

■ Dimensions

| V(Code) | | 10 (1A) | | | 16 (1C) | | | 25 (1E) | | | 35 (1V) | | | 50 (1H) | | |
|-----------|-----------|-----------------------|--------------------|----------------------|-----------------------|--------------------|----------------------|-----------------------|--------------------|----------------------|-----------------------|--------------------|----------------------|-----------------------|--------------------|----------------------|
| Cap. (μF) | Item Code | Case size φD × L (mm) | Impedance (Ω) MAX. | Rated ripple (mArms) | Case size φD × L (mm) | Impedance (Ω) MAX. | Rated ripple (mArms) | Case size φD × L (mm) | Impedance (Ω) MAX. | Rated ripple (mArms) | Case size φD × L (mm) | Impedance (Ω) MAX. | Rated ripple (mArms) | Case size φD × L (mm) | Impedance (Ω) MAX. | Rated ripple (mArms) |
| 1 | 010 | | | | | | | | | | | | | 8 × 11.5 | 2.00 | 35 |
| 2.2 | 2R2 | | | | | | | | | | | | | 8 × 11.5 | 1.80 | 50 |
| 3.3 | 3R3 | | | | | | | | | | | | | 8 × 11.5 | 1.50 | 60 |
| 4.7 | 4R7 | | | | | | | | | | | | | 8 × 11.5 | 1.15 | 85 |
| 10 | 100 | | | | | | | | | | | | | 8 × 11.5 | 0.75 | 180 |
| 22 | 220 | | | | | | | | | | | | | 8 × 11.5 | 0.50 | 250 |
| 33 | 330 | | | | | | | | | | | | | 8 × 11.5 | 0.45 | 300 |
| 47 | 470 | | | | | | | | | | | | | 8 × 11.5 | 0.35 | 440 |
| 100 | 101 | | | | 8 × 11.5 | 0.32 | 340 | 8 × 11.5 | 0.13 | 500 | 10 × 12.5 | 0.15 | 620 | 10 × 12.5 | 0.18 | 555 |
| 220 | 221 | 8 × 11.5 | 0.26 | 340 | 10 × 12.5 | 0.15 | 620 | 10 × 12.5 | 0.10 | 680 | 10 × 16 | 0.094 | 790 | 10 × 20 | 0.098 | 930 |
| 330 | 331 | 10 × 12.5 | 0.15 | 620 | 10 × 12.5 | 0.10 | 680 | 10 × 16 | 0.075 | 945 | 10 × 20 | 0.075 | 950 | 12.5 × 20 | 0.070 | 1330 |
| 470 | 471 | 10 × 12.5 | 0.10 | 680 | 10 × 16 | 0.075 | 945 | 10 × 20 | 0.057 | 1100 | 12.5 × 20 | 0.058 | 1330 | 12.5 × 25 | 0.055 | 1650 |
| 1000 | 102 | 10 × 20 | 0.057 | 1100 | 12.5 × 20 | 0.042 | 1490 | 12.5 × 25 | 0.033 | 1750 | 16 × 25 | 0.031 | 2010 | 16 × 31.5 | 0.031 | 2430 |
| 2200 | 222 | 12.5 × 25 | 0.033 | 1750 | 16 × 25 | 0.024 | 2300 | 16 × 31.5 | 0.020 | 2710 | 18 × 35.5 | 0.025 | 2790 | | | |
| 3300 | 332 | 16 × 25 | 0.024 | 2300 | 16 × 31.5 | 0.020 | 2710 | 18 × 31.5 | 0.017 | 3310 | | | | | | |
| 4700 | 472 | 16 × 31.5 | 0.020 | 2710 | 18 × 31.5 | 0.018 | 3270 | | | | | | | | | |

| V(Code) | | 63 (1J) | | | 80 (1K) | | | 100 (2A) | | |
|-----------|-----------|-----------------------|--------------------|----------------------|-----------------------|--------------------|----------------------|-----------------------|--------------------|----------------------|
| Cap. (μF) | Item Code | Case size φD × L (mm) | Impedance (Ω) MAX. | Rated ripple (mArms) | Case size φD × L (mm) | Impedance (Ω) MAX. | Rated ripple (mArms) | Case size φD × L (mm) | Impedance (Ω) MAX. | Rated ripple (mArms) |
| 4.7 | 4R7 | | | | | | | 8 × 11.5 | 2.00 | 130 |
| 10 | 100 | | | | | | | 8 × 11.5 | 1.50 | 150 |
| 22 | 220 | 8 × 11.5 | 2.00 | 130 | 8 × 11.5 | 1.50 | 150 | 10 × 12.5 | 0.80 | 480 |
| 33 | 330 | 8 × 11.5 | 1.50 | 150 | 10 × 12.5 | 0.80 | 480 | 10 × 12.5 | 0.80 | 480 |
| 47 | 470 | 10 × 12.5 | 0.59 | 530 | 10 × 12.5 | 0.80 | 480 | 10 × 16 | 0.55 | 630 |
| 100 | 101 | 10 × 16 | 0.41 | 690 | 10 × 20 | 0.39 | 790 | 12.5 × 20 | 0.25 | 990 |
| 220 | 221 | 12.5 × 20 | 0.16 | 1050 | 12.5 × 25 | 0.18 | 1240 | 16 × 25 | 0.11 | 1500 |
| 330 | 331 | 12.5 × 25 | 0.12 | 1290 | 12.5 × 31.5 | 0.16 | 1390 | 16 × 31.5 | 0.079 | 1790 |
| 470 | 471 | 12.5 × 31.5 | 0.097 | 1460 | 16 × 25 | 0.11 | 1500 | | | |

Rated ripple current (mArms) at 125°C 100kHz
Impedance (Ω) MAX. at 20°C 100kHz

● Frequency coefficient of rated ripple current

| V | CV | Frequency | | | |
|-----------|-----------|-----------|-------|------|---------------|
| | | 120Hz | 300Hz | 1kHz | 10kHz or more |
| 10 to 100 | 1000 > CV | 0.50 | 0.64 | 0.83 | 1.00 |
| | 1000 ≤ CV | 0.67 | 0.79 | 0.91 | 1.00 |

| V(Code) | | 160 (2C) | | 200 (2D) | | 250 (2E) | | 350 (2V) | | 400 (2G) | | 450 (2W) | |
|-----------|-----------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| Cap. (μF) | Item Code | Case size φD × L (mm) | Rated ripple (mArms) | Case size φD × L (mm) | Rated ripple (mArms) | Case size φD × L (mm) | Rated ripple (mArms) | Case size φD × L (mm) | Rated ripple (mArms) | Case size φD × L (mm) | Rated ripple (mArms) | Case size φD × L (mm) | Rated ripple (mArms) |
| 4.7 | 4R7 | | | | | | | 10 × 20 | 53 | 10 × 20 | 53 | 10 × 25 | 58 |
| 10 | 100 | | | 10 × 20 | 78 | 10 × 20 | 78 | 10 × 25 | 85 | 10 × 25 | 86 | 12.5 × 20 | 86 |
| 22 | 220 | 10 × 20 | 115 | 10 × 25 | 126 | 12.5 × 20 | 128 | 12.5 × 25 | 139 | 12.5 × 31.5 | 142 | 16 × 25 | 154 |
| 33 | 330 | 10 × 25 | 154 | 12.5 × 20 | 157 | 12.5 × 25 | 171 | 16 × 25 | 189 | 16 × 25 | 189 | 16 × 31.5 | 203 |
| 47 | 470 | 12.5 × 20 | 187 | 12.5 × 25 | 204 | 16 × 25 | 225 | 16 × 31.5 | 243 | 16 × 31.5 | 243 | | |
| 68 | 680 | 12.5 × 25 | 245 | 16 × 20 | 250 | 16 × 31.5 | 292 | | | | | | |
| 100 | 101 | 16 × 25 | 329 | 16 × 25 | 329 | | | | | | | | |
| 150 | 151 | 16 × 31.5 | 434 | | | | | | | | | | |

Rated ripple current (mArms) at 125°C 120Hz

● Frequency coefficient of rated ripple current

| V | Cap. (μF) | Frequency | | | | | |
|------------|-----------|-----------|-------|-------|------|-------|----------------|
| | | 50Hz | 120Hz | 300Hz | 1kHz | 10kHz | 100kHz or more |
| 160 to 450 | 4.7 to 33 | 0.75 | 1.00 | 1.25 | 1.50 | 1.75 | 1.80 |
| | 47 to 150 | 0.80 | 1.00 | 1.15 | 1.30 | 1.40 | 1.50 |