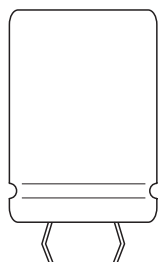
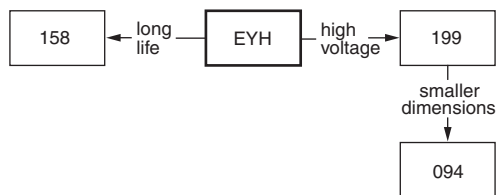


Aluminum Capacitors Standard - 105 °C Snap-In



Component Outline



FEATURES

- Polarized aluminum electrolytic capacitors
- Small dimensions
- High C x U product



RoHS
COMPLIANT

APPLICATIONS

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

| QUICK REFERENCE DATA | | |
|--|------|-----------------------|
| DESCRIPTION | UNIT | VALUE |
| Nominal case size (Ø D x L) | mm | 22 x 25 to 40 x 60 |
| Rated capacitance range C _R | µF | 820 to 68 000 |
| Capacitance tolerance | % | ± 20 |
| Rated voltage range, U _R | V | 6.3 to 100 |
| Category temperature range | °C | - 40 to + 105 |
| Load life at 105 °C | h | 2000 |
| Shelf life at 0 V, 105 °C | h | 1000 |
| Based on sectional specifications | | IEC 60384-4/EN 130300 |
| Climatic category IEC 60068 | | 40/105/56 |

| SELECTION CHART FOR C _R , U _R AND RELEVANT NOMINAL CASE SIZES (Ø D x L in mm) | | | | | | | | | |
|---|--------------------|----|----|----|----|----|--------------------|-------------------------------|-------------------------------|
| C _R (µF) | U _R (V) | | | | | | | | |
| | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 |
| 820 | - | - | - | - | - | - | - | 22 x 25 | 22 x 30 25 x 25 |
| 1000 | - | - | - | - | - | - | - | 22 x 30 25 x 25 | 22 x 35 25 x 30 |
| 1200 | - | - | - | - | - | - | 22 x 25 | 22 x 30 25 x 25 | 22 x 40 25 x 35 30 x 25 |
| 1500 | - | - | - | - | - | - | 22 x 30 25 x 25 | 22 x 35 25 x 30 | 22 x 45 25 x 40 30 x 30 |
| 1800 | - | - | - | - | - | - | 22 x 30 25 x 25 | 22 x 40 25 x 35 30 x 25 | 25 x 45 30 x 35 |
| 2200 | - | - | - | - | - | - | 22 x 35 25 x 30 | 22 x 45 25 x 35 30 x 30 | 25 x 50 30 x 40 35 x 30 |

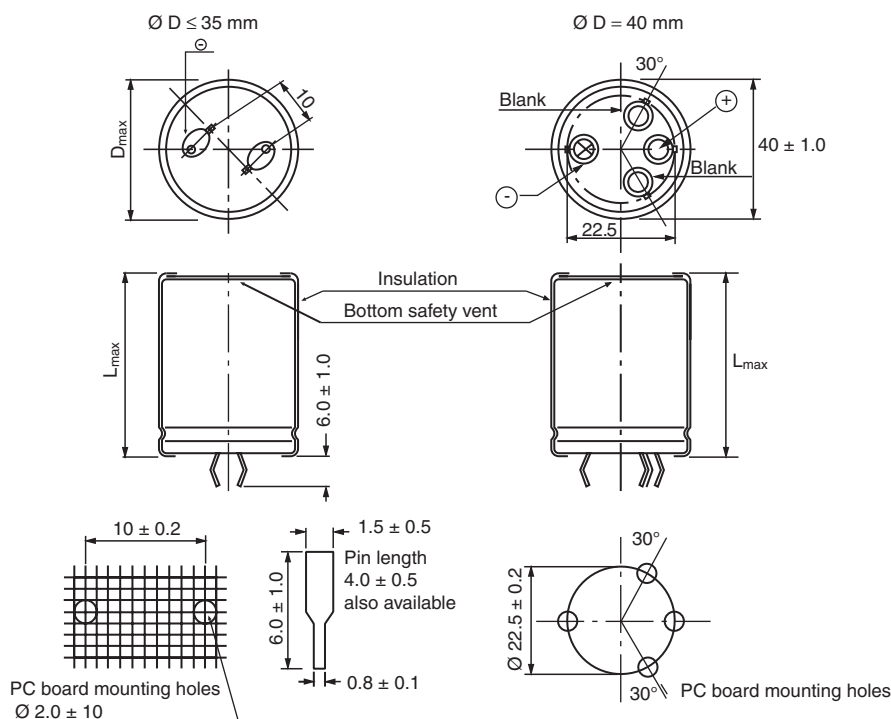


Aluminum Capacitors
Standard - 105 °C Snap-In

Vishay Roederstein

| SELECTION CHART FOR C_R, U_R AND RELEVANT NOMINAL CASE SIZES (∅ D x L in mm) | | | | | | | | | |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------|
| C _R (μF) | U _R (V) | | | | | | | | |
| | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 |
| 2700 | - | - | - | - | - | 22 x 30 | 22 x 40 25 x 30 30 x 25 | 25 x 45 30 x 35 | 30 x 45 35 x 35 |
| 3300 | - | - | - | - | 22 x 25 | 22 x 35 | 22 x 50 25 x 40 30 x 30 | 25 x 50 30 x 40 35 x 30 | 30 x 50 35 x 40 |
| 3900 | - | - | - | - | 22 x 30 | 22 x 40 25 x 35 30 x 25 | 25 x 45 30 x 35 | 30 x 45 35 x 35 | 35 x 45 |
| 4700 | - | - | - | 22 x 25 | 22 x 35 25 x 25 | 22 x 45 25 x 40 30 x 30 | 25 x 50 30 x 40 35 x 30 | 30 x 50 35 x 40 | 35 x 50 40 x 40 |
| 5600 | - | - | - | 22 x 30 | 22 x 35 25 x 30 | 22 x 50 25 x 40 30 x 35 | 30 x 45 35 x 35 | 35 x 45 | 40 x 50 |
| 6800 | - | - | - | 22 x 30 | 22 x 40 25 x 35 | 25 x 50 30 x 40 35 x 30 | 30 x 50 35 x 40 | 40 x 40 | 40 x 50 |
| 8200 | - | - | 22 x 25 | 22 x 35 25 x 30 | 22 x 50 25 x 40 30 x 30 | 30 x 45 35 x 35 | 35 x 45 | 40 x 50 | - |
| 10 000 | - | 22 x 25 | 22 x 30 25 x 25 | 22 x 40 25 x 35 | 25 x 45 30 x 30 | 30 x 50 35 x 40 | 35 x 50 40 x 40 | - | - |
| 12 000 | 22 x 25 | 22 x 30 | 22 x 35 25 x 30 30 x 25 | 22 x 45 25 x 40 30 x 30 | 25 x 50 35 x 30 | 35 x 45 | - | - | - |
| 15 000 | 22 x 30 | 22 x 35 25 x 25 | 22 x 40 25 x 35 30 x 30 | 25 x 45 30 x 35 35 x 30 | 35 x 35 | 35 x 50 40 x 40 | - | - | - |
| 18 000 | 22 x 35 25 x 25 | 22 x 35 25 x 30 | 22 x 45 25 x 40 30 x 30 | 25 x 50 30 x 40 35 x 35 | 35 x 40 | 40 x 50 | - | - | - |
| 22 000 | 22 x 35 25 x 30 | 22 x 40 25 x 35 30 x 25 | 25 x 45 30 x 35 | 30 x 45 35 x 35 | 35 x 45 40 x 40 | 40 x 50 | - | - | - |
| 27 000 | 22 x 40 25 x 35 30 x 25 | 22 x 50 25 x 40 30 x 30 | 25 x 50 30 x 40 35 x 30 | 35 x 45 40 x 40 | 40 x 50 | 40 x 60 | - | - | - |
| 33 000 | 22 x 50 25 x 40 30 x 30 | 25 x 45 30 x 35 | 30 x 45 35 x 35 | - | - | - | - | - | - |
| 39 000 | 25 x 45 30 x 35 | 25 x 50 30 x 40 35 x 30 | 30 x 50 35 x 40 | - | - | - | - | - | - |
| 47 000 | 25 x 50 30 x 40 35 x 30 | 30 x 45 35 x 35 | 35 x 45 40 x 40 | - | - | - | - | - | - |
| 56 000 | 30 x 50 35 x 40 | 35 x 45 40 x 40 | 40 x 50 | - | - | - | - | - | - |
| 68 000 | 35 x 45 40 x 40 | 40 x 50 | 40 x 60 | - | - | - | - | - | - |

DIMENSIONS in millimeters **AND AVAILABLE FORMS**



| DIMENSIONS in millimeters, MASS AND PACKAGING QUANTITIES | | | |
|--|---|--------------------|--|
| NOMINAL CASE SIZE $\varnothing D \times L$ | MAXIMUM SIZE $\varnothing D_{max.} \times L_{max.}$ | MASS (g) | PACKAGING QUANTITIES (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 | 18 | 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 30 | 36 x 32 | 41 | 50 |
| 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 | 106 | |



Aluminum Capacitors
Standard - 105 °C Snap-In

Vishay Roederstein

| ELECTRICAL DATA | |
|------------------|---|
| SYMBOL | DESCRIPTION |
| C _R | rated capacitance at 120 Hz |
| U _R | rated voltage |
| ESR | max. equivalent series resistance at 120 Hz |
| I _R | rated RMS ripple current at 120 Hz, 105 °C |
| T _{amb} | ambient temperature |
| RH | relative humidity |
| P | ambient pressure |

ORDERING EXAMPLE

Electrolytic capacitor EYH series

4700 µF/35 V; ± 20 %
Nominal case size: 22 mm x 35 mm
snap-in pin 4 mm, fully insulated.

Ordering code: MALIEYH07LA447F42K

Note

- Unless otherwise specified, all electrical values apply at
T_{amb} = 20 °C, P = 80 kPa to 120 kPa, RH = 45 % to 75 %

| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | | | |
|--|----------------------------------|---------------------------------------|---------------------------------|-------------------------|------------------------------|----------------------------------|----------------------------------|
| U _R (V) | C _R 120 Hz (µF) | NOMINAL CASE SIZE D x L (mm) | I _R 120 Hz (A) | I _{LS} (µA) | ESR 120 Hz MAX. (Ω) | ORDERING CODE 6 mm PIN LENGTH | ORDERING CODE 4 mm PIN LENGTH |
| 6.3 | 12 000 | 22 x 25 | 2.19 | 825 | 0.055 | MALIEYH07LU512B02K | MALIEYH07LU512B42K |
| | 15 000 | 22 x 30 | 2.53 | 922 | 0.047 | MALIEYH07LV515B02K | MALIEYH07LV515B42K |
| | 18 000 | 22 x 35 | 2.85 | 1010 | 0.041 | MALIEYH07LA518B02K | MALIEYH07LA518B42K |
| | 18 000 | 25 x 25 | 2.77 | 1010 | 0.041 | MALIEYH07AU518B02K | MALIEYH07AU518B42K |
| | 22 000 | 22 x 35 | 3.04 | 1117 | 0.036 | MALIEYH07LA522B02K | MALIEYH07LA522B42K |
| | 22 000 | 25 x 30 | 3.15 | 1117 | 0.036 | MALIEYH07AV522B02K | MALIEYH07AV522B42K |
| | 27 000 | 22 x 40 | 3.40 | 1237 | 0.032 | MALIEYH07LB527B02K | MALIEYH07LB527B42K |
| | 27 000 | 25 x 35 | 3.53 | 1237 | 0.032 | MALIEYH07AA527B02K | MALIEYH07AA527B42K |
| | 27 000 | 30 x 25 | 3.42 | 1237 | 0.032 | MALIEYH07BU527B02K | MALIEYH07BU527B42K |
| | 33 000 | 22 x 50 | 3.92 | 1368 | 0.029 | MALIEYH07LD533B02K | MALIEYH07LD533B42K |
| | 33 000 | 25 x 40 | 3.91 | 1368 | 0.029 | MALIEYH07AB533B02K | MALIEYH07AB533B42K |
| | 33 000 | 30 x 30 | 3.83 | 1368 | 0.029 | MALIEYH07BV533B02K | MALIEYH07BV533B42K |
| | 39 000 | 25 x 45 | 4.26 | 1487 | 0.026 | MALIEYH07AC539B02K | MALIEYH07AC539B42K |
| | 39 000 | 30 x 35 | 4.20 | 1487 | 0.026 | MALIEYH07BA539B02K | MALIEYH07BA539B42K |
| | 47 000 | 25 x 50 | 4.63 | 1632 | 0.024 | MALIEYH07AD547B02K | MALIEYH07AD547B42K |
| | 47 000 | 30 x 40 | 4.60 | 1632 | 0.024 | MALIEYH07BB547B02K | MALIEYH07BB547B42K |
| | 47 000 | 35 x 30 | 4.50 | 1632 | 0.024 | MALIEYH07CV547B02K | MALIEYH07CV547B42K |
| | 56 000 | 30 x 50 | 5.17 | 1782 | 0.022 | MALIEYH07BD556B02K | MALIEYH07BD556B42K |
| 56 000 | 35 x 40 | 5.12 | 1782 | 0.022 | MALIEYH07CB556B02K | MALIEYH07CB556B42K | |
| 68 000 | 35 x 45 | 5.52 | 1964 | 0.021 | MALIEYH07CC568B02K | MALIEYH07CC568B42K | |
| 68 000 | 40 x 40 | 5.62 | 1964 | 0.021 | MALIEYH07DB568B02K | MALIEYH07DB568B42K | |
| 10 | 10 000 | 22 x 25 | 2.17 | 949 | 0.066 | MALIEYH07LU510C02K | MALIEYH07LU510C42K |
| | 12 000 | 22 x 30 | 2.48 | 1039 | 0.057 | MALIEYH07LV512C02K | MALIEYH07LV512C42K |
| | 15 000 | 22 x 35 | 2.83 | 1162 | 0.049 | MALIEYH07LA515C02K | MALIEYH07LA515C42K |
| | 15 000 | 25 x 25 | 2.75 | 1162 | 0.049 | MALIEYH07AU515C02K | MALIEYH07AU515C42K |
| | 18 000 | 22 x 35 | 3.00 | 1273 | 0.043 | MALIEYH07LA518C02K | MALIEYH07LA518C42K |
| | 18 000 | 25 x 30 | 3.11 | 1273 | 0.043 | MALIEYH07AV518C02K | MALIEYH07AV518C42K |
| | 22 000 | 22 x 40 | 3.35 | 1407 | 0.037 | MALIEYH07LB522C02K | MALIEYH07LB522C42K |
| | 22 000 | 25 x 35 | 3.48 | 1407 | 0.037 | MALIEYH07AA522C02K | MALIEYH07AA522C42K |
| | 22 000 | 30 x 25 | 3.38 | 1407 | 0.037 | MALIEYH07BU522C02K | MALIEYH07BU522C42K |
| | 27 000 | 22 x 50 | 3.88 | 1559 | 0.033 | MALIEYH07LD527C02K | MALIEYH07LD527C42K |
| | 27 000 | 25 x 40 | 3.87 | 1559 | 0.033 | MALIEYH07AB527C02K | MALIEYH07AB527C42K |
| | 27 000 | 30 x 30 | 3.79 | 1559 | 0.033 | MALIEYH07BV527C02K | MALIEYH07BV527C42K |

| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | | | |
|--|----------------------------------|---------------------------------------|---------------------------------|-------------------------|------------------------------|----------------------------------|----------------------------------|
| U _R (V) | C _R 120 Hz (μF) | NOMINAL CASE SIZE D x L (mm) | I _R 120 Hz (A) | I _{L5} (μA) | ESR 120 Hz MAX. (Ω) | ORDERING CODE 6 mm PIN LENGTH | ORDERING CODE 4 mm PIN LENGTH |
| 10 | 33 000 | 25 x 45 | 4.26 | 1723 | 0.029 | MALIEYH07AC533C02K | MALIEYH07AC533C42K |
| | 33 000 | 30 x 35 | 4.20 | 1723 | 0.029 | MALIEYH07BA533C02K | MALIEYH07BA533C42K |
| | 39 000 | 25 x 50 | 4.60 | 1873 | 0.027 | MALIEYH07AD539C02K | MALIEYH07AD539C42K |
| | 39 000 | 30 x 40 | 4.57 | 1873 | 0.027 | MALIEYH07BB539C02K | MALIEYH07BB539C42K |
| | 39 000 | 35 x 30 | 4.46 | 1873 | 0.027 | MALIEYH07CV539C02K | MALIEYH07CV539C42K |
| | 47 000 | 30 x 45 | 4.95 | 2057 | 0.025 | MALIEYH07BC547C02K | MALIEYH07BC547C42K |
| | 47 000 | 35 x 35 | 4.87 | 2057 | 0.025 | MALIEYH07CA547C02K | MALIEYH07CA547C42K |
| | 56 000 | 35 x 45 | 5.49 | 2245 | 0.023 | MALIEYH07CC556C02K | MALIEYH07CC556C42K |
| | 56 000 | 40 x 40 | 5.59 | 2245 | 0.023 | MALIEYH07DB556C02K | MALIEYH07DB556C42K |
| | 68 000 | 40 x 50 | 6.22 | 2474 | 0.021 | MALIEYH07DD568C02K | MALIEYH07DD568C42K |
| 16 | 8200 | 22 x 25 | 2.14 | 1087 | 0.065 | MALIEYH07LU482D02K | MALIEYH07LU482D42K |
| | 10 000 | 22 x 30 | 2.48 | 1200 | 0.055 | MALIEYH07LV510D02K | MALIEYH07LV510D42K |
| | 10 000 | 25 x 25 | 2.56 | 1200 | 0.055 | MALIEYH07AU510D02K | MALIEYH07AU510D42K |
| | 12 000 | 22 x 35 | 2.80 | 1315 | 0.048 | MALIEYH07LA512D02K | MALIEYH07LA512D42K |
| | 12 000 | 25 x 30 | 2.90 | 1315 | 0.048 | MALIEYH07AV512D02K | MALIEYH07AV512D42K |
| | 12 000 | 30 x 25 | 2.97 | 1315 | 0.048 | MALIEYH07BU512D02K | MALIEYH07BU512D42K |
| | 15 000 | 22 x 40 | 3.17 | 1470 | 0.041 | MALIEYH07LB515D02K | MALIEYH07LB515D42K |
| | 15 000 | 25 x 35 | 3.29 | 1470 | 0.041 | MALIEYH07AA515D02K | MALIEYH07AA515D42K |
| | 15 000 | 30 x 30 | 3.38 | 1470 | 0.041 | MALIEYH07BV515D02K | MALIEYH07BV515D42K |
| | 18 000 | 22 x 45 | 3.50 | 1610 | 0.037 | MALIEYH07LC518D02K | MALIEYH07LC518D42K |
| | 18 000 | 25 x 40 | 3.65 | 1610 | 0.037 | MALIEYH07AB518D02K | MALIEYH07AB518D42K |
| | 18 000 | 30 x 30 | 3.57 | 1610 | 0.037 | MALIEYH07BV518D02K | MALIEYH07BV518D42K |
| | 22 000 | 25 x 45 | 4.03 | 1780 | 0.032 | MALIEYH07AC522D02K | MALIEYH07AC522D42K |
| | 22 000 | 30 x 35 | 3.98 | 1780 | 0.032 | MALIEYH07BA522D02K | MALIEYH07BA522D42K |
| | 27 000 | 25 x 50 | 4.42 | 1972 | 0.029 | MALIEYH07AD527D02K | MALIEYH07AD527D42K |
| | 27 000 | 30 x 40 | 4.39 | 1972 | 0.029 | MALIEYH07BB527D02K | MALIEYH07BB527D42K |
| | 27 000 | 35 x 30 | 4.29 | 1972 | 0.029 | MALIEYH07CV527D02K | MALIEYH07CV527D42K |
| | 33 000 | 30 x 45 | 4.79 | 2180 | 0.026 | MALIEYH07BC533D02K | MALIEYH07BC533D42K |
| | 33 000 | 35 x 35 | 4.71 | 2180 | 0.026 | MALIEYH07CA533D02K | MALIEYH07CA533D42K |
| | 39 000 | 30 x 50 | 5.16 | 2370 | 0.024 | MALIEYH07BD539D02K | MALIEYH07BD539D42K |
| | 39 000 | 35 x 40 | 5.10 | 2370 | 0.024 | MALIEYH07CB539D02K | MALIEYH07CB539D42K |
| | 47 000 | 35 x 45 | 5.50 | 2602 | 0.022 | MALIEYH07CC547D02K | MALIEYH07CC547D42K |
| | 47 000 | 40 x 40 | 5.60 | 2602 | 0.022 | MALIEYH07DB547D02K | MALIEYH07DB547D42K |
| | 56 000 | 40 x 50 | 6.22 | 2840 | 0.021 | MALIEYH07DD556D02K | MALIEYH07DD556D42K |
| | 68 000 | 40 x 60 | 6.83 | 3129 | 0.019 | MALIEYH07DF568D02K | MALIEYH07DF568D42K |
| | 25 | 4700 | 22 x 25 | 1.73 | 1028 | 0.099 | MALIEYH07LU447E02K |
| 5600 | | 22 x 30 | 1.98 | 1122 | 0.085 | MALIEYH07LV456E02K | MALIEYH07LV456E42K |
| 6800 | | 22 x 30 | 2.14 | 1237 | 0.072 | MALIEYH07LV468E02K | MALIEYH07LV468E42K |
| 8200 | | 22 x 35 | 2.42 | 1358 | 0.062 | MALIEYH07LA482E02K | MALIEYH07LA482E42K |
| 8200 | | 25 x 30 | 2.50 | 1358 | 0.062 | MALIEYH07AV482E02K | MALIEYH07AV482E42K |
| 10 000 | | 22 x 40 | 2.77 | 1500 | 0.053 | MALIEYH07LB510E02K | MALIEYH07LB510E42K |
| 10 000 | | 25 x 35 | 2.88 | 1500 | 0.053 | MALIEYH07AA510E02K | MALIEYH07AA510E42K |
| 12 000 | | 22 x 45 | 3.09 | 1643 | 0.047 | MALIEYH07LC512E02K | MALIEYH07LC512E42K |
| 12 000 | | 25 x 40 | 3.22 | 1643 | 0.047 | MALIEYH07AB512E02K | MALIEYH07AB512E42K |
| 12 000 | | 30 x 30 | 3.15 | 1643 | 0.047 | MALIEYH07BV512E02K | MALIEYH07BV512E42K |
| 15 000 | | 25 x 45 | 3.62 | 1837 | 0.040 | MALIEYH07AC515E02K | MALIEYH07AC515E42K |
| 15 000 | | 30 x 35 | 3.57 | 1837 | 0.040 | MALIEYH07BA515E02K | MALIEYH07BA515E42K |
| 15 000 | | 35 x 30 | 3.65 | 1837 | 0.040 | MALIEYH07CV515E02K | MALIEYH07CV515E42K |
| 18 000 | | 25 x 50 | 3.98 | 2012 | 0.036 | MALIEYH07AD518E02K | MALIEYH07AD518E42K |
| 18 000 | | 30 x 40 | 3.95 | 2012 | 0.036 | MALIEYH07BB518E02K | MALIEYH07BB518E42K |
| 18 000 | | 35 x 35 | 4.06 | 2012 | 0.036 | MALIEYH07CA518E02K | MALIEYH07CA518E42K |
| 22 000 | | 30 x 45 | 4.36 | 2225 | 0.032 | MALIEYH07BC522E02K | MALIEYH07BC522E42K |
| 22 000 | | 35 x 35 | 4.28 | 2225 | 0.032 | MALIEYH07CA522E02K | MALIEYH07CA522E42K |
| 27 000 | | 35 x 45 | 4.92 | 2465 | 0.028 | MALIEYH07CC527E02K | MALIEYH07CC527E42K |
| 27 000 | | 40 x 40 | 5.01 | 2465 | 0.028 | MALIEYH07DB527E02K | MALIEYH07DB527E42K |



Aluminum Capacitors
Standard - 105 °C Snap-In

Vishay Roederstein

| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | | | |
|--|----------------------------------|---------------------------------------|---------------------------------|-------------------------|------------------------------|----------------------------------|----------------------------------|
| U _R (V) | C _R 120 Hz (μF) | NOMINAL CASE SIZE D x L (mm) | I _R 120 Hz (A) | I _{L5} (μA) | ESR 120 Hz MAX. (Ω) | ORDERING CODE 6 mm PIN LENGTH | ORDERING CODE 4 mm PIN LENGTH |
| 35 | 3300 | 22 x 25 | 1.62 | 1020 | 0.141 | MALIEYH07LU433F02K | MALIEYH07LU433F42K |
| | 3900 | 22 x 30 | 1.88 | 1108 | 0.121 | MALIEYH07LV439F02K | MALIEYH07LV439F42K |
| | 4700 | 22 x 35 | 2.14 | 1217 | 0.103 | MALIEYH07LA447F02K | MALIEYH07LA447F42K |
| | 4700 | 25 x 25 | 2.09 | 1217 | 0.103 | MALIEYH07AU447F02K | MALIEYH07AU447F42K |
| | 5600 | 22 x 35 | 2.29 | 1328 | 0.088 | MALIEYH07LA456F02K | MALIEYH07LA456F42K |
| | 5600 | 25 x 30 | 2.37 | 1328 | 0.088 | MALIEYH07AV456F02K | MALIEYH07AV456F42K |
| | 6800 | 22 x 40 | 2.61 | 1464 | 0.075 | MALIEYH07LB468F02K | MALIEYH07LB468F42K |
| | 6800 | 25 x 35 | 2.71 | 1464 | 0.075 | MALIEYH07AA468F02K | MALIEYH07AA468F42K |
| | 8200 | 22 x 50 | 3.02 | 1607 | 0.065 | MALIEYH07LD482F02K | MALIEYH07LD482F42K |
| | 8200 | 25 x 40 | 3.02 | 1607 | 0.065 | MALIEYH07AB482F02K | MALIEYH07AB482F42K |
| | 8200 | 30 x 30 | 2.95 | 1607 | 0.065 | MALIEYH07BV482F02K | MALIEYH07BV482F42K |
| | 10 000 | 25 x 45 | 3.43 | 1775 | 0.055 | MALIEYH07AC510F02K | MALIEYH07AC510F42K |
| | 10 000 | 30 x 30 | 3.38 | 1775 | 0.055 | MALIEYH07BV510F02K | MALIEYH07BV510F42K |
| | 12 000 | 25 x 50 | 3.78 | 1944 | 0.048 | MALIEYH07AD512F02K | MALIEYH07AD512F42K |
| | 12 000 | 35 x 30 | 3.67 | 1944 | 0.048 | MALIEYH07CV512F02K | MALIEYH07CV512F42K |
| | 15 000 | 35 x 35 | 4.12 | 2174 | 0.041 | MALIEYH07CA515F02K | MALIEYH07CA515F42K |
| | 18 000 | 35 x 40 | 4.52 | 2381 | 0.037 | MALIEYH07CB518F02K | MALIEYH07CB518F42K |
| 22 000 | 35 x 45 | 4.95 | 2632 | 0.032 | MALIEYH07CC522F02K | MALIEYH07CC522F42K | |
| 22 000 | 40 x 40 | 5.04 | 2632 | 0.032 | MALIEYH07DB522F02K | MALIEYH07DB522F42K | |
| 27 000 | 40 x 50 | 5.92 | 2916 | 0.029 | MALIEYH07DD527F02K | MALIEYH07DD527F42K | |
| 50 | 2700 | 22 x 30 | 1.94 | 1102 | 0.123 | MALIEYH07LV427H02K | MALIEYH07LV427H42K |
| | 3300 | 22 x 35 | 2.20 | 1219 | 0.103 | MALIEYH07LA433H02K | MALIEYH07LA433H42K |
| | 3900 | 22 x 40 | 2.52 | 1325 | 0.089 | MALIEYH07LB439H02K | MALIEYH07LB439H42K |
| | 3900 | 25 x 35 | 2.62 | 1325 | 0.089 | MALIEYH07AA439H02K | MALIEYH07AA439H42K |
| | 3900 | 30 x 25 | 2.54 | 1325 | 0.089 | MALIEYH07BU439H02K | MALIEYH07BU439H42K |
| | 4700 | 22 x 45 | 2.81 | 1454 | 0.076 | MALIEYH07LC447H02K | MALIEYH07LC447H42K |
| | 4700 | 25 x 40 | 2.93 | 1454 | 0.076 | MALIEYH07AB447H02K | MALIEYH07AB447H42K |
| | 4700 | 30 x 30 | 2.87 | 1454 | 0.076 | MALIEYH07BV447H02K | MALIEYH07BV447H42K |
| | 5600 | 22 x 50 | 3.11 | 1587 | 0.066 | MALIEYH07LD456H02K | MALIEYH07LD456H42K |
| | 5600 | 25 x 40 | 3.11 | 1587 | 0.066 | MALIEYH07AB456H02K | MALIEYH07AB456H42K |
| | 5600 | 30 x 35 | 3.21 | 1587 | 0.066 | MALIEYH07BA456H02K | MALIEYH07BA456H42K |
| | 6800 | 25 x 50 | 3.64 | 1749 | 0.057 | MALIEYH07AD468H02K | MALIEYH07AD468H42K |
| | 6800 | 30 x 40 | 3.61 | 1749 | 0.057 | MALIEYH07BB468H02K | MALIEYH07BB468H42K |
| | 6800 | 35 x 30 | 3.53 | 1749 | 0.057 | MALIEYH07CV468H02K | MALIEYH07CV468H42K |
| | 8200 | 30 x 45 | 3.94 | 1921 | 0.049 | MALIEYH07BC482H02K | MALIEYH07BC482H42K |
| | 8200 | 35 x 35 | 3.87 | 1921 | 0.049 | MALIEYH07CA482H02K | MALIEYH07CA482H42K |
| | 10 000 | 30 x 50 | 4.42 | 2121 | 0.043 | MALIEYH07BD510H02K | MALIEYH07BD510H42K |
| | 10 000 | 35 x 40 | 4.37 | 2121 | 0.043 | MALIEYH07CB510H02K | MALIEYH07CB510H42K |
| | 12 000 | 35 x 45 | 4.78 | 2324 | 0.038 | MALIEYH07CC512H02K | MALIEYH07CC512H42K |
| 15 000 | 35 x 50 | 5.24 | 2598 | 0.033 | MALIEYH07CD515H02K | MALIEYH07CD515H42K | |
| 15 000 | 40 x 40 | 5.13 | 2598 | 0.033 | MALIEYH07DB515H02K | MALIEYH07DB515H42K | |
| 18 000 | 40 x 50 | 5.76 | 2846 | 0.030 | MALIEYH07DD518H02K | MALIEYH07DD518H42K | |
| 22 000 | 40 x 50 | 5.98 | 3146 | 0.027 | MALIEYH07DD522H02K | MALIEYH07DD522H42K | |
| 27 000 | 40 x 60 | 6.61 | 3486 | 0.024 | MALIEYH07DF527H02K | MALIEYH07DF527H42K | |
| 63 | 1200 | 22 x 25 | 1.37 | 825 | 0.276 | MALIEYH07LU412J02K | MALIEYH07LU412J42K |
| | 1500 | 22 x 30 | 1.50 | 922 | 0.224 | MALIEYH07LV415J02K | MALIEYH07LV415J42K |
| | 1500 | 25 x 25 | 1.54 | 922 | 0.224 | MALIEYH07AU415J02K | MALIEYH07AU415J42K |
| | 1800 | 22 x 30 | 1.64 | 1010 | 0.189 | MALIEYH07LV418J02K | MALIEYH07LV418J42K |
| | 1800 | 25 x 25 | 1.69 | 1010 | 0.189 | MALIEYH07AU418J02K | MALIEYH07AU418J42K |
| | 2200 | 22 x 35 | 1.86 | 1117 | 0.157 | MALIEYH07LA422J02K | MALIEYH07LA422J42K |
| | 2200 | 25 x 30 | 1.92 | 1117 | 0.157 | MALIEYH07AV422J02K | MALIEYH07AV422J42K |
| | 2700 | 22 x 40 | 2.17 | 1237 | 0.130 | MALIEYH07LB427J02K | MALIEYH07LB427J42K |
| | 2700 | 25 x 30 | 2.13 | 1237 | 0.130 | MALIEYH07AV427J02K | MALIEYH07AV427J42K |
| | 2700 | 30 x 25 | 2.18 | 1237 | 0.130 | MALIEYH07BU427J02K | MALIEYH07BU427J42K |

| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | | | |
|--|----------------------------------|---------------------------------------|---------------------------------|-------------------------|------------------------------|----------------------------------|----------------------------------|
| U _R (V) | C _R 120 Hz (μF) | NOMINAL CASE SIZE D x L (mm) | I _R 120 Hz (A) | I _{L5} (μA) | ESR 120 Hz MAX. (Ω) | ORDERING CODE 6 mm PIN LENGTH | ORDERING CODE 4 mm PIN LENGTH |
| 63 | 3300 | 22 x 50 | 2.53 | 1368 | 0.109 | MALIEYH07LD433J02K | MALIEYH07LD433J42K |
| | 3300 | 25 x 40 | 2.53 | 1368 | 0.109 | MALIEYH07AB433J02K | MALIEYH07AB433J42K |
| | 3300 | 30 x 30 | 2.48 | 1368 | 0.109 | MALIEYH07BV433J02K | MALIEYH07BV433J42K |
| | 3900 | 25 x 45 | 2.88 | 1487 | 0.094 | MALIEYH07AC439J02K | MALIEYH07AC439J42K |
| | 3900 | 30 x 35 | 2.84 | 1487 | 0.094 | MALIEYH07BA439J02K | MALIEYH07BA439J42K |
| | 4700 | 25 x 50 | 3.2 | 1632 | 0.080 | MALIEYH07AD447J02K | MALIEYH07AD447J42K |
| | 4700 | 30 x 40 | 3.17 | 1632 | 0.080 | MALIEYH07BB447J02K | MALIEYH07BB447J42K |
| | 4700 | 35 x 30 | 3.10 | 1632 | 0.080 | MALIEYH07CV447J02K | MALIEYH07CV447J42K |
| | 5600 | 30 x 45 | 3.51 | 1782 | 0.070 | MALIEYH07BC456J02K | MALIEYH07BC456J42K |
| | 5600 | 35 x 35 | 3.46 | 1782 | 0.070 | MALIEYH07CA456J02K | MALIEYH07CA456J42K |
| | 6800 | 30 x 50 | 3.92 | 1964 | 0.060 | MALIEYH07BD468J02K | MALIEYH07BD468J42K |
| | 6800 | 35 x 40 | 3.88 | 1964 | 0.060 | MALIEYH07CB468J02K | MALIEYH07CB468J42K |
| | 8200 | 35 x 45 | 4.22 | 2156 | 0.052 | MALIEYH07CC482J02K | MALIEYH07CC482J42K |
| | 10 000 | 35 x 50 | 4.74 | 2381 | 0.045 | MALIEYH07CD510J02K | MALIEYH07CD510J42K |
| | 10 000 | 40 x 40 | 4.64 | 2381 | 0.045 | MALIEYH07DB510J02K | MALIEYH07DB510J42K |
| 80 | 820 | 22 x 25 | 1.37 | 768 | 0.323 | MALIEYH07LU382W02K | MALIEYH07LU382W42K |
| | 1000 | 22 x 30 | 1.62 | 849 | 0.268 | MALIEYH07LV410W02K | MALIEYH07LV410W42K |
| | 1000 | 25 x 25 | 1.67 | 849 | 0.268 | MALIEYH07AU410W02K | MALIEYH07AU410W42K |
| | 1200 | 22 x 30 | 1.67 | 930 | 0.225 | MALIEYH07LV412W02K | MALIEYH07LV412W42K |
| | 1200 | 25 x 25 | 1.72 | 930 | 0.225 | MALIEYH07AU412W02K | MALIEYH07AU412W42K |
| | 1500 | 22 x 35 | 1.98 | 1039 | 0.183 | MALIEYH07LA415W02K | MALIEYH07LA415W42K |
| | 1500 | 25 x 30 | 2.05 | 1039 | 0.183 | MALIEYH07AV415W02K | MALIEYH07AV415W42K |
| | 1800 | 22 x 40 | 2.28 | 1138 | 0.155 | MALIEYH07LB418W02K | MALIEYH07LB418W42K |
| | 1800 | 25 x 35 | 2.37 | 1138 | 0.155 | MALIEYH07AA418W02K | MALIEYH07AA418W42K |
| | 1800 | 30 x 25 | 2.30 | 1138 | 0.155 | MALIEYH07BU418W02K | MALIEYH07BU418W42K |
| | 2200 | 22 x 45 | 2.51 | 1259 | 0.129 | MALIEYH07LC422W02K | MALIEYH07LC422W42K |
| | 2200 | 25 x 35 | 2.49 | 1259 | 0.129 | MALIEYH07AA422W02K | MALIEYH07AA422W42K |
| | 2200 | 30 x 30 | 2.56 | 1259 | 0.129 | MALIEYH07BV422W02K | MALIEYH07BV422W42K |
| | 2700 | 25 x 45 | 3.03 | 1394 | 0.107 | MALIEYH07AC427W02K | MALIEYH07AC427W42K |
| | 2700 | 30 x 35 | 2.99 | 1394 | 0.107 | MALIEYH07BA427W02K | MALIEYH07BA427W42K |
| | 3300 | 25 x 50 | 3.33 | 1541 | 0.090 | MALIEYH07AD433W02K | MALIEYH07AD433W42K |
| | 3300 | 30 x 40 | 3.30 | 1541 | 0.090 | MALIEYH07BB433W02K | MALIEYH07BB433W42K |
| | 3300 | 35 x 30 | 3.23 | 1541 | 0.090 | MALIEYH07CV433W02K | MALIEYH07CV433W42K |
| | 3900 | 30 x 45 | 3.75 | 1676 | 0.078 | MALIEYH07BC439W02K | MALIEYH07BC439W42K |
| | 3900 | 35 x 35 | 3.69 | 1676 | 0.078 | MALIEYH07CA439W02K | MALIEYH07CA439W42K |
| | 4700 | 30 x 50 | 4.10 | 1840 | 0.067 | MALIEYH07BD447W02K | MALIEYH07BD447W42K |
| | 4700 | 35 x 40 | 4.06 | 1840 | 0.067 | MALIEYH07CB447W02K | MALIEYH07CB447W42K |
| | 5600 | 35 x 45 | 4.44 | 2008 | 0.059 | MALIEYH07CC456W02K | MALIEYH07CC456W42K |
| | 6800 | 40 x 40 | 4.80 | 2213 | 0.051 | MALIEYH07DB468W02K | MALIEYH07DB468W42K |
| 8200 | 40 x 50 | 5.32 | 2430 | 0.044 | MALIEYH07DD482W02K | MALIEYH07DD482W42K | |
| 100 | 820 | 22 x 30 | 1.16 | 859 | 0.323 | MALIEYH07LV382L02K | MALIEYH07LV382L42K |
| | 820 | 25 x 25 | 1.51 | 859 | 0.323 | MALIEYH07AU382L02K | MALIEYH07AU382L42K |
| | 1000 | 22 x 35 | 1.71 | 949 | 0.268 | MALIEYH07LA410L02K | MALIEYH07LA410L42K |
| | 1000 | 25 x 30 | 1.77 | 949 | 0.268 | MALIEYH07AV410L02K | MALIEYH07AV410L42K |
| | 1200 | 22 x 40 | 1.86 | 1039 | 0.225 | MALIEYH07LB412L02K | MALIEYH07LB412L42K |
| | 1200 | 25 x 35 | 1.94 | 1039 | 0.225 | MALIEYH07AA412L02K | MALIEYH07AA412L42K |
| | 1200 | 30 x 25 | 1.88 | 1039 | 0.225 | MALIEYH07BU412L02K | MALIEYH07BU412L42K |
| | 1500 | 22 x 45 | 2.18 | 1162 | 0.183 | MALIEYH07LC415L02K | MALIEYH07LC415L42K |
| | 1500 | 25 x 40 | 2.28 | 1162 | 0.183 | MALIEYH07AB415L02K | MALIEYH07AB415L42K |
| | 1500 | 30 x 30 | 2.23 | 1162 | 0.183 | MALIEYH07BV415L02K | MALIEYH07BV415L42K |
| | 1800 | 25 x 45 | 2.61 | 1273 | 0.155 | MALIEYH07AC418L02K | MALIEYH07AC418L42K |
| | 1800 | 30 x 35 | 2.57 | 1273 | 0.155 | MALIEYH07BA418L02K | MALIEYH07BA418L42K |
| | 2200 | 25 x 50 | 2.85 | 1407 | 0.129 | MALIEYH07AD422L02K | MALIEYH07AD422L42K |
| | 2200 | 30 x 40 | 2.83 | 1407 | 0.129 | MALIEYH07BB422L02K | MALIEYH07BB422L42K |
| | 2200 | 35 x 30 | 2.76 | 1407 | 0.129 | MALIEYH07CV422L02K | MALIEYH07CV422L42K |



Aluminum Capacitors
Standard - 105 °C Snap-In

Vishay Roederstein

| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | | | |
|--|----------------------------------|---------------------------------------|---------------------------------|-------------------------|------------------------------|----------------------------------|----------------------------------|
| U _R (V) | C _R 120 Hz (μF) | NOMINAL CASE SIZE D x L (mm) | I _R 120 Hz (A) | I _{L5} (μA) | ESR 120 Hz MAX. (Ω) | ORDERING CODE 6 mm PIN LENGTH | ORDERING CODE 4 mm PIN LENGTH |
| 100 | 2700 | 30 x 45 | 3.27 | 1559 | 0.107 | MALIEYH07BC427L02K | MALIEYH07BC427L42K |
| | 2700 | 35 x 35 | 3.22 | 1559 | 0.107 | MALIEYH07CA427L02K | MALIEYH07CA427L42K |
| | 3300 | 30 x 50 | 3.59 | 1723 | 0.090 | MALIEYH07BD433L02K | MALIEYH07BD433L42K |
| | 3300 | 35 x 40 | 3.55 | 1723 | 0.090 | MALIEYH07CB433L02K | MALIEYH07CB433L42K |
| | 3900 | 35 x 45 | 4.03 | 1873 | 0.078 | MALIEYH07CC439L02K | MALIEYH07CC439L42K |
| | 4700 | 35 x 50 | 4.40 | 2057 | 0.067 | MALIEYH07CD447L02K | MALIEYH07CD447L42K |
| | 4700 | 40 x 40 | 4.31 | 2057 | 0.067 | MALIEYH07DB447L02K | MALIEYH07DB447L42K |
| | 5600 | 40 x 50 | 4.88 | 2245 | 0.059 | MALIEYH07DD456L02K | MALIEYH07DD456L42K |
| | 6800 | 40 x 50 | 5.18 | 2474 | 0.051 | MALIEYH07DD468L02K | MALIEYH07DD468L42K |

LIFETIME TABLE U_R ≤ 100 V

| INTERRELATION BETWEEN ALTERNATING CURRENT, AMBIENT TEMPERATURE AND LIFETIME | | | | | | | | | | | | | | | | | | | | |
|---|------|-------------|------|------|------|-------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------------|
| I/I _R (FREQUENCY DEPENDENT) | | | | | | | LIFETIME MULTIPLIER L (DEPENDING ON I/I _R AND T _{amb}) | | | | | | | | | | | | | |
| FREQUENCY (Hz) | | | | | | | AMBIENT TEMPERATURE T _{amb} (°C) | | | | | | | | | | | | | |
| 50 | 100 | 120 | 250 | 500 | 1000 | >2500 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 | 105 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 127 | 81 | 53 | 35 | 23 | 16 | 11 | 7.4 | 5.1 | 3.6 | 2.6 | 1.84 | 1.33 |
| 0.17 | 0.20 | 0.20 | 0.21 | 0.22 | 0.23 | 0.23 | 194 | 123 | 79 | 51 | 34 | 23 | 15 | 10 | 7.2 | 5.0 | 3.5 | 2.5 | 1.81 | 1.31 |
| 0.35 | 0.39 | 0.40 | 0.42 | 0.44 | 0.46 | 0.47 | 177 | 113 | 74 | 48 | 32 | 21 | 14 | 9.9 | 6.9 | 4.8 | 3.4 | 2.4 | 1.73 | 1.25 |
| 0.52 | 0.59 | 0.60 | 0.64 | 0.66 | 0.68 | 0.70 | 157 | 101 | 66 | 43 | 29 | 19 | 13 | 9.1 | 6.3 | 4.5 | 3.2 | 2.3 | 1.63 | 1.18 |
| 0.70 | 0.78 | 0.80 | 0.85 | 0.88 | 0.91 | 0.94 | 132 | 86 | 57 | 38 | 25 | 17 | 12 | 8.2 | 5.8 | 4.1 | 2.9 | 2.1 | 1.50 | 1.09 |
| 0.87 | 0.98 | 1.00 | 1.06 | 1.10 | 1.14 | 1.17 | 108 | 72 | 48 | 32 | 22 | 15 | 10 | 7.2 | 5.1 | 3.6 | 2.6 | 1.9 | 1.36 | 1.00 |
| 1.04 | 1.17 | 1.20 | 1.27 | 1.32 | 1.37 | 1.40 | 86 | 58 | 39 | 27 | 18 | 13 | 8.9 | 6.2 | 4.4 | 3.2 | 2.3 | 1.6 | 1.20 | |
| 1.22 | 1.37 | 1.40 | 1.48 | 1.54 | 1.60 | 1.64 | 67 | 46 | 31 | 22 | 15 | 11 | 7.4 | 5.3 | 3.8 | 2.7 | 2.0 | 1.4 | 1.05 | |
| 1.39 | 1.56 | 1.60 | 1.70 | 1.76 | 1.82 | 1.87 | 51 | 35 | 25 | 17 | 12 | 8.6 | 6.1 | 4.4 | 3.2 | 2.3 | 1.7 | 1.2 | | |
| 1.57 | 1.76 | 1.80 | 1.91 | 1.98 | 2.05 | 2.11 | 38 | 27 | 19 | 14 | 9.7 | 6.9 | 5.0 | 3.6 | 2.6 | 1.9 | 1.4 | 1.0 | | |
| 1.74 | 1.95 | 2.00 | 2.12 | 2.20 | 2.28 | 2.34 | 28 | 20 | 15 | 10 | 7.6 | 5.5 | 4.0 | 2.9 | 2.1 | 1.6 | 1.2 | | | |
| 1.91 | 2.15 | 2.20 | 2.33 | 2.42 | 2.51 | 2.57 | 20 | 15 | 11 | 7.9 | 5.8 | 4.3 | 3.1 | 2.3 | 1.7 | 1.3 | | | | |
| 2.09 | 2.34 | 2.40 | 2.54 | 2.64 | 2.74 | 2.81 | 15 | 11 | 8.1 | 6.0 | 4.4 | 3.3 | 2.4 | 1.8 | 1.4 | 1.0 | | | | |
| 2.26 | 2.54 | 2.60 | 2.76 | 2.86 | 2.96 | 3.04 | 11 | 7.9 | 5.9 | 4.4 | 3.3 | 2.5 | 1.9 | 1.4 | 1.1 | | | | | |
| 2.44 | 2.73 | 2.80 | 2.97 | 3.08 | 3.19 | 3.28 | 7.5 | 5.7 | 4.3 | 3.3 | 2.5 | 1.9 | 1.4 | 1.1 | | | | | | |
| 2.61 | 2.93 | 3.00 | 3.18 | 3.30 | 3.42 | 3.51 | 5.3 | 4.1 | 3.1 | 2.4 | 1.8 | 1.4 | 1.1 | | | | | | | |
| 2.78 | 3.12 | 3.20 | 3.39 | 3.52 | 3.65 | 3.74 | 3.7 | 2.9 | 2.2 | 1.7 | 1.3 | 1.0 | | | | | | | | |
| 2.96 | 3.32 | 3.40 | 3.60 | 3.74 | 3.88 | 3.98 | 2.5 | 2.0 | 1.6 | 1.2 | 1.0 | | | | | | | | | |
| 3.13 | 3.51 | 3.60 | 3.82 | 3.96 | 4.10 | 4.21 | 1.8 | 1.4 | 1.1 | | | | | | | | | | | |
| 3.31 | 3.71 | 3.80 | 4.03 | 4.18 | 4.33 | 4.45 | 1.2 | 1.0 | | | | | | | | | | | | |

**combination
not
permitted**

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 [°C]

L Lifetime multiplier

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



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