

## MV-CX Series Low impedance, Smaller in size, Long life



MV-CX series is smaller than MV-AX series and low impedance, long life.

It is suitable for switching power supply, noise limiter etc.

Solvent proof (within 5 minutes).

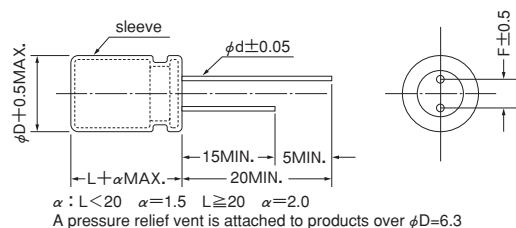
**CX** Low impedance mini

← **AX**

## Specifications

| Items                                             |              | Specifications                                                                                                |      |      |      |      |
|---------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------|------|------|------|------|
| Rated voltage (V)                                 |              | 6.3                                                                                                           | 10   | 16   | 25   | 35   |
| Category temperature range (°C)                   |              | -55 to +105                                                                                                   |      |      |      |      |
| Capacitance tolerance (%)                         |              | ±20 (120Hz/20°C)                                                                                              |      |      |      |      |
| Tangent of loss angle (tan δ) (MAX.)              |              | 0.22                                                                                                          | 0.19 | 0.16 | 0.14 | 0.12 |
| Leakage current (L.C.) (μA/after 2min.) (MAX.)    |              | When nominal capacitance exceeds 1000 μF, add 0.02 to the value above for each 1000 μF increase. (120Hz/20°C) |      |      |      |      |
| Impedance (120Hz) ratio at low temperature (MAX.) |              | 0.01CV                                                                                                        |      |      |      |      |
| Endurance 105°C rated voltage applied.            | Z-40°C/Z20°C | 3                                                                                                             | 2    | 2    | 2    | 2    |
|                                                   | Z-55°C/Z20°C | 4                                                                                                             | 4    | 3    | 3    | 3    |
|                                                   | TEST (hrs.)  | φ 5 to 6.3 : 2000、φ 8 : 3000、φ 10 : 4000、φ 12.5 : 5000、φ 16 to 18 : 7000                                      |      |      |      |      |
|                                                   | ΔC/C         | Within ± 25% of the initial value                                                                             |      |      |      |      |
|                                                   |              | tan δ                                                                                                         |      |      |      |      |
|                                                   |              | ≤ Twice the initial standard                                                                                  |      |      |      |      |
|                                                   |              | L.C.                                                                                                          |      |      |      |      |
|                                                   |              | ≤ The initial standard                                                                                        |      |      |      |      |

## Dimensions



(Unit : mm)

| φ D | 5   | 6.3 | 8   | 10  | 12.5 | 16  | 18  |
|-----|-----|-----|-----|-----|------|-----|-----|
| F   | 2.0 | 2.5 | 3.5 | 5.0 | 5.0  | 7.5 | 7.5 |
| φ d | 0.5 | 0.5 | 0.6 | 0.6 | 0.6* | 0.8 | 0.8 |

\* φ 12.5×30 : φ d=0.8

## Size List, Impedance, Maximum Permissible Ripple Current

| V<br>Case size<br>φD×L (mm) | 6.3                 |                                    |                                                 | 10                  |                                    |                                                 |
|-----------------------------|---------------------|------------------------------------|-------------------------------------------------|---------------------|------------------------------------|-------------------------------------------------|
|                             | Capacitance<br>(μF) | Impedance (ΩMAX.)<br>(20°C/100kHz) | Ripple current (mArms)<br>(105°C/10k to 200kHz) | Capacitance<br>(μF) | Impedance (ΩMAX.)<br>(20°C/100kHz) | Ripple current (mArms)<br>(105°C/10k to 200kHz) |
| 5×11                        | 180                 | 0.34                               | 205                                             | 150                 | 0.34                               | 205                                             |
| 6.3×11                      | 330                 | 0.17                               | 330                                             | 270                 | 0.17                               | 330                                             |
| 6.3×11                      | 390                 | 0.17                               | 330                                             |                     |                                    |                                                 |
| 8×11.5                      | 680                 | 0.11                               | 580                                             | 470                 | 0.11                               | 580                                             |
| 8×11.5                      |                     |                                    |                                                 | 560                 | 0.11                               | 580                                             |
| 8×15                        | 1000                | 0.080                              | 750                                             | 680                 | 0.080                              | 750                                             |
| 8×20                        | ※1 1200             | 0.060                              | 1000                                            | ※1 1000             | 0.060                              | 1000                                            |
| 8×20                        | ※1 1500             | 0.060                              | 1000                                            |                     |                                    |                                                 |
| 10×12.5                     | 1200                | 0.063                              | 900                                             | 820                 | 0.063                              | 900                                             |
| 10×16                       | 1500                | 0.049                              | 1200                                            | 1000                | 0.049                              | 1200                                            |
| 10×16                       |                     |                                    |                                                 | 1200                | 0.049                              | 1200                                            |
| 10×20                       | 2200                | 0.036                              | 1450                                            | 1500                | 0.036                              | 1450                                            |
| 10×22                       | 2700                | 0.036                              | 1500                                            | 1800                | 0.036                              | 1500                                            |
| 12.5×16                     | ※2 2200             | 0.049                              | 1400                                            | ※2 1800             | 0.049                              | 1400                                            |
| 12.5×20                     | 3900                | 0.035                              | 1660                                            | 2700                | 0.035                              | 1660                                            |
| 12.5×25                     | 4700                | 0.027                              | 2000                                            | 3900                | 0.027                              | 2000                                            |
| 12.5×25                     | 5600                | 0.027                              | 2000                                            |                     |                                    |                                                 |
| 12.5×30                     | ※1 6800             | 0.024                              | 2450                                            | ※1 4700             | 0.024                              | 2450                                            |
| 16×21                       | ※2 5600             | 0.032                              | 2000                                            | ※2 3900             | 0.032                              | 2000                                            |
| 16×25                       | 6800                | 0.022                              | 2560                                            | 4700                | 0.022                              | 2560                                            |
| 16×25                       | 8200                | 0.022                              | 2560                                            | 5600                | 0.022                              | 2560                                            |
| 16×31.5                     | 10000               | 0.017                              | 3010                                            | 6800                | 0.017                              | 3010                                            |
| 16×31.5                     |                     |                                    |                                                 | 8200                | 0.017                              | 3010                                            |
| 16×35.5                     | 12000               | 0.016                              | 3150                                            | 10000               | 0.016                              | 3150                                            |
| 18×21                       | ※2 6800             | 0.030                              | 2490                                            | ※2 5600             | 0.030                              | 2490                                            |
| 18×25                       | ※2 10000            | 0.022                              | 2740                                            | ※2 6800             | 0.022                              | 2740                                            |
| 18×30.5                     | ※2 12000            | 0.017                              | 3330                                            | ※2 10000            | 0.017                              | 3330                                            |
| 18×35.5                     | 15000               | 0.016                              | 3680                                            | 12000               | 0.016                              | 3680                                            |
| 18×41                       | 18000               | 0.015                              | 3800                                            | 15000               | 0.015                              | 3800                                            |

※1 : Series symbol is CXL, ※2 : Series symbol is CXS

# MV-CX

## Series

| V<br>Case size<br>φD×L (mm) | 16                  |                                    |                                                 | 25                  |                                    |                                                 |
|-----------------------------|---------------------|------------------------------------|-------------------------------------------------|---------------------|------------------------------------|-------------------------------------------------|
|                             | Capacitance<br>(μF) | Impedance (ΩMAX.)<br>(20°C/100kHz) | Ripple current (mArms)<br>(105°C/10k to 200kHz) | Capacitance<br>(μF) | Impedance (ΩMAX.)<br>(20°C/100kHz) | Ripple current (mArms)<br>(105°C/10k to 200kHz) |
| 5×11                        | 100                 | 0.34                               | 205                                             | 68                  | 0.34                               | 205                                             |
| 6.3×11                      | 180                 | 0.17                               | 330                                             | 120                 | 0.17                               | 330                                             |
| 8×11.5                      | 330                 | 0.11                               | 580                                             | 220                 | 0.11                               | 580                                             |
| 8×15                        | 470                 | 0.080                              | 750                                             | 330                 | 0.080                              | 750                                             |
| 8×20                        | 680                 | 0.060                              | 1000                                            | 470                 | 0.060                              | 1000                                            |
| 10×12.5                     | 560                 | 0.063                              | 900                                             | 390                 | 0.063                              | 900                                             |
| 10×16                       | 820                 | 0.049                              | 1200                                            | 560                 | 0.049                              | 1200                                            |
| 10×20                       | 1000                | 0.036                              | 1450                                            | 680                 | 0.036                              | 1450                                            |
| 10×20                       |                     |                                    |                                                 | 820                 | 0.036                              | 1450                                            |
| 10×22                       | 1200                | 0.036                              | 1500                                            | 1000                | 0.036                              | 1500                                            |
| 12.5×16                     | ※2 1200             | 0.049                              | 1400                                            | ※2 820              | 0.049                              | 1400                                            |
| 12.5×20                     | 1500                | 0.035                              | 1660                                            | 1200                | 0.035                              | 1660                                            |
| 12.5×20                     | 1800                | 0.035                              | 1660                                            |                     |                                    |                                                 |
| 12.5×25                     | 2200                | 0.027                              | 2000                                            | 1800                | 0.027                              | 2000                                            |
| 12.5×25                     | 2700                | 0.027                              | 2000                                            |                     |                                    |                                                 |
| 12.5×30                     | ※1 3300             | 0.024                              | 2450                                            | ※1 2200             | 0.024                              | 2450                                            |
| 16×21                       | ※2 2700             | 0.032                              | 2000                                            | ※2 1800             | 0.032                              | 2000                                            |
| 16×25                       | 3300                | 0.022                              | 2560                                            | 2700                | 0.022                              | 2560                                            |
| 16×25                       | 3900                | 0.022                              | 2560                                            |                     |                                    |                                                 |
| 16×31.5                     | 4700                | 0.017                              | 3010                                            | 3300                | 0.017                              | 3010                                            |
| 16×31.5                     | 5600                | 0.017                              | 3010                                            |                     |                                    |                                                 |
| 16×35.5                     | 6800                | 0.016                              | 3150                                            | 3900                | 0.016                              | 3150                                            |
| 18×21                       | ※2 3300             | 0.030                              | 2490                                            | ※2 2200             | 0.030                              | 2490                                            |
| 18×25                       | ※2 4700             | 0.022                              | 2740                                            | ※2 3300             | 0.022                              | 2740                                            |
| 18×30.5                     |                     |                                    |                                                 | ※2 3900             | 0.017                              | 3330                                            |
| 18×35.5                     | 8200                | 0.016                              | 3680                                            | 5600                | 0.016                              | 3680                                            |
| 18×41                       | 10000               | 0.015                              | 3800                                            | 6800                | 0.015                              | 3800                                            |

| V<br>Case size<br>D×L (mm) | 35                  |                                    |                                                 |
|----------------------------|---------------------|------------------------------------|-------------------------------------------------|
|                            | Capacitance<br>(μF) | Impedance (ΩMAX.)<br>(20°C/100kHz) | Ripple current (mArms)<br>(105°C/10k to 200kHz) |
| 5×11                       | 47                  | 0.34                               | 205                                             |
| 6.3×11                     | 100                 | 0.17                               | 330                                             |
| 8×11.5                     | 150                 | 0.11                               | 580                                             |
| 8×15                       | 220                 | 0.080                              | 750                                             |
| 8×20                       | ※1 330              | 0.060                              | 1000                                            |
| 10×12.5                    | 270                 | 0.063                              | 900                                             |
| 10×16                      | 330                 | 0.049                              | 1200                                            |
| 10×16                      | 390                 | 0.049                              | 1200                                            |
| 10×20                      | 470                 | 0.036                              | 1450                                            |
| 10×20                      | 560                 | 0.036                              | 1450                                            |
| 10×22                      | 680                 | 0.036                              | 1500                                            |
| 12.5×16                    | ※2 560              | 0.049                              | 1400                                            |
| 12.5×20                    | 820                 | 0.035                              | 1660                                            |
| 12.5×25                    | 1200                | 0.027                              | 2000                                            |
| 12.5×30                    | ※1 1500             | 0.024                              | 2450                                            |
| 16×21                      | ※2 1200             | 0.032                              | 2000                                            |
| 16×25                      | 1800                | 0.022                              | 2560                                            |
| 16×31.5                    | 2700                | 0.017                              | 3010                                            |
| 16×35.5                    | 3300                | 0.016                              | 3150                                            |
| 18×21                      | ※2 1500             | 0.030                              | 2490                                            |
| 18×25                      | 2200                | 0.022                              | 2740                                            |
| 18×35.5                    | 3900                | 0.016                              | 3680                                            |
| 18×41                      | 4700                | 0.015                              | 3800                                            |

※1 ; Series symbol is CXL, ※2 : Series symbol is CXS

Model No.

10 MV 1000 CX  
 └─ Series code  
 └─ Capacitance symbol  
 └─ Type code※  
 └─ Rated voltage

※1 10 MV 1000 CXL  
 └─ Series code  
 └─ Capacitance symbol  
 └─ Type code※  
 └─ Rated voltage

※2 10 MV 1800 CXS  
 └─ Series code  
 └─ Capacitance symbol  
 └─ Type code※  
 └─ Rated voltage

※Type code

|                                                                                 |                                    |
|---------------------------------------------------------------------------------|------------------------------------|
| Environment-friendly capacitors<br>Pb free lead finishing<br>Pb free PET sleeve | Sn-Pb lead finishing<br>PVC sleeve |
| ME                                                                              | MV                                 |