

MV-AX Series Low impedance, Long life

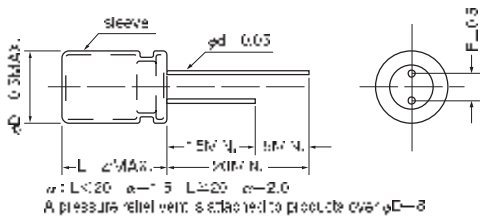


MV-AX series is low impedance and long life.
It is suitable for switching power supply, noise limiter etc.
Solvent proof (within 5 minutes).

Specifications

| Items | | Specifications | | | | | | | |
|--|--------------|---|------|------|------|------|------|------|-----------|
| Rated voltage (V) | | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 |
| Operating temperature range (°C) | | 55 to 105 | | | | | | | 40 to 105 |
| Capacitance tolerance (%) | | ±20 | | | | | | | (120Hz) |
| Tangent of loss angel (tanδ) (MAX.) | | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.10 | 0.10 |
| Leakage current (L.C.) (μA./after 2 min.) (MAX.) | | 0.02 to be added to the above value every time nominal capacitance exceeds 1000 μF. (120Hz) | | | | | | | |
| Impedance (120Hz) ratio at low temperature (MAX.) | Z-40°C/Z20°C | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | Z-55°C/Z20°C | 4 | 4 | 3 | 3 | 3 | 2 | 2 | |
| High-temperature load 105°C rated voltage applied. | Test (hrs.) | φ5 : 2500, φ6.3 : 3000, φ8 : 3500 to 4500, φ10 : 5000, φ12.5 : 7000, φ16 to φ18 : 10000 | | | | | | | |
| | ΔC/C | Within ±20% of the initial value | | | | | | | |
| | tan δ | ≤ Twice the initial standard | | | | | | | |
| | L.C. | ≤ The initial standard | | | | | | | |
| Other characteristics | | Conform to IEC 60384-4 | | | | | | | |

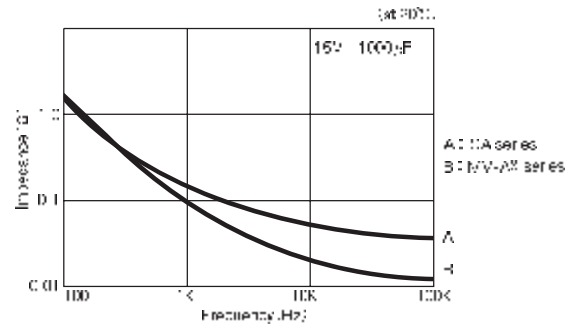
Dimensions



(Unit: mm)

| φD | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
|----|-----|-----|-----|-----|------|-----|-----|
| F | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| φd | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 |

Impedance VS. Frequency



Size List, Impedance, Maximum Permissible Ripple Current

| Case Size (φD×Lmm) | 6.3 | | | 10 | | |
|--------------------|------------------|----------------------------------|---|------------------|----------------------------------|---|
| | Capacitance (μF) | Impedance (Ω MAX.) (20°C/100kHz) | Ripple current (mA rms) (105°C/10k to 200kHz) | Capacitance (μF) | Impedance (Ω MAX.) (20°C/100kHz) | Ripple current (mA rms) (105°C/10k to 200kHz) |
| 5×11 | 150 | 0.42 | 190 | 100 | 0.42 | 190 |
| 6.3×11 | 270 | 0.22 | 300 | 220 | 0.22 | 300 |
| 8×11.5 | 470 | 0.11 | 560 | 330 | 0.11 | 560 |
| 8×12.5 | 560 | 0.11 | 570 | 390 | 0.11 | 570 |
| 8×15 | 680 | 0.085 | 730 | 470 | 0.085 | 730 |
| 8×20 | 1000 | 0.069 | 800 | ※ 680 | 0.069 | 800 |
| 10×12.5 | 820 | 0.085 | 800 | 680 | 0.085 | 800 |
| 10×16 | 1200 | 0.062 | 1050 | 820 | 0.062 | 1050 |
| 10×20 | 1500 | 0.044 | 1250 | 1200 | 0.044 | 1250 |
| 10×22 | 1800 | 0.039 | 1450 | 1500 | 0.039 | 1450 |
| 12.5×20 | 2700 | 0.038 | 1600 | 2200 | 0.038 | 1600 |
| 12.5×25 | 3900 | 0.029 | 1800 | 2700 | 0.029 | 1800 |
| 16×25 | 5600 | 0.022 | 2100 | 3900 | 0.022 | 2100 |
| 16×31.5 | 8200 | 0.018 | 2350 | 5600 | 0.018 | 2350 |
| 16×35 | 10000 | 0.018 | 2550 | 6800 | 0.018 | 2550 |
| 18×35.5 | 12000 | 0.018 | 2800 | 8200 | 0.018 | 2800 |

※ ; Series symbol is AXL

MV-AX Series

AX Low impedance Long Life ← CA

| V Case Size (φD×Lmm) | 16 | | | 25 | | |
|----------------------------|---------------------|-------------------------------------|--|---------------------|-------------------------------------|--|
| | Capacitance (μF) | Impedance (Ω MAX.) (20°C/100kHz) | Ripple current (mA rms) (105°C/10k to 200kHz) | Capacitance (μF) | Impedance (Ω MAX.) (20°C/100kHz) | Ripple current (mA rms) (105°C/10k to 200kHz) |
| 5×11 | 68 | 0.42 | 190 | 47 | 0.42 | 190 |
| 6.3×11 | 150 | 0.22 | 300 | 100 | 0.22 | 300 |
| 8×11.5 | 220 | 0.11 | 560 | 150 | 0.11 | 560 |
| 8×12.5 | 270 | 0.11 | 570 | 180 | 0.11 | 570 |
| 8×15 | 330 | 0.085 | 730 | 220 | 0.085 | 730 |
| 8×20 | ※ 470 | 0.069 | 800 | 330 | 0.069 | 800 |
| 10×12.5 | 470 | 0.085 | 800 | 270 | 0.085 | 800 |
| 10×16 | 560 | 0.062 | 1050 | 390 | 0.062 | 1050 |
| 10×20 | 820 | 0.044 | 1250 | 560 | 0.044 | 1250 |
| 10×22 | 1000 | 0.039 | 1450 | 680 | 0.039 | 1450 |
| 12.5×20 | 1200 | 0.038 | 1600 | 1000 | 0.038 | 1600 |
| 12.5×25 | 1800 | 0.029 | 1800 | 1200 | 0.029 | 1800 |
| 16×25 | 2700 | 0.022 | 2100 | 1800 | 0.022 | 2100 |
| 16×31.5 | 3900 | 0.018 | 2350 | 2700 | 0.018 | 2350 |
| 16×35 | 4700 | 0.018 | 2550 | 3300 | 0.018 | 2550 |
| 18×35.5 | 5600 | 0.018 | 2800 | 3900 | 0.018 | 2800 |

| V Case Size (φD×Lmm) | 35 | | | 50 | | |
|----------------------------|---------------------|-------------------------------------|--|---------------------|-------------------------------------|--|
| | Capacitance (μF) | Impedance (Ω MAX.) (20°C/100kHz) | Ripple current (mA rms) (105°C/10k to 200kHz) | Capacitance (μF) | Impedance (Ω MAX.) (20°C/100kHz) | Ripple current (mA rms) (105°C/10k to 200kHz) |
| 5×11 | 4.7 | 1.2 | 115 | 4.7 | 2.0 | 90 |
| 5×11 | 10 | 0.90 | 140 | 10 | 1.7 | 110 |
| 5×11 | 22 | 0.42 | 190 | 15 | 1.2 | 130 |
| 5×11 | 33 | 0.42 | 190 | 22 | 0.70 | 160 |
| 6.3×11 | 68 | 0.22 | 300 | 47 | 0.43 | 220 |
| 8×11.5 | 100 | 0.11 | 560 | 68 | 0.26 | 360 |
| 8×12.5 | 120 | 0.11 | 570 | 82 | 0.24 | 400 |
| 8×15 | 150 | 0.085 | 730 | 100 | 0.18 | 500 |
| 8×20 | ※ 220 | 0.069 | 800 | 150 | 0.16 | 650 |
| 10×12.5 | 220 | 0.085 | 800 | 120 | 0.16 | 550 |
| 10×16 | 270 | 0.062 | 1050 | 180 | 0.12 | 760 |
| 10×20 | 330 | 0.044 | 1250 | 270 | 0.088 | 950 |
| 10×22 | 470 | 0.039 | 1450 | 330 | 0.072 | 1000 |
| 12.5×20 | 680 | 0.038 | 1600 | 470 | 0.059 | 1200 |
| 12.5×25 | 1000 | 0.029 | 1800 | 560 | 0.045 | 1400 |
| 16×25 | 1500 | 0.022 | 2100 | 1000 | 0.039 | 1750 |
| 16×31.5 | 2200 | 0.018 | 2350 | 1200 | 0.025 | 2100 |
| 16×35 | ※ 2200 | 0.018 | 2550 | 1500 | 0.025 | 2300 |
| 18×35.5 | 2700 | 0.018 | 2800 | 1800 | 0.024 | 2400 |

| V Case Size (φD×Lmm) | 63 | | | 100 | | |
|----------------------------|---------------------|-------------------------------------|--|---------------------|-------------------------------------|--|
| | Capacitance (μF) | Impedance (Ω MAX.) (20°C/100kHz) | Ripple current (mA rms) (105°C/10k to 200kHz) | Capacitance (μF) | Impedance (Ω MAX.) (20°C/100kHz) | Ripple current (mA rms) (105°C/10k to 200kHz) |
| 5×11 | 18 | 1.6 | 140 | 5.6 | 2.7 | 120 |
| 6.3×11 | 33 | 0.90 | 200 | 12 | 1.4 | 170 |
| 8×11.5 | 68 | 0.52 | 275 | 22 | 0.81 | 230 |
| 8×12.5 | ※ 68 | 0.47 | 300 | ※ 22 | 0.79 | 250 |
| 8×15 | 82 | 0.34 | 360 | 27 | 0.64 | 295 |
| 8×20 | ※ 120 | 0.21 | 510 | ※ 39 | 0.36 | 400 |
| 10×12.5 | 120 | 0.26 | 420 | 39 | 0.39 | 360 |
| 10×16 | 150 | 0.20 | 525 | 47 | 0.35 | 420 |
| 10×20 | 220 | 0.15 | 765 | 68 | 0.24 | 630 |
| 10×22 | 270 | 0.12 | 840 | 82 | 0.21 | 700 |
| 12.5×20 | 330 | 0.10 | 960 | 100 | 0.15 | 800 |
| 12.5×25 | 470 | 0.064 | 1200 | 150 | 0.11 | 920 |
| 16×25 | 680 | 0.052 | 1500 | 220 | 0.071 | 1100 |
| 16×31.5 | 1000 | 0.042 | 1750 | 330 | 0.049 | 1490 |
| 16×35 | 1200 | 0.036 | 1920 | 390 | 0.043 | 1630 |
| 18×35.5 | 1500 | 0.033 | 2000 | 470 | 0.038 | 1700 |

※ ; Series symbol is AXL

Model No. 16MV470AX ※ 16MV470AXL
 └─ Capacitance symbol └─ Capacitance symbol
 └─ Rated voltage └─ Rated voltage