

# JVL series

## ■ 特性 Features

- 105°C2000-3000H
- 适用于高密度表面安装 Suitable for High-Density Surface Mounting
- 高电压, 高纹波电流 High voltage, high ripple current



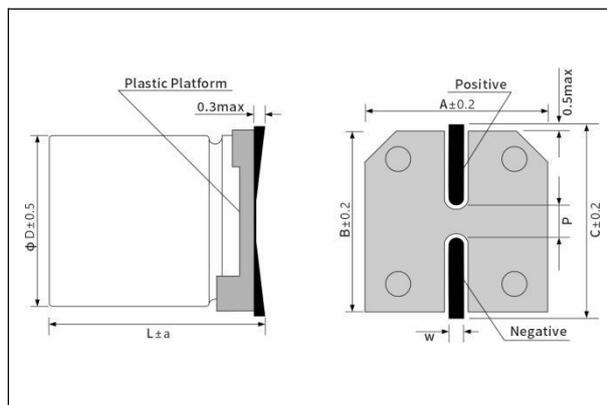
## ■ 仕样 Specifications

| 项目 Item                            | 条件 Condition  |   | 性能 Performance                                    |      |      |                     |      |      |
|------------------------------------|---|---|---|------|------|---------------------|------|------|
| 使用温度范围 Operating Temperature Range | -   |   | -40°C~+105°C                                      |      |      | -25°C~+105°C        |      |      |
| 额定电压范围 Rated Voltage Range         | -   |   | 160~400V <sub>DC</sub>                            |      |      | 450~V <sub>DC</sub> |      |      |
| 额定静容量范围 Rated Capacitance Range    | -   |   | 1.0~22μF  |      |      |                     |      |      |
| 额定静容量容许差 Capacitance Tolerance     | 120Hz, 20°C   |   | ±20%  |      |      |                     |      |      |
| 漏电流 Leakage current                | 施加额定电压 2 分钟后 After applying rated voltage for 2 minutes   |   | 0.02CV+10μA                                       |      |      |                     |      |      |
| 额定电压 Rated Voltage(V)              | -   |   | 160   | 200  | 250  | 350                 | 400  | 450  |
| 损失角正切值 Dissipation Factor          | 120Hz,20°C (Max.)   | tan δ   | 0.15  | 0.15 | 0.15 | 0.20                | 0.20 | 0.20 |
|                                    |   | 对于超过 1000μF 的产品, 每增加 1000μF, 其值便随之增加 0.02<br>For products exceeding 1000μF, the value increases by 0.02 per additional 1000μF |   |      |      |                     |      |      |
| 温度特性 Temperature Characteristics   | 阻抗率 Impedance Ratio(Max.)   | Z <sub>(-25°C)/Z<sub>(+20°C)</sub></sub>  | 2   | 2    | 2    | 3                   | 3    | 3    |
|                                    |   | Z <sub>(-40°C)/Z<sub>(+20°C)</sub></sub>  | 6   | 6    | 6    | 10                  | 10   | -    |
| 耐久性 Endurance                      | 在 105°C 下, 连续施加额定电压 3000 小时后(φ6.3 为 2000H), 满足以下项目 Under 105°C, apply rated voltage for 3000 hours (φ6.3: 2000H), The capacitors shall meet the following requirements.       |   |   |      |      |                     |      |      |
|                                    | 静容量变化率 Capacitance Change   |   | 初始值的 ±30% 以内<br>≤ ±30% of the initial value.      |      |      |                     |      |      |
|                                    | 损失角正切值 Dissipation Factor   |   | 规格值 300% 以下<br>≤ 300% of initial specified value. |      |      |                     |      |      |
|                                    | 漏电流 Leakage Current   |   | 规格值以下<br>≤ Initial specified value.               |      |      |                     |      |      |
| 高温储存 Shelf Life                    | 在 105°C 条件下不施加额定电压 1000 小时后, 电容器应满足与上表耐久性相同标准<br>After storage for 1000H at 105°C with no voltage applied, the capacitor shall meet the limits same as above endurance table. |   |   |      |      |                     |      |      |

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## 尺寸图 Dimensions

(Unit: mm)

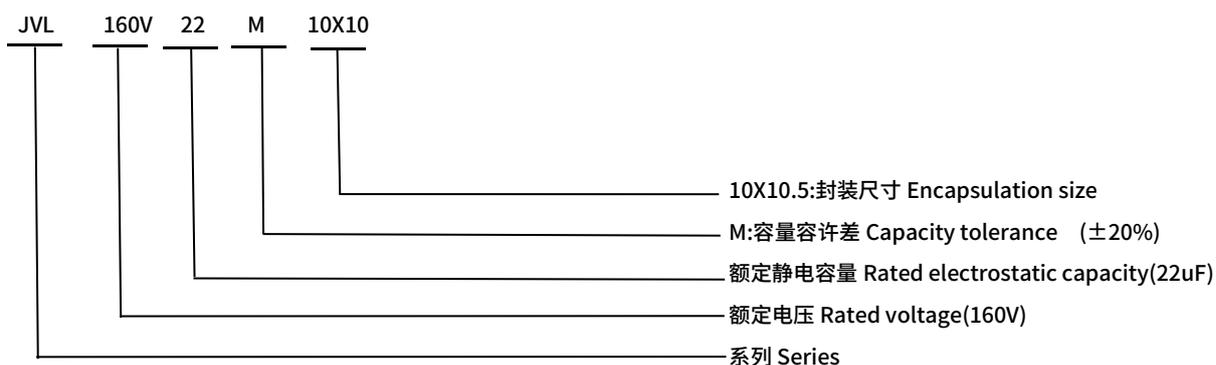


| D    | L    | A    | B    | C    | P   | $\alpha$  | W       |
|------|------|------|------|------|-----|-----------|---------|
| 4    | 5.7  | 4.3  | 4.3  | 5.0  | 1.0 | $\pm 0.5$ | 0.5-0.8 |
| 5    | 5.7  | 5.3  | 5.3  | 6.0  | 1.5 | $\pm 0.5$ | 0.5-0.8 |
| 6.3  | 5.7  | 6.6  | 6.6  | 7.3  | 2.0 | $\pm 0.5$ | 0.5-0.8 |
| 6.3  | 7.7  | 6.6  | 6.6  | 7.3  | 2.0 | $\pm 0.5$ | 0.5-0.8 |
| 8.0  | 10.5 | 8.3  | 8.3  | 9.0  | 3.1 | $\pm 0.5$ | 0.7-1.2 |
| 10.0 | 10.5 | 10.3 | 10.3 | 11.0 | 4.7 | $\pm 0.5$ | 0.7-1.2 |
| 12.5 | 13.5 | 13   | 13   | 14   | 4.7 | $\pm 1.0$ | 1.0-1.4 |
| 16   | 16.5 | 17   | 17   | 18   | 6.4 | $\pm 1.0$ | 1.0-1.4 |

## 纹波电流速查表 Ripple Current Quick Reference Table:

| 频率 Freq.<br>容值 Cap. | 120Hz | 1KHz | 10KHz | 100KHz |
|---------------------|-------|------|-------|--------|
| Under 8.2           | 0.45  | 0.60 | 0.80  | 1.00   |
| 10~22 $\mu$ F       | 0.50  | 0.75 | 0.90  | 1.00   |

## 品号编码体系 Part Number Coding System (Example: 160V22 $\mu$ F)



注释: 型号中 R 表示小数点, 如 4R7 表示 4.7 $\mu$ F

Note: "R" in the model number denotes a decimal point (e.g., 4R7 = 4.7 $\mu$ F)

# JVL series

## ■ 电气特性 Electrical characteristics

| 额定电压<br>Rated<br>Voltage(V) | 额定静电容量<br>Rated<br>Capacitance( $\mu$ F) | 铝壳尺寸<br>Case Size<br>$\Phi$ DXL(mm) | 额定纹波电流<br>Rated Ripple Current<br>(mA,105 $^{\circ}$ C,100KHz) | 损失角正切值<br>tan $\delta$ | 品号<br>Part Number |
|-----------------------------|--|-------------------------------------|--|------------------------|-------------------|
| 160                         | 5.6                                      | 6.3X10.5                            | 110  | 0.15                   | JVL160V5R6M6X10   |
|                             | 6.8                                      | 6.3X10.5                            | 125  | 0.15                   | JVL160V6R8M6X10   |
|                             | 8.2                                      | 8X10.5                              | 125  | 0.15                   | JVL160V8R2M8X10   |
|                             | 10                                       | 8X10.5                              | 140  | 0.15                   | JVL160V10M8X10    |
|                             | 12                                       | 8X10.5                              | 150  | 0.15                   | JVL160V12M8X10    |
|                             | 15                                       | 8X10.5                              | 160  | 0.15                   | JVL160V15M8X10    |
|                             | 22                                       | 10X10.5                             | 250  | 0.15                   | JVL160V22M10X10   |
| 200                         | 4.7                                      | 6.3X10.5                            | 125  | 0.15                   | JVL200V4R7M6X10   |
|                             | 5.6                                      | 6.3X10.5                            | 125  | 0.15                   | JVL200V5R6M6X10   |
|                             | 6.8                                      | 8X10.5                              | 130  | 0.15                   | JVL200V6R8M8X10   |
|                             | 8.2                                      | 8X10.5                              | 140  | 0.15                   | JVL200V8R2M8X10   |
|                             | 10                                       | 8X10.5                              | 170  | 0.15                   | JVL200V10M8X10    |
|                             | 12                                       | 10X10.5                             | 230  | 0.15                   | JVL200V12M10X10   |
|                             | 15                                       | 10X10.5                             | 240  | 0.15                   | JVL200V15M10X10   |
|                             | 22                                       | 10X10.5                             | 250  | 0.15                   | JVL200V22M10X10   |
| 250                         | 2.2                                      | 6.3X10.5                            | 105  | 0.15                   | JVL250V2R2M6X10   |
|                             | 3.9                                      | 6.3X10.5                            | 135  | 0.15                   | JVL250V3R9M6X10   |
|                             | 4.7                                      | 6.3X10.5                            | 135  | 0.15                   | JVL250V4R7M6X10   |
|                             | 5.6                                      | 8X10.5                              | 140  | 0.15                   | JVL250V5R6M8X10   |
|                             | 6.8                                      | 8X10.5                              | 150  | 0.15                   | JVL250V6R8M8X10   |
|                             | 8.2                                      | 8X10.5                              | 170  | 0.15                   | JVL250V8R2M8X10   |
|                             | 10                                       | 10X10.5                             | 230  | 0.15                   | JVL250V10M10X10   |
|                             | 12                                       | 10X10.5                             | 240  | 0.15                   | JVL250V12M10X10   |
|                             | 15                                       | 10X10.5                             | 250  | 0.15                   | JVL250V15M10X10   |
| 350                         | 2.7                                      | 6.3X10.5                            | 125  | 0.20                   | JVL350V2R7M6X10   |
|                             | 3.3                                      | 6.3X10.5                            | 125  | 0.20                   | JVL350V3R3M6X10   |
|                             | 3.9                                      | 8X10.5                              | 130  | 0.20                   | JVL350V3R9M8X10   |
|                             | 4.7                                      | 8X10.5                              | 140  | 0.20                   | JVL350V4R7M8X10   |
|                             | 5.6                                      | 8X10.5                              | 140  | 0.20                   | JVL350V5R6M8X10   |
|                             | 6.8                                      | 8X10.5                              | 230  | 0.20                   | JVL350V6R8M8X10   |
|                             | 8.2                                      | 8X10.5                              | 240  | 0.20                   | JVL350V8R2M8X10   |
|                             | 10                                       | 8X10.5                              | 250  | 0.20                   | JVL350V10M8X10    |
| 400                         | 1.0                                      | 6.3X10.5                            | 80   | 0.20                   | JVL400V1M6X10     |

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| 额定电压<br>Rated<br>Voltage(V) | 额定静电容量<br>Rated<br>Capacitance( $\mu$ F) | 铝壳尺寸<br>Case Size<br>$\Phi$ DXL(mm) | 额定纹波电流<br>Rated Ripple Current<br>(mA,105°C,100KHz) | 损失角正切值<br>tan $\delta$ | 品号<br>Part Number |
|-----------------------------|--|-------------------------------------|---|------------------------|-------------------|
| 400                         | 2.2                                      | 6.3X10.5                            | 105   | 0.20                   | JVL400V2R2M6X10   |
|                             | 2.7                                      | 6.3X10.5                            | 125   | 0.20                   | JVL400V2R7M6X10   |
|                             | 3.3                                      | 8X10.5                              | 135   | 0.20                   | JVL400V3R3M8X10   |
|                             | 3.9                                      | 8X10.5                              | 140   | 0.20                   | JVL400V3R9M8X10   |
|                             | 4.7                                      | 8X10.5                              | 48  | 0.20                   | JVL400V4R7M8X10   |
|                             | 5.6                                      | 10X10.5                             | 220   | 0.20                   | JVL400V5R6M10X10  |
|                             | 6.8                                      | 10X10.5                             | 230   | 0.20                   | JVL400V6R8M10X10  |
|                             | 8.2                                      | 10X10.5                             | 240   | 0.20                   | JVL400V8R2M10X10  |
|                             | 8.2                                      | 10X12.5                             | 275   | 0.20                   | JVL400V8R2M10X12  |
|                             | 10                                       | 10X12.5                             | 275   | 0.20                   | JVL400V10M10X12   |
| 450                         | 1.0                                      | 6.3X10.5                            | 80  | 0.20                   | JVL450V1M6X10     |
|                             | 1.5                                      | 6.3X10.5                            | 90  | 0.20                   | JVL450V1R5M6X10   |
|                             | 2.2                                      | 6.3X10.5                            | 100   | 0.20                   | JVL450V2R2M6X10   |
|                             | 2.7                                      | 8X10.5                              | 115   | 0.20                   | JVL450V2R7M8X10   |
|                             | 3.3                                      | 8X10.5                              | 120   | 0.20                   | JVL450V3R3M8X10   |
|                             | 3.9                                      | 8X10.5                              | 135   | 0.20                   | JVL450V3R9M8X10   |
|                             | 4.7                                      | 10X10.5                             | 160   | 0.20                   | JVL450V4R7M10X10  |
|                             | 5.6                                      | 10X10.5                             | 190   | 0.20                   | JVL450V5R6M10X10  |
|                             | 6.8                                      | 10X10.5                             | 215   | 0.20                   | JVL450V6R8M10X10  |
|                             | 6.8                                      | 10X12.5                             | 245   | 0.20                   | JVL450V6R8M10X12  |

Note1:Case size  $\Phi$ D xL(mm), ripple current (mA, rms) at 105°C,100KHz.

Note2: Produce custom product too, which are not found in these tables.