

# JVS series

## ■ 特性 Features

- 4.5~5.5mmL, 105°C1000H
- 适用于高密度表面安装 Suitable for High-Density Surface Mounting
- 高稳定性和可靠性 High stability and reliability



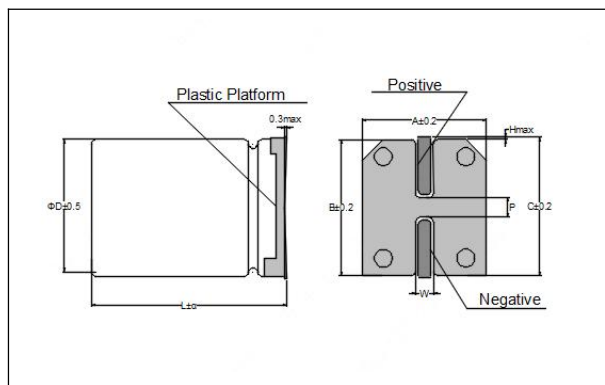
## ■ 仕様 Specifications

| 项目 Item                            | 条件 Condition                                                                                                                                                             |                                                                                                                           | 性能 Performance                                                   |      |      |      |      |      |  |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------|------|------|------|------|--|
| 使用温度范围 Operating Temperature Range | -                                                                                                                                                                        |                                                                                                                           | -55℃~+105℃                                                       |      |      |      |      |      |  |
| 额定电压范围 Rated Voltage Range         | -                                                                                                                                                                        |                                                                                                                           | 6.3~50V                                                          |      |      |      |      |      |  |
| 额定静电容量范围 Rated Capacitance Range   | -                                                                                                                                                                        |                                                                                                                           | 1.0~100μF                                                        |      |      |      |      |      |  |
| 额定静电容量容许差 Capacitance Tolerance    | 120Hz, 20℃                                                                                                                                                               |                                                                                                                           | ±20%                                                             |      |      |      |      |      |  |
| 漏电流 Leakage current                | 施加额定电压 2 分钟后 After applying rated voltage for 2 minutes                                                                                                                  |                                                                                                                           | I≤0.01CV 或 3μA（以较大值为准）<br>I≤0.01CV or 3μA (whichever is greater) |      |      |      |      |      |  |
| 额定电压 Rated Voltage(V)              | -                                                                                                                                                                        |                                                                                                                           | 6.3                                                              | 10   | 16   | 25   | 35   | 50   |  |
| 损失角正切值 Dissipation Factor          | 120Hz,20℃ (Max.)                                                                                                                                                         | tan δ                                                                                                                     | 0.30                                                             | 0.24 | 0.20 | 0.18 | 0.16 | 0.14 |  |
|                                    |                                                                                                                                                                          | 对于超过 1000μF 的产品，每增加 1000μF，其值便随之增加 0.02 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℃)</sub> /Z <sub>(+20℃)</sub>                                                                                  | 4                                                                | 3    | 2    | 2    | 2    | 2    |  |
|                                    |                                                                                                                                                                          | Z <sub>(-40℃)</sub> /Z <sub>(+20℃)</sub>                                                                                  | 8                                                                | 5    | 4    | 3    | 3    | 3    |  |
| 耐久性 Endurance                      | 在 105℃下，连续施加额定电压 1000 小时后，满足以下项目 Under 105℃, apply rated voltage for 1000 hours , The capacitors shall meet the following requirements.                                  |                                                                                                                           |                                                                  |      |      |      |      |      |  |
|                                    | 静电容量变化率 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℃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℃ 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)

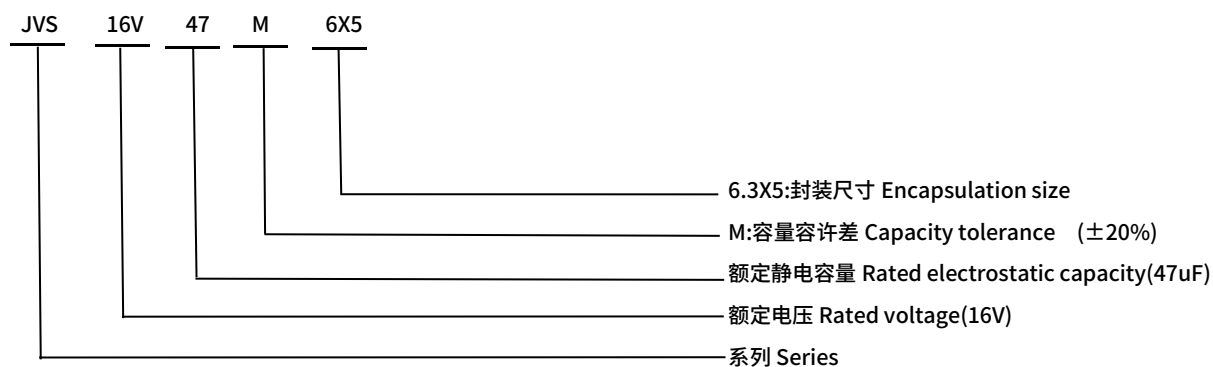


| D   | L   | A   | B   | C   | P   | $\alpha$  | W       |
|-----|-----|-----|-----|-----|-----|-----------|---------|
| 4   | 4.5 | 4.3 | 4.3 | 5.0 | 1.0 | $\pm 0.3$ | 0.5-0.8 |
| 4   | 5.5 | 4.3 | 4.3 | 5.0 | 1.0 | $\pm 0.3$ | 0.5-0.8 |
| 5   | 4.5 | 5.3 | 5.3 | 6.0 | 1.5 | $\pm 0.3$ | 0.5-0.8 |
| 5   | 5.5 | 5.3 | 5.3 | 6.0 | 1.5 | $\pm 0.3$ | 0.5-0.8 |
| 6.3 | 4.5 | 6.6 | 6.6 | 7.3 | 2.0 | $\pm 0.3$ | 0.5-0.8 |
| 6.3 | 5.5 | 6.6 | 6.6 | 7.3 | 2.0 | $\pm 0.3$ | 0.5-0.8 |

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

| 频率 Freq.  | 50Hz | 120Hz | 1KHz | 10KHz up |
|-----------|------|-------|------|----------|
| 容值 Cap.   |      |       |      |          |
| Under 100 | 0.70 | 1.00  | 1.30 | 1.40     |

## 品号编码体系 Part Number Coding System (Example: 16V 47 $\mu$ 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)

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## ■ 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°C,120Hz) | 损失角正切值<br>$\tan \delta$ | 品号<br>Part Number |
|-----------------------------|------------------------------------------|-------------------------------------|----------------------------------------------------|-------------------------|-------------------|
| 6.3                         | 22                                       | 4X4.5                               | 19                                                 | 0.30                    | JVS6.3V22M4X4     |
|                             | 22                                       | 4X5.5                               | 21                                                 | 0.30                    | JVS6.3V22M4X5     |
|                             | 33                                       | 5X4.5                               | 26                                                 | 0.30                    | JVS6.3V33M5X4     |
|                             | 33                                       | 5X5.5                               | 30                                                 | 0.30                    | JVS6.3V33M5X5     |
|                             | 47                                       | 5X4.5                               | 32                                                 | 0.30                    | JVS6.3V47M5X4     |
|                             | 47                                       | 5X5.5                               | 36                                                 | 0.30                    | JVS6.3V47M5X5     |
|                             | 100                                      | 6.3X4.5                             | 52                                                 | 0.30                    | JVS6.3V100M6X4    |
|                             | 100                                      | 6.3X5.5                             | 61                                                 | 0.30                    | JVS6.3V100M6X5    |
|                             | 150                                      | 6.3X5.5                             | 70                                                 | 0.30                    | JVS6.3V150M6X5    |
|                             | 220                                      | 6.3X4.5                             | 56                                                 | 0.30                    | JVS6.3V220M6X4    |
|                             | 220                                      | 6.3X5.5                             | 82                                                 | 0.30                    | JVS6.3V220M6X5    |
| 10                          | 22                                       | 5X4.5                               | 24                                                 | 0.54                    | JVS10V22M5X4      |
|                             | 22                                       | 5X5.5                               | 25                                                 | 0.54                    | JVS10V22M5X5      |
|                             | 33                                       | 5X4.5                               | 30                                                 | 0.54                    | JVS10V33M5X4      |
|                             | 33                                       | 5X5.5                               | 31                                                 | 0.24                    | JVS10V33M5X5      |
|                             | 47                                       | 6.3X4.5                             | 40                                                 | 0.24                    | JVS10V47M6X4      |
|                             | 47                                       | 6.3X5.5                             | 43                                                 | 0.24                    | JVS10V47M6X5      |
|                             | 100                                      | 6.3X4.5                             | 56                                                 | 0.24                    | JVS10V100M6X4     |
|                             | 100                                      | 6.3X5.5                             | 65                                                 | 0.24                    | JVS10V100M6X5     |
|                             | 150                                      | 6.3X5.5                             | 72                                                 | 0.24                    | JVS10V150M6X5     |
|                             | 220                                      | 6.3X4.5                             | 60                                                 | 0.24                    | JVS10V220M6X4     |
| 16                          | 10                                       | 4X4.5                               | 16                                                 | 0.20                    | JVS16V10M4X4      |
|                             | 10                                       | 4X5.5                               | 16                                                 | 0.20                    | JVS16V10M4X5      |
|                             | 22                                       | 5X4.5                               | 26                                                 | 0.20                    | JVS16V22M5X4      |
|                             | 22                                       | 5X5.5                               | 28                                                 | 0.20                    | JVS16V22M5X5      |
|                             | 33                                       | 6.3X4.5                             | 35                                                 | 0.20                    | JVS16V33M6X4      |
|                             | 33                                       | 6.3X5.5                             | 40                                                 | 0.20                    | JVS16V33M6X5      |
|                             | 47                                       | 5X4.5                               | 36                                                 | 0.20                    | JVS16V47M5X4      |
|                             | 47                                       | 6.3X5.5                             | 47                                                 | 0.20                    | JVS16V47M6X5      |
|                             | 100                                      | 5X5.7                               | 58                                                 | 0.20                    | JVS16V100M5X6     |
|                             | 100                                      | 6.3X4.5                             | 58                                                 | 0.20                    | JVS16V100M6X4     |
| 25                          | 4.7                                      | 4X4.5                               | 11                                                 | 0.18                    | JVS25V4R7M4X4     |
|                             | 4.7                                      | 4X5.5                               | 12                                                 | 0.18                    | JVS25V4R7M4X4     |

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| 额定电压<br>Rated<br>Voltage(V) | 额定静容量<br>Rated<br>Capacitance(μF) | 铝壳尺寸<br>Case Size<br>Φ DXL(mm) | 额定纹波电流<br>Rated Ripple Current<br>(mA,105°C,120Hz) | 损失角正切值<br>tan δ | 品号<br>Part Number |
|-----------------------------|-----------------------------------|--------------------------------|----------------------------------------------------|-----------------|-------------------|
| 25                          | 10                                | 5X4.5                          | 20                                                 | 0.18            | JVS25V10M5X4      |
|                             | 10                                | 5X5.5                          | 21                                                 | 0.18            | JVS25V10M5X5      |
|                             | 22                                | 5X4.5                          | 26                                                 | 0.18            | JVS25V22M5X4      |
|                             | 22                                | 6.3X5.5                        | 36                                                 | 0.18            | JVS25V22M6X5      |
|                             | 33                                | 6.3X4.5                        | 42                                                 | 0.18            | JVS25V33M6X4      |
|                             | 33                                | 6.3X5.5                        | 44                                                 | 0.18            | JVS25V33M6X5      |
|                             | 47                                | 6.3X4.5                        | 46                                                 | 0.18            | JVS25V47M6X4      |
|                             | 47                                | 6.3X5.5                        | 60                                                 | 0.18            | JVS25V47M6X5      |
|                             | 100                               | 6.3X4.5                        | 54                                                 | 0.18            | JVS25V100M6X4     |
| 35                          | 4.7                               | 4X4.5                          | 13                                                 | 0.16            | JVS35V4R7M4X4     |
|                             | 4.7                               | 4X5.5                          | 14                                                 | 0.16            | JVS35V4R7M4X5     |
|                             | 10                                | 5X4.5                          | 22                                                 | 0.16            | JVS35V10M5X4      |
|                             | 10                                | 5X5.5                          | 23                                                 | 0.16            | JVS35V10M5X5      |
|                             | 22                                | 6.3X4.5                        | 36                                                 | 0.16            | JVS35V22M6X4      |
|                             | 22                                | 6.3X5.5                        | 50                                                 | 0.16            | JVS35V22M6X5      |
|                             | 33                                | 6.3X4.5                        | 45                                                 | 0.16            | JVS35V33M6X4      |
|                             | 33                                | 6.3X5.5                        | 50                                                 | 0.16            | JVS35V33M6X5      |
|                             | 47                                | 6.3X4.5                        | 50                                                 | 0.16            | JVS35V47M6X4      |
|                             | 47                                | 6.3X5.5                        | 50                                                 | 0.16            | JVS35V47M6X5      |
|                             |                                   |                                |                                                    |                 |                   |
| 50                          | 1                                 | 4X4.5                          | 5.4                                                | 0.14            | JVS50V1M4X4       |
|                             | 1                                 | 4X5.5                          | 7                                                  | 0.14            | JVS50V1M4X5       |
|                             | 2.5                               | 4X4.5                          | 9.6                                                | 0.14            | JVS50V2R2M4X4     |
|                             | 2.5                               | 4X5.5                          | 10                                                 | 0.14            | JVS50V2R2M4X5     |
|                             | 3.3                               | 4X4.5                          | 12                                                 | 0.14            | JVS50V3R3M4X4     |
|                             | 3.3                               | 4X5.5                          | 12                                                 | 0.14            | JVS50V3R3M4X5     |
|                             | 4.7                               | 5X4.5                          | 16                                                 | 0.14            | JVS50V4R7M5X4     |
|                             | 4.7                               | 5X5.5                          | 17                                                 | 0.14            | JVS50V4R7M5X5     |
|                             | 10                                | 6.3X4.5                        | 26                                                 | 0.14            | JVS50V10M6X4      |
|                             | 10                                | 6.3X4.5                        | 51                                                 | 0.14            | JVS50V10M6X4      |