               |                               |
|   | 6.3                | 10 | 16 | 25 | 35 | 50                 | 63                            | 80                            | 100                           |
| 1200  | -                  | -  | -  | -  | -  | -                  | -                             | 22 x 25                       | 22 x 30<br>25 x 25            |
| 1500  | -                  | -  | -  | -  | -  | -                  | -                             | 22 x 30                       | 22 x 35<br>25 x 30<br>30 x 25 |
| 1800  | -                  | -  | -  | -  | -  | -                  | 22 x 25                       | 22 x 30<br>25 x 25            | 22 x 40<br>25 x 35<br>30 x 30 |
| 2200  | -                  | -  | -  | -  | -  | -                  | 22 x 30<br>25 x 25            | 22 x 35<br>25 x 30<br>30 x 25 | 22 x 45<br>25 x 40<br>30 x 30 |
| 2700  | -                  | -  | -  | -  | -  | -                  | 22 x 35<br>25 x 30            | 22 x 40<br>25 x 35<br>30 x 30 | 25 x 45<br>30 x 35<br>35 x 30 |
| 3300  | -                  | -  | -  | -  | -  | 22 x 30<br>25 x 25 | 22 x 35<br>25 x 30<br>30 x 25 | 22 x 45<br>25 x 40<br>30 x 30 | 25 x 50<br>30 x 40<br>35 x 35 |



| SELECTION CHART FOR $C_R$ , $U_R$ , AND RELEVANT NOMINAL CASE SIZES ( $\varnothing D \times L$ in mm) |                               |                               |                               |                               |                               |  |  |                               |                    |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--|--|-------------------------------|--------------------|
| $C_R$<br>( $\mu F$ )  | $U_R$ (V)                     |                               |                               |                               |                               |  |  |                               |                    |
|   | 6.3                           | 10                            | 16                            | 25                            | 35                            | 50                                       | 63                                       | 80                            | 100                |
| 3900  | -                             | -                             | -                             | -                             | -                             | -  | 22 x 40<br>25 x 35<br>30 x 30            | 22 x 50<br>25 x 45<br>30 x 35 | 30 x 45<br>35 x 35 |
| 4700  | -                             | -                             | -                             | -                             | 22 x 30<br>25 x 25            | 22 x 40<br>25 x 35<br>30 x 25<br>35 x 25 | 22 x 50<br>25 x 40<br>30 x 35<br>35 x 30 | 25 x 50<br>30 x 40<br>35 x 30 | 30 x 50<br>35 x 40 |
| 5600  | -                             | -                             | -                             | 22 x 25                       | 22 x 35<br>25 x 30            | 22 x 45<br>25 x 40<br>30 x 30<br>35 x 25 | 25 x 45<br>30 x 35<br>35 x 30            | 30 x 45<br>35 x 35            | 35 x 45<br>40 x 40 |
| 6800  | -                             | -                             | -                             | 22 x 30<br>25 x 25            | 22 x 40<br>25 x 30<br>30 x 25 | 22 x 50<br>25 x 40<br>30 x 35<br>35 x 30 | 25 x 50<br>30 x 40<br>35 x 30            | 35 x 40                       | 40 x 50            |
| 8200  | -                             | -                             | -                             | 22 x 35<br>25 x 30            | 22 x 45<br>25 x 35<br>30 x 30 | 25 x 50<br>30 x 40<br>35 x 30            | 30 x 45<br>35 x 35                       | 35 x 45<br>40 x 40            | 40 x 50            |
| 10 000  | -                             | -                             | 22 x 25                       | 22 x 40<br>25 x 30<br>30 x 25 | 22 x 50<br>25 x 40<br>30 x 30 | 30 x 45<br>35 x 35                       | 30 x 50<br>35 x 40                       | 40 x 50                       | -                  |
| 12 000  | -                             | 22 x 25                       | 22 x 30<br>25 x 25            | 22 x 45<br>25 x 35<br>30 x 30 | 25 x 45<br>30 x 35<br>35 x 30 | 30 x 50<br>35 x 40                       | 35 x 45<br>40 x 40                       | -                             | -                  |
| 15 000  | -                             | 22 x 30<br>25 x 25            | 22 x 35<br>25 x 30<br>30 x 25 | 22 x 50<br>25 x 40<br>30 x 35 | 30 x 40<br>35 x 35            | 35 x 45                                  | -  | -                             | -                  |
| 18 000  | 22 x 30<br>25 x 25            | 22 x 35<br>25 x 25            | 22 x 40<br>25 x 35<br>30 x 30 | 25 x 45<br>30 x 35<br>35 x 30 | 30 x 45<br>35 x 40            | 35 x 50<br>40 x 40                       | -  | -                             | -                  |
| 22 000  | 22 x 35                       | 22 x 40<br>25 x 30<br>30 x 25 | 22 x 50<br>25 x 40<br>30 x 30 | 30 x 45<br>35 x 35            | 35 x 45<br>40 x 40            | 40 x 50                                  | -  | -                             | -                  |
| 27 000  | 22 x 40<br>30 x 25            | 22 x 45<br>25 x 35<br>30 x 30 | 25 x 45<br>30 x 35            | 30 x 50<br>35 x 40            | 40 x 50                       | 40 x 60                                  | -  | -                             | -                  |
| 33 000  | 22 x 45<br>25 x 35<br>30 x 30 | 22 x 50<br>25 x 40<br>35 x 25 | 30 x 40<br>35 x 30            | 35 x 45<br>40 x 40            | 40 x 50                       | -  | -  | -                             | -                  |
| 39 000  | 22 x 50<br>25 x 40<br>35 x 25 | 25 x 45<br>30 x 25            | 30 x 45                       | -                             | -                             | -  | -  | -                             | -                  |
| 47 000  | 30 x 35<br>35 x 30            | 25 x 50<br>30 x 40            | 30 x 50<br>35 x 40            | -                             | -                             | -  | -  | -                             | -                  |
| 56 000  | 30 x 40<br>35 x 30            | 30 x 45                       | 40 x 40                       | -                             | -                             | -  | -  | -                             | -                  |
| 68 000  | -                             | -                             | 35 x 50                       | -                             | -                             | -  | -  | -                             | -                  |
| 100 000   | 40 x 40                       | 40 x 50                       | 40 x 60                       | -                             | -                             | -  | -  | -                             | -                  |



**DIMENSIONS** in millimeters **AND AVAILABLE FORMS**



| <b>DIMENSIONS</b> in millimeters, <b>MASS AND PACKAGING QUANTITIES</b> |   |                    |  |
|--|---|--------------------|--|
| <b>NOMINAL CASE SIZE</b><br>$\varnothing D \times L$                   | <b>MAXIMUM SIZE</b><br>$\varnothing D_{max.} \times L_{max.}$ | <b>MASS</b><br>(g) | <b>PACKAGING QUANTITIES</b><br>(units per box) |
| 22 x 25  | 23 x 27   | 14                 | 200  |
| 22 x 30  | 23 x 32   | 16                 |  |
| 22 x 35  | 23 x 37   | 19                 |  |
| 22 x 40  | 23 x 42   | 22                 |  |
| 22 x 45  | 23 x 47   | 24                 |  |
| 22 x 50  | 23 x 52   | 27                 |  |
| 25 x 25  | 26.4 x 27   | 10                 | 150  |
| 25 x 30  | 26.4 x 32   | 21                 |  |
| 25 x 35  | 26.4 x 37   | 25                 |  |
| 25 x 40  | 26.4 x 42   | 28                 |  |
| 25 x 45  | 26.4 x 47   | 31                 |  |
| 25 x 50  | 26.4 x 52   | 35                 |  |
| 30 x 25  | 31 x 27   | 25                 | 100  |
| 30 x 30  | 31 x 32   | 30                 |  |
| 30 x 35  | 31 x 37   | 35                 |  |
| 30 x 40  | 31 x 42   | 40                 |  |
| 30 x 45  | 31 x 47   | 45                 |  |
| 30 x 50  | 31 x 52   | 50                 |  |
| 35 x 25  | 36 x 27   | 34                 | 50   |
| 35 x 30  | 36 x 32   | 41                 |  |
| 35 x 35  | 36 x 37   | 48                 |  |
| 35 x 40  | 36 x 42   | 55                 |  |
| 35 x 45  | 36 x 47   | 62                 |  |
| 35 x 50  | 36 x 52   | 68                 |  |
| 40 x 40  | 41 x 42   | 72                 | 50   |
| 40 x 50  | 41 x 52   | 89                 |  |
| 40 x 60  | 41 x 62   | 107                |  |



| ELECTRICAL DATA |   |
|-----------------|---|
| SYMBOL          | DESCRIPTION                               |
| C <sub>R</sub>  | Rated capacitance at 120 Hz               |
| U <sub>R</sub>  | Rated voltage                             |
| ESR             | Equivalent series resistance at 120 Hz    |
| I <sub>R</sub>  | Rated RMS ripple current at 120 Hz, 85 °C |

**Note**

- Unless otherwise specified, all electrical values apply at T<sub>amb</sub> = 20 °C, P = 80 kPa to 120 kPa, RH = 45 % to 75 %

**ORDERING EXAMPLE**

Electrolytic capacitor EYN series

4700 µF / 35 V; ± 20 %

Nominal case size: 22 mm x 30 mm

Snap-in pin 4 mm, fully insulated

Ordering code: MALIEYN07LV447F42K

| ELECTRICAL DATA AND ORDERING INFORMATION |                                  |   |                                 |                         |                              |                                  |                                  |
|--|----------------------------------|---|---------------------------------|-------------------------|------------------------------|----------------------------------|----------------------------------|
| U <sub>R</sub><br>(V)                    | C <sub>R</sub><br>120 Hz<br>(µF) | NOMINAL<br>CASE SIZE<br>Ø D x L<br>(mm) | I <sub>R</sub><br>120 Hz<br>(A) | I <sub>L5</sub><br>(µA) | ESR<br>120 Hz<br>MAX.<br>(Ω) | ORDERING CODE<br>6 mm PIN LENGTH | ORDERING CODE<br>4 mm PIN LENGTH |
| 6.3                                      | 18 000                           | 22 x 30                                 | 3.85                            | 1010                    | 0.033                        | MALIEYN07LV518B02K               | MALIEYN07LV518B42K               |
|  | 18 000                           | 25 x 25                                 | 3.96                            | 1010                    | 0.033                        | MALIEYN07AU518B02K               | MALIEYN07AU518B42K               |
|  | 22 000                           | 22 x 35                                 | 4.34                            | 1117                    | 0.030                        | MALIEYN07LA522B02K               | MALIEYN07LA522B42K               |
|  | 27 000                           | 22 x 40                                 | 4.85                            | 1237                    | 0.027                        | MALIEYN07LB527B02K               | MALIEYN07LB527B42K               |
|  | 27 000                           | 30 x 25                                 | 4.89                            | 1237                    | 0.027                        | MALIEYN07BU527B02K               | MALIEYN07BU527B42K               |
|  | 33 000                           | 22 x 45                                 | 5.36                            | 1368                    | 0.024                        | MALIEYN07LC533B02K               | MALIEYN07LC533B42K               |
|  | 33 000                           | 25 x 35                                 | 5.32                            | 1368                    | 0.024                        | MALIEYN07AA533B02K               | MALIEYN07AA533B42K               |
|  | 33 000                           | 30 x 30                                 | 5.47                            | 1368                    | 0.024                        | MALIEYN07BV533B02K               | MALIEYN07BV533B42K               |
|  | 39 000                           | 22 x 50                                 | 5.83                            | 1487                    | 0.022                        | MALIEYN07LD539B02K               | MALIEYN07LD539B42K               |
|  | 39 000                           | 25 x 40                                 | 5.82                            | 1487                    | 0.022                        | MALIEYN07AB539B02K               | MALIEYN07AB539B42K               |
|  | 39 000                           | 35 x 25                                 | 5.82                            | 1487                    | 0.022                        | MALIEYN07CU539B02K               | MALIEYN07CU539B42K               |
|  | 47 000                           | 30 x 35                                 | 6.26                            | 1632                    | 0.021                        | MALIEYN07BA547B02K               | MALIEYN07BA547B42K               |
|  | 47 000                           | 35 x 30                                 | 6.41                            | 1632                    | 0.021                        | MALIEYN07CV547B02K               | MALIEYN07CV547B42K               |
|  | 56 000                           | 30 x 40                                 | 6.80                            | 1782                    | 0.020                        | MALIEYN07BB556B02K               | MALIEYN07BB556B42K               |
|  | 56 000                           | 35 x 30                                 | 6.64                            | 1782                    | 0.020                        | MALIEYN07CV556B02K               | MALIEYN07CV556B42K               |
|  | 100 000                          | 40 x 40                                 | 8.49                            | 2381                    | 0.017                        | MALIEYN07DB610B02K               | MALIEYN07DB610B42K               |
| 10                                       | 12 000                           | 22 x 25                                 | 3.31                            | 1039                    | 0.044                        | MALIEYN07LU512C02K               | MALIEYN07LU512C42K               |
|  | 15 000                           | 22 x 30                                 | 3.82                            | 1162                    | 0.038                        | MALIEYN07LV515C02K               | MALIEYN07LV515C42K               |
|  | 15 000                           | 25 x 25                                 | 3.39                            | 1162                    | 0.038                        | MALIEYN07AU515C02K               | MALIEYN07AU515C42K               |
|  | 18 000                           | 22 x 35                                 | 4.28                            | 1273                    | 0.034                        | MALIEYN07LA518C02K               | MALIEYN07LA518C42K               |
|  | 18 000                           | 25 x 25                                 | 4.17                            | 1273                    | 0.034                        | MALIEYN07AU518C02K               | MALIEYN07AU518C42K               |
|  | 22 000                           | 22 x 40                                 | 4.79                            | 1407                    | 0.030                        | MALIEYN07LB522C02K               | MALIEYN07LB522C42K               |
|  | 22 000                           | 25 x 30                                 | 4.71                            | 1407                    | 0.030                        | MALIEYN07AV522C02K               | MALIEYN07AV522C42K               |
|  | 22 000                           | 30 x 25                                 | 4.83                            | 1407                    | 0.030                        | MALIEYN07BU522C02K               | MALIEYN07BU522C42K               |
|  | 27 000                           | 22 x 45                                 | 5.30                            | 1559                    | 0.027                        | MALIEYN07LC527C02K               | MALIEYN07LC527C42K               |
|  | 27 000                           | 25 x 35                                 | 5.26                            | 1559                    | 0.027                        | MALIEYN07AA527C02K               | MALIEYN07AA527C42K               |
|  | 27 000                           | 30 x 30                                 | 5.41                            | 1559                    | 0.027                        | MALIEYN07BV527C02K               | MALIEYN07BV527C42K               |
|  | 33 000                           | 22 x 50                                 | 5.82                            | 1723                    | 0.025                        | MALIEYN07LD533C02K               | MALIEYN07LD533C42K               |
|  | 33 000                           | 25 x 40                                 | 5.81                            | 1723                    | 0.025                        | MALIEYN07AB533C02K               | MALIEYN07AB533C42K               |
|  | 33 000                           | 35 x 25                                 | 5.81                            | 1723                    | 0.025                        | MALIEYN07CU533C02K               | MALIEYN07CU533C42K               |
|  | 39 000                           | 25 x 45                                 | 6.31                            | 1873                    | 0.023                        | MALIEYN07AC539C02K               | MALIEYN07AC539C42K               |
|  | 39 000                           | 35 x 30                                 | 6.38                            | 1873                    | 0.023                        | MALIEYN07CV539C02K               | MALIEYN07CV539C42K               |
|  | 39 000                           | 30 x 35                                 | 6.22                            | 1873                    | 0.023                        | MALIEYN07BA539C02K               | MALIEYN07BA539C42K               |
|  | 47 000                           | 25 x 50                                 | 6.83                            | 2057                    | 0.021                        | MALIEYN07AD547C02K               | MALIEYN07AD547C42K               |
|  | 47 000                           | 30 x 40                                 | 6.78                            | 2057                    | 0.021                        | MALIEYN07BB547C02K               | MALIEYN07BB547C42K               |
|  | 56 000                           | 30 x 45                                 | 7.31                            | 2245                    | 0.020                        | MALIEYN07BC556C02K               | MALIEYN07BC556C42K               |
| 100 000                                  | 40 x 50                          | 9.35                                    | 3000                            | 0.017                   | MALIEYN07DD610C02K           | MALIEYN07DD610C42K               |                                  |
| 16                                       | 10 000                           | 22 x 25                                 | 3.32                            | 949                     | 0.046                        | MALIEYN07LU510D02K               | MALIEYN07LU510D42K               |
|  | 12 000                           | 22 x 30                                 | 3.55                            | 1039                    | 0.041                        | MALIEYN07LV512D02K               | MALIEYN07LV512D42K               |
|  | 12 000                           | 25 x 25                                 | 3.89                            | 1039                    | 0.041                        | MALIEYN07AU512D02K               | MALIEYN07AU512D42K               |
|  | 15 000                           | 22 x 35                                 | 4.29                            | 1162                    | 0.035                        | MALIEYN07LA515D02K               | MALIEYN07LA515D42K               |



| ELECTRICAL DATA AND ORDERING INFORMATION |                                  |   |                                 |                         |                              |                                  |                                  |
|--|----------------------------------|---|---------------------------------|-------------------------|------------------------------|----------------------------------|----------------------------------|
| U <sub>R</sub><br>(V)                    | C <sub>R</sub><br>120 Hz<br>(μF) | NOMINAL<br>CASE SIZE<br>Ø D x L<br>(mm) | I <sub>R</sub><br>120 Hz<br>(A) | I <sub>L5</sub><br>(μA) | ESR<br>120 Hz<br>MAX.<br>(Ω) | ORDERING CODE<br>6 mm PIN LENGTH | ORDERING CODE<br>4 mm PIN LENGTH |
| 16                                       | 15 000                           | 25 x 30                                 | 4.45                            | 1162                    | 0.035                        | MALIEYN07AV515D02K               | MALIEYN07AV515D42K               |
|  | 15 000                           | 30 x 25                                 | 4.56                            | 1162                    | 0.035                        | MALIEYN07BU515D02K               | MALIEYN07BU515D42K               |
|  | 18 000                           | 22 x 40                                 | 4.77                            | 1273                    | 0.032                        | MALIEYN07LB518D02K               | MALIEYN07LB518D42K               |
|  | 18 000                           | 25 x 35                                 | 4.96                            | 1273                    | 0.032                        | MALIEYN07AA518D02K               | MALIEYN07AA518D42K               |
|  | 18 000                           | 30 x 30                                 | 5.10                            | 1273                    | 0.032                        | MALIEYN07BV518D02K               | MALIEYN07BV518D42K               |
|  | 22 000                           | 22 x 50                                 | 5.51                            | 1407                    | 0.028                        | MALIEYN07LD522D02K               | MALIEYN07LD522D42K               |
|  | 22 000                           | 25 x 40                                 | 5.51                            | 1407                    | 0.028                        | MALIEYN07AB522D02K               | MALIEYN07AB522D42K               |
|  | 22 000                           | 30 x 30                                 | 5.39                            | 1407                    | 0.028                        | MALIEYN07BV522D02K               | MALIEYN07BV522D42K               |
|  | 27 000                           | 25 x 45                                 | 6.06                            | 1559                    | 0.026                        | MALIEYN07AC527D02K               | MALIEYN07AC527D42K               |
|  | 27 000                           | 30 x 35                                 | 5.98                            | 1972                    | 0.026                        | MALIEYN07BA527D02K               | MALIEYN07BA527D42K               |
|  | 33 000                           | 30 x 40                                 | 6.56                            | 2180                    | 0.023                        | MALIEYN07BB533D02K               | MALIEYN07BB533D42K               |
|  | 33 000                           | 35 x 30                                 | 6.41                            | 2180                    | 0.023                        | MALIEYN07CV533D02K               | MALIEYN07CV533D42K               |
|  | 39 000                           | 30 x 45                                 | 7.08                            | 2370                    | 0.022                        | MALIEYN07BC539D02K               | MALIEYN07BC539D42K               |
|  | 47 000                           | 30 x 50                                 | 7.62                            | 2602                    | 0.020                        | MALIEYN07BD547D02K               | MALIEYN07BD547D42K               |
|  | 47 000                           | 35 x 40                                 | 7.54                            | 2602                    | 0.020                        | MALIEYN07CB547D02K               | MALIEYN07CB547D42K               |
|  | 56 000                           | 40 x 40                                 | 8.23                            | 2840                    | 0.019                        | MALIEYN07DB556D02K               | MALIEYN07DB556D42K               |
|  | 68 000                           | 35 x 50                                 | 8.63                            | 3129                    | 0.018                        | MALIEYN07CD568D02K               | MALIEYN07CD568D42K               |
| 100 000                                  | 40 x 60                          | 10.20                                   | 3795                            | 0.017                   | MALIEYN07DF610D02K           | MALIEYN07DF610D42K               |                                  |
| 25                                       | 5600                             | 22 x 25                                 | 2.65                            | 898                     | 0.083                        | MALIEYN07LU456E02K               | MALIEYN07LU456E42K               |
|  | 6800                             | 22 x 30                                 | 3.06                            | 990                     | 0.071                        | MALIEYN07LV468E02K               | MALIEYN07LV468E42K               |
|  | 6800                             | 25 x 25                                 | 3.15                            | 990                     | 0.071                        | MALIEYN07AU468E02K               | MALIEYN07AU468E42K               |
|  | 8200                             | 22 x 35                                 | 3.45                            | 1087                    | 0.061                        | MALIEYN07LA482E02K               | MALIEYN07LA482E42K               |
|  | 8200                             | 25 x 30                                 | 3.57                            | 1087                    | 0.061                        | MALIEYN07AV482E02K               | MALIEYN07AV482E42K               |
|  | 10 000                           | 22 x 40                                 | 3.95                            | 1200                    | 0.052                        | MALIEYN07LB510E02K               | MALIEYN07LB510E42K               |
|  | 10 000                           | 25 x 30                                 | 3.89                            | 1200                    | 0.052                        | MALIEYN07AV510E02K               | MALIEYN07AV510E42K               |
|  | 10 000                           | 30 x 25                                 | 3.99                            | 1200                    | 0.052                        | MALIEYN07BU510E02K               | MALIEYN07BU510E42K               |
|  | 12 000                           | 22 x 45                                 | 4.41                            | 1643                    | 0.046                        | MALIEYN07LC512E02K               | MALIEYN07LC512E42K               |
|  | 12 000                           | 25 x 35                                 | 4.37                            | 1643                    | 0.046                        | MALIEYN07AA512E02K               | MALIEYN07AA512E42K               |
|  | 12 000                           | 30 x 30                                 | 4.50                            | 1643                    | 0.046                        | MALIEYN07BV512E02K               | MALIEYN07BV512E42K               |
|  | 15 000                           | 22 x 50                                 | 4.94                            | 1837                    | 0.039                        | MALIEYN07LD515E02K               | MALIEYN07LD515E42K               |
|  | 15 000                           | 25 x 40                                 | 4.94                            | 1837                    | 0.039                        | MALIEYN07AB515E02K               | MALIEYN07AB515E42K               |
|  | 15 000                           | 30 x 35                                 | 5.10                            | 1837                    | 0.039                        | MALIEYN07BA515E02K               | MALIEYN07BA515E42K               |
|  | 18 000                           | 25 x 45                                 | 5.45                            | 2012                    | 0.035                        | MALIEYN07AC518E02K               | MALIEYN07AC518E42K               |
|  | 18 000                           | 30 x 35                                 | 5.38                            | 2012                    | 0.035                        | MALIEYN07BA518E02K               | MALIEYN07BA518E42K               |
|  | 18 000                           | 35 x 30                                 | 5.51                            | 2012                    | 0.035                        | MALIEYN07CV518E02K               | MALIEYN07CV518E42K               |
|  | 22 000                           | 30 x 45                                 | 6.22                            | 2225                    | 0.031                        | MALIEYN07BC522E02K               | MALIEYN07BC522E42K               |
|  | 22 000                           | 35 x 35                                 | 6.12                            | 2225                    | 0.031                        | MALIEYN07CA522E02K               | MALIEYN07CA522E42K               |
|  | 27 000                           | 30 x 50                                 | 6.82                            | 2465                    | 0.028                        | MALIEYN07BD527E02K               | MALIEYN07BD527E42K               |
| 27 000                                   | 35 x 40                          | 6.74                                    | 2465                            | 0.028                   | MALIEYN07CB527E02K           | MALIEYN07CB527E42K               |                                  |
| 33 000                                   | 35 x 45                          | 7.35                                    | 2725                            | 0.025                   | MALIEYN07CC533E02K           | MALIEYN07CC533E42K               |                                  |
| 33 000                                   | 40 x 40                          | 7.48                                    | 2725                            | 0.025                   | MALIEYN07DB533E02K           | MALIEYN07DB533E42K               |                                  |
| 35                                       | 4700                             | 22 x 30                                 | 3.06                            | 1028                    | 0.085                        | MALIEYN07LV447F02K               | MALIEYN07LV447F42K               |
|  | 4700                             | 25 x 25                                 | 2.98                            | 1028                    | 0.085                        | MALIEYN07AU447F02K               | MALIEYN07AU447F42K               |
|  | 5600                             | 22 x 35                                 | 3.28                            | 1122                    | 0.073                        | MALIEYN07LA456F02K               | MALIEYN07LA456F42K               |
|  | 5600                             | 25 x 30                                 | 3.39                            | 1122                    | 0.073                        | MALIEYN07AV456F02K               | MALIEYN07AV456F42K               |
|  | 6800                             | 22 x 40                                 | 3.73                            | 1464                    | 0.063                        | MALIEYN07LB468F02K               | MALIEYN07LB468F42K               |
|  | 6800                             | 25 x 30                                 | 3.67                            | 1464                    | 0.063                        | MALIEYN07AV468F02K               | MALIEYN07AV468F42K               |
|  | 6800                             | 30 x 25                                 | 3.76                            | 1464                    | 0.063                        | MALIEYN07BU468F02K               | MALIEYN07BU468F42K               |
|  | 8200                             | 22 x 45                                 | 4.13                            | 1607                    | 0.054                        | MALIEYN07LC482F02K               | MALIEYN07LC482F42K               |
|  | 8200                             | 25 x 35                                 | 4.10                            | 1607                    | 0.054                        | MALIEYN07AA482F02K               | MALIEYN07AA482F42K               |
|  | 8200                             | 30 x 30                                 | 4.22                            | 1607                    | 0.054                        | MALIEYN07BV482F02K               | MALIEYN07BV482F42K               |
|  | 10 000                           | 22 x 50                                 | 4.68                            | 1775                    | 0.047                        | MALIEYN07LD510F02K               | MALIEYN07LD510F42K               |
|  | 10 000                           | 25 x 40                                 | 4.68                            | 1775                    | 0.047                        | MALIEYN07AB510F02K               | MALIEYN07AB510F42K               |



| ELECTRICAL DATA AND ORDERING INFORMATION |                               |   |                        |                        |                                       |                                  |                                  |
|--|-------------------------------|---|------------------------|------------------------|---------------------------------------|----------------------------------|----------------------------------|
| $U_R$<br>(V)                             | $C_R$<br>120 Hz<br>( $\mu$ F) | NOMINAL<br>CASE SIZE<br>$\varnothing$ D x L<br>(mm) | $I_R$<br>120 Hz<br>(A) | $I_{L5}$<br>( $\mu$ A) | ESR<br>120 Hz<br>MAX.<br>( $\Omega$ ) | ORDERING CODE<br>6 mm PIN LENGTH | ORDERING CODE<br>4 mm PIN LENGTH |
| 35                                       | 10 000                        | 30 x 30   | 4.58                   | 1775                   | 0.047                                 | MALIEYN07BV510F02K               | MALIEYN07BV510F42K               |
|  | 12 000                        | 25 x 45   | 5.18                   | 1944                   | 0.041                                 | MALIEYN07AC512F02K               | MALIEYN07AC512F42K               |
|  | 12 000                        | 30 x 35   | 5.11                   | 1944                   | 0.041                                 | MALIEYN07BA512F02K               | MALIEYN07BA512F42K               |
|  | 12 000                        | 35 x 30   | 5.24                   | 1944                   | 0.041                                 | MALIEYN07CV512F02K               | MALIEYN07CV512F42K               |
|  | 15 000                        | 30 x 40   | 5.72                   | 2174                   | 0.036                                 | MALIEYN07BB515F02K               | MALIEYN07BB515F42K               |
|  | 15 000                        | 35 x 35   | 5.88                   | 2174                   | 0.036                                 | MALIEYN07CA515F02K               | MALIEYN07CA515F42K               |
|  | 18 000                        | 30 x 45   | 6.28                   | 2381                   | 0.032                                 | MALIEYN07BC518F02K               | MALIEYN07BC518F42K               |
|  | 18 000                        | 35 x 40   | 6.46                   | 2381                   | 0.032                                 | MALIEYN07CB518F02K               | MALIEYN07CB518F42K               |
|  | 22 000                        | 35 x 45   | 7.07                   | 2632                   | 0.029                                 | MALIEYN07CC522F02K               | MALIEYN07CC522F42K               |
|  | 22 000                        | 40 x 40   | 7.20                   | 2632                   | 0.029                                 | MALIEYN07DB522F02K               | MALIEYN07DB522F42K               |
|  | 27 000                        | 40 x 50   | 8.14                   | 2916                   | 0.026                                 | MALIEYN07DD527F02K               | MALIEYN07DD527F42K               |
|  | 33 000                        | 40 x 50   | 8.46                   | 3224                   | 0.023                                 | MALIEYN07DD533F02K               | MALIEYN07DD533F42K               |
| 50                                       | 3300                          | 22 x 30   | 2.97                   | 1020                   | 0.100                                 | MALIEYN07LV433H02K               | MALIEYN07LV433H42K               |
|  | 3300                          | 25 x 25   | 3.06                   | 1020                   | 0.100                                 | MALIEYN07AU433H02K               | MALIEYN07AU433H42K               |
|  | 4700                          | 22 x 40   | 3.83                   | 1217                   | 0.074                                 | MALIEYN07LB447H02K               | MALIEYN07LB447H42K               |
|  | 4700                          | 25 x 35   | 3.98                   | 1217                   | 0.074                                 | MALIEYN07AA447H02K               | MALIEYN07AA447H42K               |
|  | 4700                          | 30 x 25   | 3.86                   | 1454                   | 0.074                                 | MALIEYN07BU447H02K               | MALIEYN07BU447H42K               |
|  | 4700                          | 35 x 25   | 4.19                   | 1454                   | 0.074                                 | MALIEYN07CU447H02K               | MALIEYN07CU447H42K               |
|  | 5600                          | 22 x 45   | 4.26                   | 1587                   | 0.065                                 | MALIEYN07LC456H02K               | MALIEYN07LC456H42K               |
|  | 5600                          | 25 x 40   | 4.44                   | 1587                   | 0.065                                 | MALIEYN07AB456H02K               | MALIEYN07AB456H42K               |
|  | 5600                          | 30 x 30   | 4.35                   | 1587                   | 0.065                                 | MALIEYN07BV456H02K               | MALIEYN07BV456H42K               |
|  | 5600                          | 35 x 25   | 4.44                   | 1587                   | 0.065                                 | MALIEYN07CU456H02K               | MALIEYN07CU456H42K               |
|  | 6800                          | 22 x 50   | 4.77                   | 1749                   | 0.056                                 | MALIEYN07LD468H02K               | MALIEYN07LD468H42K               |
|  | 6800                          | 25 x 40   | 4.76                   | 1749                   | 0.056                                 | MALIEYN07AB468H02K               | MALIEYN07AB468H42K               |
|  | 6800                          | 30 x 35   | 4.92                   | 1749                   | 0.056                                 | MALIEYN07BA468H02K               | MALIEYN07BA468H42K               |
|  | 6800                          | 35 x 30   | 5.04                   | 1749                   | 0.056                                 | MALIEYN07CV468H02K               | MALIEYN07CV468H42K               |
|  | 8200                          | 25 x 50   | 5.43                   | 1921                   | 0.048                                 | MALIEYN07AD482H02K               | MALIEYN07AD482H42K               |
|  | 8200                          | 30 x 40   | 5.38                   | 1921                   | 0.048                                 | MALIEYN07BB482H02K               | MALIEYN07BB482H42K               |
|  | 8200                          | 35 x 30   | 5.26                   | 1921                   | 0.048                                 | MALIEYN07CV482H02K               | MALIEYN07CV482H42K               |
|  | 10 000                        | 30 x 45   | 6.07                   | 2121                   | 0.042                                 | MALIEYN07BC510H02K               | MALIEYN07BC510H42K               |
|  | 10 000                        | 35 x 35   | 5.97                   | 2121                   | 0.042                                 | MALIEYN07CA510H02K               | MALIEYN07CA510H42K               |
|  | 12 000                        | 30 x 50   | 6.62                   | 2324                   | 0.037                                 | MALIEYN07BD512H02K               | MALIEYN07BD512H42K               |
| 12 000                                   | 35 x 40                       | 6.55  | 2324                   | 0.037                  | MALIEYN07CB512H02K                    | MALIEYN07CB512H42K               |                                  |
| 15 000                                   | 35 x 45                       | 7.20  | 2598                   | 0.032                  | MALIEYN07CC515H02K                    | MALIEYN07CC515H42K               |                                  |
| 18 000                                   | 35 x 50                       | 7.74  | 2846                   | 0.029                  | MALIEYN07CD518H02K                    | MALIEYN07CD518H42K               |                                  |
| 18 000                                   | 40 x 40                       | 7.62  | 2846                   | 0.029                  | MALIEYN07DB518H02K                    | MALIEYN07DB518H42K               |                                  |
| 22 000                                   | 40 x 50                       | 8.54  | 3146                   | 0.026                  | MALIEYN07DD522H02K                    | MALIEYN07DD522H42K               |                                  |
| 27 000                                   | 40 x 60                       | 9.45  | 3486                   | 0.024                  | MALIEYN07DF527H02K                    | MALIEYN07DF527H42K               |                                  |
| 63                                       | 1800                          | 22 x 25   | 2.20                   | 900                    | 0.184                                 | MALIEYN07LU418J02K               | MALIEYN07LU418J42K               |
|  | 2200                          | 22 x 30   | 2.50                   | 995                    | 0.153                                 | MALIEYN07LV422J02K               | MALIEYN07LV422J42K               |
|  | 2200                          | 25 x 25   | 2.58                   | 995                    | 0.153                                 | MALIEYN07AU422J02K               | MALIEYN07AU422J42K               |
|  | 2700                          | 22 x 35   | 2.94                   | 1102                   | 0.127                                 | MALIEYN07LA427J02K               | MALIEYN07LA427J42K               |
|  | 2700                          | 25 x 30   | 3.04                   | 1237                   | 0.127                                 | MALIEYN07AV427J02K               | MALIEYN07AV427J42K               |
|  | 3300                          | 22 x 35   | 3.14                   | 1368                   | 0.107                                 | MALIEYN07LA433J02K               | MALIEYN07LA433J42K               |
|  | 3300                          | 25 x 30   | 3.26                   | 1368                   | 0.107                                 | MALIEYN07AV433J02K               | MALIEYN07AV433J42K               |
|  | 3300                          | 30 x 25   | 3.34                   | 1368                   | 0.107                                 | MALIEYN07BU433J02K               | MALIEYN07BU433J42K               |
|  | 3900                          | 22 x 40   | 3.60                   | 1487                   | 0.092                                 | MALIEYN07LB439J02K               | MALIEYN07LB439J42K               |
|  | 3900                          | 25 x 35   | 3.74                   | 1487                   | 0.092                                 | MALIEYN07AA439J02K               | MALIEYN07AA439J42K               |
|  | 3900                          | 30 x 30   | 3.85                   | 1487                   | 0.092                                 | MALIEYN07BV439J02K               | MALIEYN07BV439J42K               |
|  | 4700                          | 22 x 50   | 4.19                   | 1632                   | 0.079                                 | MALIEYN07LD447J02K               | MALIEYN07LD447J42K               |
|  | 4700                          | 25 x 40   | 4.19                   | 1632                   | 0.079                                 | MALIEYN07AB447J02K               | MALIEYN07AB447J42K               |
|  | 4700                          | 30 x 35   | 4.10                   | 1632                   | 0.079                                 | MALIEYN07BA447J02K               | MALIEYN07BA447J42K               |
| 4700                                     | 35 x 30                       | 4.19  | 1632                   | 0.079                  | MALIEYN07CV447J02K                    | MALIEYN07CV447J42K               |                                  |



| ELECTRICAL DATA AND ORDERING INFORMATION |                                  |   |                                 |                         |                              |                                  |                                  |
|--|----------------------------------|---|---------------------------------|-------------------------|------------------------------|----------------------------------|----------------------------------|
| U <sub>R</sub><br>(V)                    | C <sub>R</sub><br>120 Hz<br>(μF) | NOMINAL<br>CASE SIZE<br>Ø D x L<br>(mm) | I <sub>R</sub><br>120 Hz<br>(A) | I <sub>L5</sub><br>(μA) | ESR<br>120 Hz<br>MAX.<br>(Ω) | ORDERING CODE<br>6 mm PIN LENGTH | ORDERING CODE<br>4 mm PIN LENGTH |
| 63                                       | 5600                             | 25 x 45                                 | 4.65                            | 1782                    | 0.068                        | MALIEYN07AC456J02K               | MALIEYN07AC456J42K               |
|  | 5600                             | 30 x 35                                 | 4.58                            | 1782                    | 0.068                        | MALIEYN07BA456J02K               | MALIEYN07BA456J42K               |
|  | 5600                             | 35 x 30                                 | 4.70                            | 1782                    | 0.068                        | MALIEYN07CV456J02K               | MALIEYN07CV456J42K               |
|  | 6800                             | 25 x 50                                 | 5.20                            | 1964                    | 0.059                        | MALIEYN07AD468J02K               | MALIEYN07AD468J42K               |
|  | 6800                             | 30 x 40                                 | 5.16                            | 1964                    | 0.059                        | MALIEYN07BB468J02K               | MALIEYN07BB468J42K               |
|  | 6800                             | 35 x 30                                 | 5.04                            | 1964                    | 0.059                        | MALIEYN07CV468J02K               | MALIEYN07CV468J42K               |
|  | 8200                             | 30 x 45                                 | 5.62                            | 2156                    | 0.051                        | MALIEYN07BC482J02K               | MALIEYN07BC482J42K               |
|  | 8200                             | 35 x 35                                 | 5.53                            | 2156                    | 0.051                        | MALIEYN07CA482J02K               | MALIEYN07CA482J42K               |
|  | 10 000                           | 30 x 50                                 | 6.32                            | 2381                    | 0.044                        | MALIEYN07BD510J02K               | MALIEYN07BD510J42K               |
|  | 10 000                           | 35 x 40                                 | 6.25                            | 2381                    | 0.044                        | MALIEYN07CB510J02K               | MALIEYN07CB510J42K               |
|  | 12 000                           | 35 x 45                                 | 6.83                            | 2608                    | 0.039                        | MALIEYN07CC512J02K               | MALIEYN07CC512J42K               |
|  | 12 000                           | 40 x 40                                 | 6.95                            | 2608                    | 0.039                        | MALIEYN07DB512J02K               | MALIEYN07DB512J42K               |
| 80                                       | 1200                             | 22 x 25                                 | 2.24                            | 825                     | 0.221                        | MALIEYN07LU412W02K               | MALIEYN07LU412W42K               |
|  | 1500                             | 22 x 30                                 | 2.67                            | 1039                    | 0.179                        | MALIEYN07LV415W02K               | MALIEYN07LV415W42K               |
|  | 1800                             | 22 x 30                                 | 2.92                            | 1138                    | 0.152                        | MALIEYN07LV418W02K               | MALIEYN07LV418W42K               |
|  | 1800                             | 25 x 25                                 | 3.01                            | 1138                    | 0.152                        | MALIEYN07AU418W02K               | MALIEYN07AU418W42K               |
|  | 2200                             | 22 x 35                                 | 3.25                            | 1259                    | 0.127                        | MALIEYN07LA422W02K               | MALIEYN07LA422W42K               |
|  | 2200                             | 25 x 30                                 | 3.36                            | 1259                    | 0.127                        | MALIEYN07AV422W02K               | MALIEYN07AV422W42K               |
|  | 2200                             | 30 x 25                                 | 3.45                            | 1259                    | 0.127                        | MALIEYN07BU422W02K               | MALIEYN07BU422W42K               |
|  | 2700                             | 22 x 40                                 | 3.79                            | 1394                    | 0.106                        | MALIEYN07LB427W02K               | MALIEYN07LB427W42K               |
|  | 2700                             | 25 x 35                                 | 3.94                            | 1394                    | 0.106                        | MALIEYN07AA427W02K               | MALIEYN07AA427W42K               |
|  | 2700                             | 30 x 30                                 | 4.05                            | 1394                    | 0.106                        | MALIEYN07BV427W02K               | MALIEYN07BV427W42K               |
|  | 3300                             | 22 x 45                                 | 4.18                            | 1541                    | 0.089                        | MALIEYN07LC433W02K               | MALIEYN07LC433W42K               |
|  | 3300                             | 25 x 40                                 | 4.36                            | 1541                    | 0.089                        | MALIEYN07AB433W02K               | MALIEYN07AB433W42K               |
|  | 3300                             | 30 x 30                                 | 4.27                            | 1541                    | 0.089                        | MALIEYN07BV433W02K               | MALIEYN07BV433W42K               |
|  | 3900                             | 22 x 50                                 | 4.75                            | 1676                    | 0.077                        | MALIEYN07LD439W02K               | MALIEYN07LD439W42K               |
|  | 3900                             | 25 x 45                                 | 4.96                            | 1676                    | 0.077                        | MALIEYN07AC439W02K               | MALIEYN07AC439W42K               |
|  | 3900                             | 30 x 35                                 | 4.89                            | 1676                    | 0.077                        | MALIEYN07BA439W02K               | MALIEYN07BA439W42K               |
|  | 4700                             | 25 x 50                                 | 5.44                            | 1840                    | 0.066                        | MALIEYN07AD447W02K               | MALIEYN07AD447W42K               |
|  | 4700                             | 30 x 40                                 | 5.39                            | 1840                    | 0.066                        | MALIEYN07BB447W02K               | MALIEYN07BB447W42K               |
|  | 4700                             | 35 x 30                                 | 5.27                            | 1840                    | 0.066                        | MALIEYN07CV447W02K               | MALIEYN07CV447W42K               |
|  | 5600                             | 30 x 45                                 | 5.91                            | 2008                    | 0.058                        | MALIEYN07BC456W02K               | MALIEYN07BC456W42K               |
|  | 5600                             | 35 x 35                                 | 5.81                            | 2008                    | 0.058                        | MALIEYN07CA456W02K               | MALIEYN07CA456W42K               |
|  | 6800                             | 35 x 40                                 | 5.46                            | 2213                    | 0.050                        | MALIEYN07CB468W02K               | MALIEYN07CB468W42K               |
|  | 8200                             | 35 x 45                                 | 6.91                            | 2430                    | 0.044                        | MALIEYN07CC482W02K               | MALIEYN07CC482W42K               |
|  | 8200                             | 40 x 40                                 | 7.04                            | 2430                    | 0.044                        | MALIEYN07DB482W02K               | MALIEYN07DB482W42K               |
| 10 000                                   | 40 x 50                          | 8.14                                    | 2683                            | 0.038                   | MALIEYN07DD510W02K           | MALIEYN07DD510W42K               |                                  |
| 100                                      | 1200                             | 22 x 30                                 | 2.39                            | 930                     | 0.221                        | MALIEYN07LV412L02K               | MALIEYN07LV412L42K               |
|  | 1200                             | 25 x 25                                 | 2.46                            | 930                     | 0.221                        | MALIEYN07AU412L02K               | MALIEYN07AU412L42K               |
|  | 1500                             | 22 x 35                                 | 2.83                            | 1039                    | 0.179                        | MALIEYN07LA415L02K               | MALIEYN07LA415L42K               |
|  | 1500                             | 25 x 30                                 | 2.93                            | 1039                    | 0.179                        | MALIEYN07AV415L02K               | MALIEYN07AV415L42K               |
|  | 1500                             | 30 x 25                                 | 3.00                            | 1039                    | 0.179                        | MALIEYN07BU415L02K               | MALIEYN07BU415L42K               |
|  | 1800                             | 22 x 40                                 | 3.26                            | 1138                    | 0.152                        | MALIEYN07LB418L02K               | MALIEYN07LB418L42K               |
|  | 1800                             | 25 x 35                                 | 3.39                            | 1138                    | 0.152                        | MALIEYN07AA418L02K               | MALIEYN07AA418L42K               |
|  | 1800                             | 30 x 30                                 | 3.49                            | 1138                    | 0.152                        | MALIEYN07BV418L02K               | MALIEYN07BV418L42K               |
|  | 2200                             | 22 x 45                                 | 3.58                            | 1259                    | 0.127                        | MALIEYN07LC422L02K               | MALIEYN07LC422L42K               |
|  | 2200                             | 25 x 40                                 | 3.74                            | 1259                    | 0.127                        | MALIEYN07AB422L02K               | MALIEYN07AB422L42K               |
|  | 2200                             | 30 x 30                                 | 3.66                            | 1259                    | 0.127                        | MALIEYN07BV422L02K               | MALIEYN07BV422L42K               |
|  | 2700                             | 25 x 45                                 | 4.33                            | 1394                    | 0.106                        | MALIEYN07AC427L02K               | MALIEYN07AC427L42K               |
|  | 2700                             | 30 x 35                                 | 4.27                            | 1394                    | 0.106                        | MALIEYN07BA427L02K               | MALIEYN07BA427L42K               |
|  | 2700                             | 35 x 30                                 | 4.37                            | 1394                    | 0.106                        | MALIEYN07CV427L02K               | MALIEYN07CV427L42K               |
|  | 3300                             | 25 x 50                                 | 4.76                            | 1541                    | 0.089                        | MALIEYN07AD433L02K               | MALIEYN07AD433L42K               |
|  | 3300                             | 30 x 40                                 | 4.72                            | 1541                    | 0.089                        | MALIEYN07BB433L02K               | MALIEYN07BB433L42K               |



| ELECTRICAL DATA AND ORDERING INFORMATION |                         |  |                  |                     |                              |                               |                               |
|--|-------------------------|--|------------------|---------------------|------------------------------|-------------------------------|-------------------------------|
| $U_R$ (V)                                | $C_R$ 120 Hz ( $\mu$ F) | NOMINAL CASE SIZE $\varnothing$ D x L (mm) | $I_R$ 120 Hz (A) | $I_{L5}$ ( $\mu$ A) | ESR 120 Hz MAX. ( $\Omega$ ) | ORDERING CODE 6 mm PIN LENGTH | ORDERING CODE 4 mm PIN LENGTH |
| 100                                      | 3300                    | 35 x 35                                    | 4.85             | 1541                | 0.089                        | MALIEYN07CA433L02K            | MALIEYN07CA433L42K            |
|  | 3900                    | 30 x 45                                    | 5.36             | 1676                | 0.077                        | MALIEYN07BC439L02K            | MALIEYN07BC439L42K            |
|  | 3900                    | 35 x 35                                    | 5.27             | 1676                | 0.077                        | MALIEYN07CA439L02K            | MALIEYN07CA439L42K            |
|  | 4700                    | 30 x 50                                    | 5.86             | 1840                | 0.066                        | MALIEYN07BD447L02K            | MALIEYN07BD447L42K            |
|  | 4700                    | 35 x 40                                    | 5.80             | 1840                | 0.066                        | MALIEYN07CB447L02K            | MALIEYN07CB447L42K            |
|  | 5600                    | 35 x 45                                    | 6.34             | 2008                | 0.058                        | MALIEYN07CC456L02K            | MALIEYN07CC456L42K            |
|  | 5600                    | 40 x 40                                    | 6.45             | 2008                | 0.058                        | MALIEYN07DB456L02K            | MALIEYN07DB456L42K            |
|  | 6800                    | 40 x 50                                    | 7.40             | 2213                | 0.050                        | MALIEYN07DD468L02K            | MALIEYN07DD468L42K            |
|  | 8200                    | 40 x 50                                    | 7.60             | 2430                | 0.044                        | MALIEYN07DD482L02K            | MALIEYN07DD482L42K            |

### LOW TEMPERATURE BEHAVIOR

Table for the calculation of the maximum 10 kHz impedance at low temperatures:

$$Z(10 \text{ kHz})[\Omega] = \frac{\text{Tabular value}}{C_R [\mu\text{F}]}$$

| $T_{amb}$ ( $^{\circ}$ C) | RATED VOLTAGE $U_R$ (V) |        |        |        |        |        |        |      |      |      |      |      |      |      |      |
|---------------------------|-------------------------|--------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|
|                           | 6.3                     | 10     | 16     | 25     | 35     | 50     | 63     | 100  | 160  | 200  | 250  | 350  | 400  | 450  | 500  |
| 25                        | 9000                    | 7200   | 5400   | 4050   | 3150   | 2700   | 2250   | 1710 | 1960 | 1820 | 1680 | 1870 | 1870 | 1870 | 1870 |
| 40                        | 30 000                  | 24 000 | 18 000 | 13 500 | 10 500 | 12 000 | 10 000 | 7600 | 7000 | 6500 | 7200 | 6600 | -    | -    | -    |

The lower limit of the series resistance and impedance is given by the ohmic part of the contact points and the foil resistance values. Therefore it will not always be possible to achieve calculated values below 0.03  $\Omega$ .

### LIFETIME TABLE $U_R \leq 100$ V

| INTERRELATION BETWEEN ALTERNATING CURRENT, AMBIENT TEMPERATURE AND LIFETIME |      |             |      |      |      |        |   |     |     |     |     |     |     |     |     |             |
|---|------|-------------|------|------|------|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-------------|
| $I / I_R$ (FREQUENCY DEPENDANT)   |      |             |      |      |      |        | LIFETIME MULTIPLIER L (DEPENDING ON $I / I_R$ AND $T_{amb}$ ) |     |     |     |     |     |     |     |     |             |
| FREQUENCY (Hz)  |      |             |      |      |      |        | AMBIENT TEMPERATURE $T_{amb}$ ( $^{\circ}$ C)                 |     |     |     |     |     |     |     |     |             |
| 50  | 100  | 120         | 250  | 500  | 1000 | > 2500 | 40  | 45  | 50  | 55  | 60  | 65  | 70  | 75  | 80  | 85          |
| 0.00  | 0.00 | 0.00        | 0.00 | 0.00 | 0.00 | 0.00   | 66  | 42  | 27  | 17  | 11  | 7.6 | 5.1 | 3.5 | 2.4 | 1.7         |
| 0.17  | 0.19 | 0.20        | 0.22 | 0.23 | 0.23 | 0.24   | 62  | 40  | 26  | 17  | 11  | 7.4 | 5.0 | 3.4 | 2.3 | 1.6         |
| 0.34  | 0.39 | 0.40        | 0.43 | 0.45 | 0.46 | 0.47   | 53  | 34  | 22  | 15  | 9.9 | 6.7 | 4.5 | 3.1 | 2.2 | 1.5         |
| 0.51  | 0.58 | 0.60        | 0.65 | 0.68 | 0.70 | 0.71   | 43  | 28  | 19  | 12  | 8.4 | 5.8 | 4.0 | 2.8 | 1.9 | 1.4         |
| 0.68  | 0.78 | 0.80        | 0.86 | 0.90 | 0.93 | 0.94   | 32  | 22  | 15  | 10  | 6.9 | 4.8 | 3.4 | 2.4 | 1.7 | 1.2         |
| 0.85  | 0.97 | <b>1.00</b> | 1.08 | 1.13 | 1.16 | 1.18   | 23  | 16  | 11  | 7.8 | 5.5 | 3.8 | 2.7 | 1.9 | 1.4 | <b>1.00</b> |
| 1.02  | 1.17 | 1.20        | 1.30 | 1.35 | 1.39 | 1.42   | 16  | 12  | 8.3 | 5.9 | 4.2 | 3.0 | 2.2 | 1.6 | 1.1 |             |
| 1.20  | 1.36 | 1.40        | 1.51 | 1.58 | 1.62 | 1.65   | 11  | 3.3 | 6.0 | 4.3 | 3.1 | 2.3 | 1.7 | 1.2 |     |             |
| 1.37  | 1.56 | 1.60        | 1.73 | 1.81 | 1.85 | 1.89   | 7.7   | 6.0 | 4.2 | 3.1 | 2.3 | 1.7 | 1.3 |     |     |             |
| 1.54  | 1.75 | 1.80        | 1.94 | 2.03 | 2.09 | 2.12   | 5.1   | 4.2 | 2.9 | 2.2 | 1.7 | 1.3 |     |     |     |             |
| 1.71  | 1.95 | 2.00        | 2.16 | 2.26 | 2.32 | 2.36   | 3.4   | 2.9 | 2.0 | 1.6 | 1.2 |     |     |     |     |             |
| 1.88  | 2.14 | 2.20        | 2.38 | 2.48 | 2.55 | 2.59   | 2.2   | 2.0 | 1.4 | 1.1 |     |     |     |     |     |             |
| 2.05  | 2.34 | 2.40        | 2.59 | 2.71 | 2.78 | 2.83   | 1.5   | 1.4 |     |     |     |     |     |     |     |             |
| 2.22  | 2.53 | 2.60        | 2.81 | 2.94 | 3.01 | 3.07   | 1.0   |     |     |     |     |     |     |     |     |             |

#### Notes

$I_R$  Rated ripple current (120 Hz, RMS) [A] at upper category temperature  $T_{uc}$  taken from datasheet

$I$  User ripple current [A]

$T_{amb}$  Ambient temperature of capacitor [ $^{\circ}$ C]

$L$  Useful life multiplier

Regard  $L$  as a function of ambient temperature (x-axis) and of current (y-axis); use the current-axis according to the frequency

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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