

PLV / PZL series

150°C 1000 時間 (ハイブリッドタイプ)
Load life : 150°C 1000 hours (Hybrid Type)



AEC-Q200



◆規格表/SPECIFICATION

| 項目 Item | 特性 Characteristics | | | | | | | | | | | | |
|--|--|-------------------------------|---|------------------------------|--|---------------|--|-------------------------|---|------|------|------|--|
| カテゴリ温度範囲 Category Temperature Range | -55~+150°C | | | | | | | | | | | | |
| 定格電圧範囲 Rated Voltage Range | 25~63Vdc | | | | | | | | | | | | |
| 静電容量許容差 Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | |
| 漏れ電流 Leakage Current (MAX) | I=0.01CV又は3μAのいずれか大なる値以下 (定格電圧印加2分後) I=0.01CV or 3μA whichever is greater. (After 2 minutes) I=漏れ電流(μA) C=静電容量(μF) V=定格電圧(Vdc) Leakage Current Capacitance Rated Voltage | | | | | | | | | | | | |
| 損失角の正接(tan δ) Dissipation Factor(MAX) | <table border="1"> <tr> <td>定格電圧 (Vdc) Rated Voltage</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tan δ</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td></td> </tr> </table> | 定格電圧 (Vdc) Rated Voltage | 25 | 35 | 50 | 63 | (20°C, 120Hz) | tan δ | 0.14 | 0.12 | 0.10 | 0.08 | |
| 定格電圧 (Vdc) Rated Voltage | 25 | 35 | 50 | 63 | (20°C, 120Hz) | | | | | | | | |
| tan δ | 0.14 | 0.12 | 0.10 | 0.08 | | | | | | | | | |
| 耐久性 Endurance | 150°C中で1000時間定格電圧(定格リップル重畳)印加後、下記規格を満足すること。 After applying rated voltage with rated ripple current for 1000 hours at 150°C, the capacitors shall meet the following Criteria. | | | | | | | | | | | | |
| 高温高湿負荷 Biased Humidity | 85°C,85%RH中で2000時間定格電圧印加後、下記規格を満足すること。 After applying rated voltage for 2000 hours at 85°C and humidity of 85%, the capacitors shall meet the following Criteria. | | | | | | | | | | | | |
| 規格 Criteria | <table border="1"> <tr> <td>静電容量変化率 Capacitance Change</td> <td>初期値の ±30% 以内 Within ±30% of the initial value.</td> </tr> <tr> <td>損失角の正接 Dissipation Factor</td> <td>規格値の 200% 以下 Not more than 200% of the specified value.</td> </tr> <tr> <td>等価直列抵抗 ESR</td> <td>規格値の 200% 以下 Not more than 200% of the specified value.</td> </tr> <tr> <td>漏れ電流 Leakage Current</td> <td>規格値以下 Not more than the specified value.</td> </tr> </table> | 静電容量変化率 Capacitance Change | 初期値の ±30% 以内 Within ±30% of the initial value. | 損失角の正接 Dissipation Factor | 規格値の 200% 以下 Not more than 200% of the specified value. | 等価直列抵抗 ESR | 規格値の 200% 以下 Not more than 200% of the specified value. | 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | | | | |
| 静電容量変化率 Capacitance Change | 初期値の ±30% 以内 Within ±30% of the initial value. | | | | | | | | | | | | |
| 損失角の正接 Dissipation Factor | 規格値の 200% 以下 Not more than 200% of the specified value. | | | | | | | | | | | | |
| 等価直列抵抗 ESR | 規格値の 200% 以下 Not more than 200% of the specified value. | | | | | | | | | | | | |
| 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | | | | | | | | | | | | |
| 低温特性 Low Temperature Stability (インピーダンス比) Impedance Ratio (MAX) | $Z(-55^{\circ}\text{C})/Z(+20^{\circ}\text{C}) \leq 2.0$ (100kHz) $Z(-25^{\circ}\text{C})/Z(+20^{\circ}\text{C}) \leq 1.5$ | | | | | | | | | | | | |

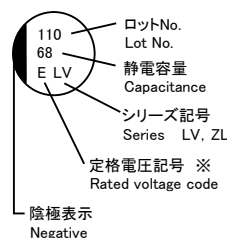
◆呼称方法/PART NUMBER

□□□
PLV/PZL
□□□□□
M
□□□
□□
D x L
 定格電圧 シリーズ名 静電容量 静電容量許容差 副記号 リード加工記号 ケースサイズ
 Rated Voltage Series Capacitance Capacitance Tolerance Option Lead Forming Case Size

◆リップル電流補正係数/
MULTIPLIER FOR RIPPLE CURRENT

| 周波数 (Hz) Frequency | 100 ≤ f < 1k | 1k ≤ f < 10k | 10k ≤ f < 20k |
|-----------------------|---------------|----------------|---------------|
| 係数 Coefficient | 0.05 | 0.30 | 0.70 |
| 周波数 (Hz) Frequency | 20k ≤ f < 50k | 50k ≤ f < 100k | 100k ≤ |
| 係数 Coefficient | 0.80 | 0.90 | 1.00 |

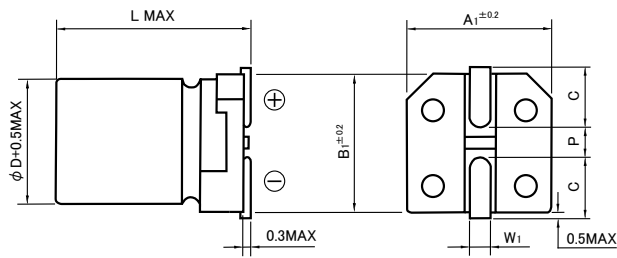
◆表示/MARKING



※電圧記号 Voltage code

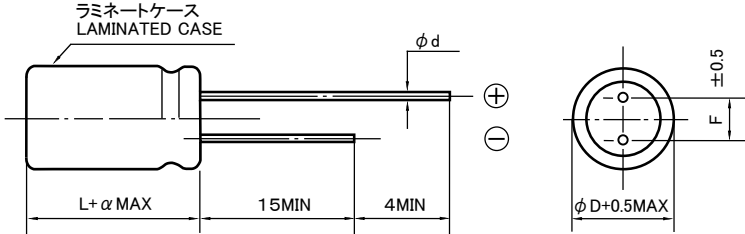
| | | | | |
|-----------------------------|----|----|----|----|
| 定格電圧 (Vdc) Rated Voltage | 25 | 35 | 50 | 63 |
| 電圧記号 Voltage code | E | V | H | J |

◆寸法図/DIMENSIONS



(mm)

| φ D | L | A1 | B1 | C | W1 | P |
|-----|------|------|------|-----|---------|-----|
| 8 | 10.5 | 8.3 | 8.3 | 2.9 | 0.8~1.1 | 3.1 |
| 10 | 10.5 | 10.3 | 10.3 | 3.2 | 0.8~1.1 | 4.5 |



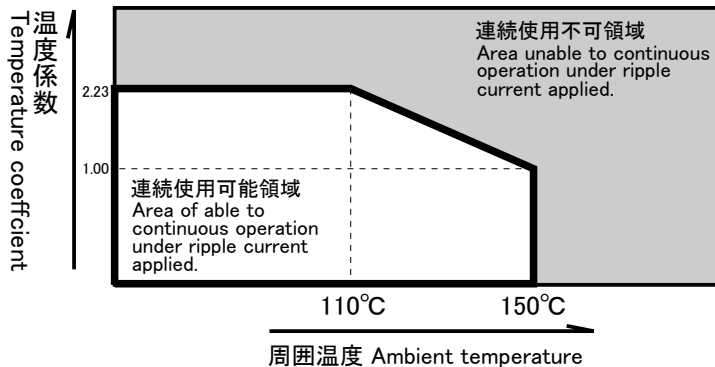
(mm)

| φ D | L | F | φ d | α |
|-----|---|-----|-----|-----|
| 8 | 9 | 3.5 | 0.6 | 1.5 |
| 10 | 9 | 5.0 | 0.6 | 1.5 |

◆標準品一覧表/STANDARD SIZE

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μF) | 外形寸法 Size φ D × L (mm) | | 等価直列抵抗 E.S.R (mΩ MAX, 100kHz) | | 定格リップル電流 Rated Ripple Current (mArms/ 150°C, 100kHz) | 許容リップル電流 Permissible Ripple Current (mA) | |
|--------------------------------|-----------------------------|---------------------------|----------------|----------------------------------|-------|---|---|---------------|
| | | PLV (SMD) | PZL (LeadWire) | 20°C | -40°C | | 150°C, 100kHz | 110°C, 100kHz |
| 25 | 150 | 8×10.5 | 8×9 | 25 | | 1400 | 1400 | 3120 |
| | 270 | 10×10.5 | 10×9 | 20 | | 1800 | 1800 | 4010 |
| 35 | 100 | 8×10.5 | 8×9 | 25 | | 1400 | 1400 | 3120 |
| | 150 | 10×10.5 | 10×9 | 20 | | 1800 | 1800 | 4010 |
| 50 | 68 | 8×10.5 | 8×9 | 35 | | 1000 | 1000 | 2230 |
| | 100 | 10×10.5 | 10×9 | 28 | | 1300 | 1300 | 2890 |
| 63 | 33 | 8×10.5 | 8×9 | 40 | | 900 | 900 | 2000 |
| | 56 | 10×10.5 | 10×9 | 30 | | 1100 | 1100 | 2450 |

◆温度係数/TEMPERATURE COEFFICIENT FOR RIPPLE CURRENT



| | | | | | |
|---|-------|------|------|------|------|
| 温度 Temperature T(°C) | ≤ 110 | 115 | 125 | 135 | 140 |
| 係数 Coefficient (IMAX/I _r) | 2.23 | 2.12 | 1.87 | 1.58 | 1.41 |
| 温度 Temperature T(°C) | 145 | 150 | | | |
| 係数 Coefficient (IMAX/I _r) | 1.22 | 1.00 | | | |

温度係数 IMAX/I₀: 定格リップル電流(I₀)を超えて連続印加可能なリップル電流最大値(IMAX)を示す係数。寿命推定時間は寿命計算式に従う。

Temperature coefficient IMAX/I₀: Coefficient indicating the maximum permissible ripple current (IMAX) that can be continuously applied beyond the rated current (I₀). Estimated lifetime complies with our lifetime calculation formula.