

PCV 系列  
SERIES

贴片型 125°C 3000小时品

Load Life : 125°C 3000 hours, Chip Type

- 高耐压(~50Vdc)、超低ESR品、高纹波品。  
High Voltage(~50Vdc), Ultra Low ESR, High Ripple Current.
- 可对应AEC-Q200。  
AEC-Q200.

RoHS  
compliance

## ◆规格表／SPECIFICATIONS

| 项目 Items   | 特性 Characteristics  |  |  |                               |   |                              |  |                        |   |
|--|---|--|--|-------------------------------|---|------------------------------|--|------------------------|---|
| 工作温度范围 Category Temperature Range  | -55~+125°C  |  |  |                               |   |                              |  |                        |   |
| 额定电压范围 Rated Voltage Range   | 25~50Vdc  |  |  |                               |   |                              |  |                        |   |
| 脉冲电压 Surge Voltage   | 额定电压×1.15<br>Rated Voltage ×1.15  |  |  |                               |   |                              |  |                        |   |
| 静电容量允许差 Capacitance Tolerance  | ±20%(20°C,120Hz)  |  |  |                               |   |                              |  |                        |   |
| 漏电流 Leakage Current(MAX)   | 标准品一览表如下(施加额定电压2分钟后)<br>The value is shown in "STANDARD SIZE" table (After 2 minutes)   |  |  |                               |   |                              |  |                        |   |
| 损失角正切值(tan δ)<br>Dissipation Factor(MAX)                                 | 0.12以下(20°C,120Hz)  |  |  |                               |   |                              |  |                        |   |
| 耐久性 Endurance  | 在125°C中施加额定电压3000小时后，满足以下各项。<br>After applying rated voltage for 3000 hours at 125°C, the capacitors shall meet the following requirements. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">静电容量变化率<br/>Capacitance Change</td><td style="width: 33%;">初期值的±20%以内<br/>Within ±20% of the initial value.</td></tr> <tr> <td>损失角正切值<br/>Dissipation Factor</td><td>规格值的150%以下<br/>Not more than 150% of the specified value.</td></tr> <tr> <td>漏电流<br/>Leakage Current</td><td>规格值以下<br/>Not more than the specified value.</td></tr> </table>                                   |  |  | 静电容量变化率<br>Capacitance Change | 初期值的±20%以内<br>Within ±20% of the initial value. | 损失角正切值<br>Dissipation Factor | 规格值的150%以下<br>Not more than 150% of the specified value. | 漏电流<br>Leakage Current | 规格值以下<br>Not more than the specified value. |
| 静电容量变化率<br>Capacitance Change  | 初期值的±20%以内<br>Within ±20% of the initial value.   |  |  |                               |   |                              |  |                        |   |
| 损失角正切值<br>Dissipation Factor   | 规格值的150%以下<br>Not more than 150% of the specified value.  |  |  |                               |   |                              |  |                        |   |
| 漏电流<br>Leakage Current   | 规格值以下<br>Not more than the specified value.   |  |  |                               |   |                              |  |                        |   |
| 高温高湿(固定)<br>Damp heat(Stady state)                                       | 在60°C、90~95%RH中，施加额定电压1000小时后、满足下记各项。<br>After applying rated voltage for 1000 hours at 60°C and humidity of 90 to 95%, the capacitors shall meet the following requirements. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">静电容量变化率<br/>Capacitance Change</td><td style="width: 33%;">初期值的±20%以内<br/>Within ±20% of the initial value.</td></tr> <tr> <td>损失角正切值<br/>Dissipation Factor</td><td>规格值的150%以下<br/>Not more than 150% of the specified value.</td></tr> <tr> <td>漏电流<br/>Leakage Current</td><td>规格值以下<br/>Not more than the specified value.</td></tr> </table> |  |  | 静电容量变化率<br>Capacitance Change | 初期值的±20%以内<br>Within ±20% of the initial value. | 损失角正切值<br>Dissipation Factor | 规格值的150%以下<br>Not more than 150% of the specified value. | 漏电流<br>Leakage Current | 规格值以下<br>Not more than the specified value. |
| 静电容量变化率<br>Capacitance Change  | 初期值的±20%以内<br>Within ±20% of the initial value.   |  |  |                               |   |                              |  |                        |   |
| 损失角正切值<br>Dissipation Factor   | 规格值的150%以下<br>Not more than 150% of the specified value.  |  |  |                               |   |                              |  |                        |   |
| 漏电流<br>Leakage Current   | 规格值以下<br>Not more than the specified value.   |  |  |                               |   |                              |  |                        |   |
| 低温特性<br>Low Temperature Characteristics<br>(阻抗比)<br>Impedance Ratio(MAX) | $Z(-55°C)/Z(+20°C) \leq 1.25$ (100kHz)<br>$Z(-25°C)/Z(+20°C) \leq 1.15$   |  |  |                               |   |                              |  |                        |   |

## ◆产品型号体系／PART NUMBER

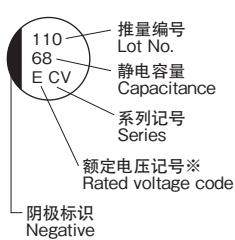
|                       |                |                     |                                  |               |                   |
|-----------------------|----------------|---------------------|----------------------------------|---------------|-------------------|
| □□□                   | PCV            | □□□□□               | M                                | □□□           | DXL               |
| 额定电压<br>Rated Voltage | 系列名称<br>Series | 静电容量<br>Capacitance | 静电容量允许差<br>Capacitance Tolerance | 副记号<br>Option | 铝壳尺寸<br>Case Size |

## ◆纹波电流补正系数／

## MULTIPLIER FOR RIPPLE CURRENT

|                     |      |      |      |       |
|---------------------|------|------|------|-------|
| 频率(Hz)<br>Frequency | 120  | 1k   | 10k  | 100k≤ |
| 系数<br>Coefficient   | 0.05 | 0.30 | 0.70 | 1.00  |

## ◆标识／MARKING

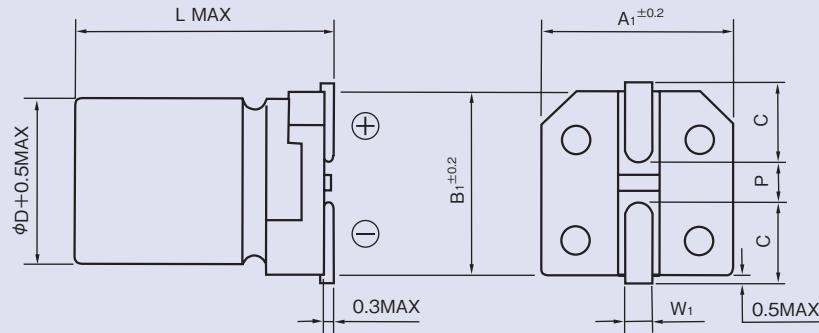


※电压记号 Voltage code

|                            |    |    |    |
|----------------------------|----|----|----|
| 额定电压(Vdc)<br>Rated Voltage | 25 | 35 | 50 |
| 额定电压记号<br>Voltage code     | E  | V  | H  |

## ◆尺寸图／DIMENSIONS

(mm)



| $\phi D$ | 8       |    | 10      |    |
|----------|---------|----|---------|----|
| L        | 12      | 15 | 12      | 15 |
| A1       | 8.3     |    | 10.3    |    |
| B1       | 8.3     |    | 10.3    |    |
| C        | 2.9     |    | 3.2     |    |
| W1       | 0.8~1.1 |    | 0.8~1.1 |    |
| P        | 3.1     |    | 4.5     |    |

## ◆标准品一览表／STANDARD SIZE

| 额定电压<br>Rated Voltage<br>(Vdc) | 静电容量<br>Capacitance<br>( $\mu F$ ) | 外形尺寸<br>Size<br>$\phi D \times L$ (mm) | 损失角正切值<br>(tan $\delta$ )<br>(120Hz, 20°C) | 漏电流<br>Leakage Current<br>( $\mu A/2min$ ) | 等效串联电阻<br>E.S.R.(m $\Omega$ ,max) |              | 额定纹波电流<br>Rated Ripple Current<br>(mA r.m.s./100kHz) |
|--------------------------------|------------------------------------|--|--|--|-----------------------------------|--------------|--|
|                                |                                    |  |  |  | 20°C, 100kHz                      | -40°C, 10kHz |  |
| 25                             | 68                                 | 8×12                                   | 0.12                                       | 340  | 35                                | 53           | 1600   |
|                                | 82                                 | 8×15                                   | 0.12                                       | 410  | 32                                | 48           | 2000   |
|                                | 100                                | 10×12                                  | 0.12                                       | 500  | 30                                | 45           | 2000   |
|                                | 150                                | 10×15                                  | 0.12                                       | 750  | 29                                | 44           | 2300   |
| 35                             | 33                                 | 8×12                                   | 0.12                                       | 231  | 37                                | 56           | 1600   |
|                                | 39                                 | 8×15                                   | 0.12                                       | 273  | 35                                | 53           | 2000   |
|                                | 56                                 | 10×12                                  | 0.12                                       | 392  | 31                                | 47           | 2000   |
|                                | 68                                 | 10×15                                  | 0.12                                       | 476  | 30                                | 45           | 2300   |
| 50                             | 22                                 | 8×12                                   | 0.12                                       | 220  | 38                                | 57           | 1250   |
|                                | 27                                 | 8×15                                   | 0.12                                       | 270  | 36                                | 54           | 1500   |
|                                | 33                                 | 10×12                                  | 0.12                                       | 330  | 33                                | 50           | 1600   |
|                                | 47                                 | 10×15                                  | 0.12                                       | 470  | 31                                | 47           | 2000   |