

PJ / PZJ series

125°C 4000 時間品 (ハイブリッドタイプ)
Load life : 125°C 4000 hours (Hybrid Type)
高温対応, 高リップル品
High Temperature, High Ripple Current

AEC-Q200



◆規格表/SPECIFICATION

| 項目 Item | 特性 Characteristics | | | | |
|--|--|--|------|------|------|
| カテゴリー温度範囲 Category Temperature Range | -55~+125°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 $3\mu A$ のいずれか大なる値以下 (定格電圧印加2分後) $I=0.01CV$ or $3\mu A$ 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) | 定格電圧 (Vdc) Rated Voltage | 25 | 35 | 50 | 63 |
| | tan δ | 0.14 | 0.12 | 0.10 | 0.08 |
| 耐久性 Endurance | 125°C中で4000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 4000 hours at 125°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 | 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) | $Z(-55°C)/Z(+20°C) \leq 2.0$ (100kHz) $Z(-25°C)/Z(+20°C) \leq 1.5$ | | | | |

◆呼称方法/PART NUMBER

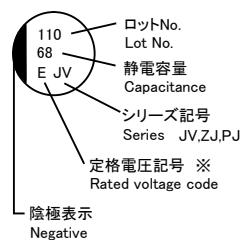
| □□□ | PJV/PZJ | □□□□□ | M | □□□ | □□ | D x L |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| 定格電圧 Rated Voltage | シリーズ名 Series | 静電容量 Capacitance | 静電容量許容差 Capacitance Tolerance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

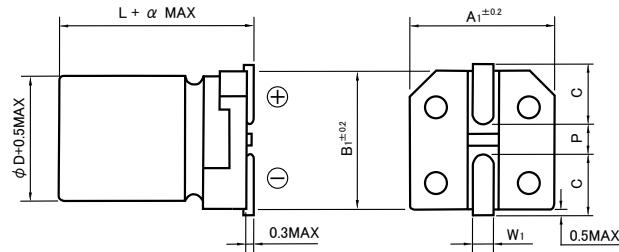
◆表示/MARKING



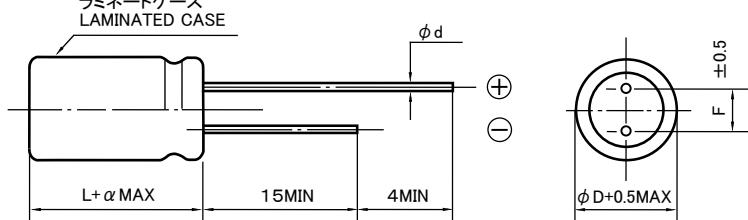
※電圧記号 Voltage code

| | | | | |
|-----------------------------|----|----|----|----|
| 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



| ϕD | L | A1 | B1 | C | W1 | P | α | (mm) |
|----------|------|------|------|-----|---------|-----|----------|------|
| 6.3 | 6.1 | 6.6 | 6.6 | 2.7 | 0.5~0.8 | 1.8 | 0 | |
| 6.3 | 8 | 6.6 | 6.6 | 2.7 | 0.5~0.8 | 1.8 | 0 | |
| 8 | 10.5 | 8.3 | 8.3 | 2.9 | 0.8~1.1 | 3.1 | 0 | |
| 10 | 10.5 | 10.3 | 10.3 | 3.2 | 0.8~1.1 | 4.5 | 0 | |
| 10 | 12.5 | 10.3 | 10.3 | 3.2 | 0.8~1.1 | 4.5 | 0.3 | |
| 10 | 16.5 | 10.3 | 10.3 | 3.2 | 0.8~1.1 | 4.5 | 0.3 | |

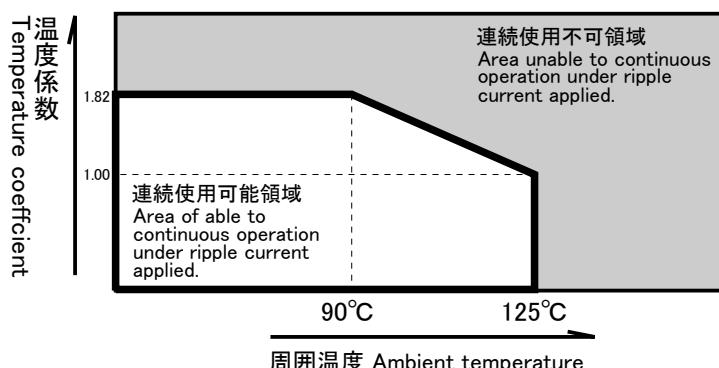


| ϕD | L | F | ϕd | α | (mm) |
|----------|----|-----|----------|----------|------|
| 8 | 9 | 3.5 | 0.6 | 1.5 | |
| 10 | 9 | 5.0 | 0.6 | 1.5 | |
| 10 | 11 | 5.0 | 0.6 | 1.5 | |
| 10 | 15 | 5.0 | 0.6 | 1.5 | |

◆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 $\phi D \times L$ (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/ 125°C, 100kHz) | 許容リップル電流 Permissible Ripple Current (mA) | |
|--------------------------------|------------------------------------|-------------------------------------|----------------|----------------------------------|-------|---|---|--------------|
| | | PJV (SMD) | PZJ (LeadWire) | 20°C | -40°C | | 125°C, 100kHz | 90°C, 100kHz |
| 25 | 68 | 6.3×6.1 | - | 50 | | 1080 | 1080 | 1960 |
| | 150 | 6.3×8 | - | 30 | | 1680 | 1680 | 3220 |
| | 270 | 8×10.5 | 8×9 | 25 | | 1920 | 1920 | 3490 |
| | 470 | 10×10.5 | 10×9 | 20 | | 2800 | 2800 | 5090 |
| | 560 | 10×12.5 | 10×11 | 14 | | 3500 | 3500 | 6370 |
| | 820 | 10×16.5 | 10×15 | 11 | | 4000 | 4000 | 7280 |
| 35 | 56 | 6.3×6.1 | - | 50 | | 1080 | 1080 | 1960 |
| | 100 | 6.3×8 | - | 30 | | 1680 | 1680 | 3220 |
| | 180 | 8×10.5 | 8×9 | 25 | | 1920 | 1920 | 3490 |
| | 330 | 10×10.5 | 10×9 | 20 | | 2800 | 2800 | 5090 |
| | 390 | 10×12.5 | 10×11 | 14 | | 3500 | 3500 | 6370 |
| | 560 | 10×16.5 | 10×15 | 11 | | 4000 | 4000 | 7280 |
| 50 | 82 | 8×10.5 | 8×9 | 30 | | 1700 | 1700 | 3090 |
| | 150 | 10×10.5 | 10×9 | 28 | | 2200 | 2200 | 4000 |
| | 180 | 10×12.5 | 10×11 | 18 | | 3000 | 3000 | 5460 |
| | 220 | 10×16.5 | 10×15 | 13 | | 3600 | 3600 | 6550 |
| 63 | 47 | 8×10.5 | 8×9 | 40 | | 1500 | 1500 | 2730 |
| | 82 | 10×10.5 | 10×9 | 30 | | 1900 | 1900 | 3450 |
| | 100 | 10×12.5 | 10×11 | 19 | | 2700 | 2700 | 4910 |
| | 150 | 10×16.5 | 10×15 | 15 | | 3300 | 3300 | 6000 |

◆温度係数/TEMPERATURE COEFFICIENT FOR RIPPLE CURRENT



| 温度 Temperature T (°C) | ≤ 90 | 95 | 100 | 105 | 110 | 115 | 125 |
|---|------|------|------|------|------|------|------|
| 係数 Coefficient (IMAX/I _r) | 1.82 | 1.73 | 1.63 | 1.52 | 1.41 | 1.29 | 1.00 |

温度係数 $IMAX/I_0$: 定格リップル電流(I_0)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 $IMAX/I_0$: Coefficient indicating the maximum permissible ripple current ($IMAX$) that can be continuously applied beyond the rated current (I_0). Estimated lifetime complies with our lifetime calculation formula.