

TKV series

105°C 2000時間 低ESR品
Load life : 105°C 2000 hours Low ESR

AEC-Q200



◆規格表 / SPECIFICATIONS

| 項目 Item | 特性 Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|-------------------------------|---|------------------------------|--|-------------------------|---|---------------|------------------|------|------|------|------|------|--|------------------|---|---|---|---|---|--|------------------|---|---|---|---|---|--|
| カテゴリ温度範囲 Category Temperature Range | -55~+105°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 定格電圧範囲 Rated Voltage Range | 6.3~35Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tan δ</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td></td> </tr> </table> | 定格電圧 (Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | (20°C, 120Hz) | tan δ | 0.26 | 0.19 | 0.16 | 0.14 | 0.12 | | | | | | | | | | | | | | | |
| 定格電圧 (Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | | | |
| tan δ | 0.26 | 0.19 | 0.16 | 0.14 | 0.12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 耐久性 Endurance | <p>105°C中で2000時間定格電圧印加後、下記項目を満足すること。 After applying rated voltage for 2000 hours at 105°C, the capacitors shall meet the following requirements.</p> <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>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. | 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | | | | | | | | | | | | | | | | | | | | | | |
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| 損失角の正接 Dissipation Factor | 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) | <table border="1"> <tr> <td>定格電圧 (Vdc) Rated Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td>Z(-55°C)/Z(20°C)</td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td></td> </tr> </table> | 定格電圧 (Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | (120Hz) | Z(-25°C)/Z(20°C) | 2 | 2 | 2 | 2 | 2 | | Z(-40°C)/Z(20°C) | 3 | 3 | 3 | 3 | 3 | | Z(-55°C)/Z(20°C) | 4 | 4 | 4 | 3 | 3 | |
| 定格電圧 (Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | (120Hz) | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-55°C)/Z(20°C) | 4 | 4 | 4 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | |

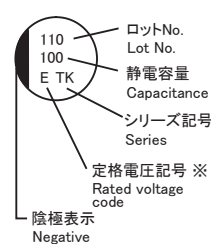
◆呼称方法 / PART NUMBER

| | | | | | |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|---------------------|
| □□□ | TKV | □□□□□ | 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 | 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 | | 120 | 1k | 10k | 100k ≤ |
|-----------------------|-------------|------|------|------|--------|
| 係数 Coefficient | 33 μF | 0.42 | 0.75 | 0.90 | 1.00 |
| | 47~150 μF | 0.44 | 0.80 | 0.95 | 1.00 |
| | 220~1800 μF | 0.60 | 0.85 | 0.95 | 1.00 |

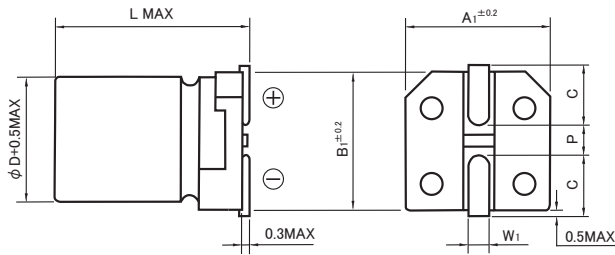
◆表示 / MARKING



※電圧記号 Voltage code

| | | | | | |
|-----------------------------|-----|----|----|----|----|
| 定格電圧 (Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 |
| 電圧記号 Voltage code | j | A | C | E | V |

◆寸法図／DIMENSIONS



(mm)

| φD | L | A1 | B1 | C | W1 | P |
|-----|------|------|------|-----|---------|-----|
| 6.3 | 6.1 | 6.6 | 6.6 | 2.7 | 0.5~0.8 | 1.8 |
| 6.3 | 8 | 6.6 | 6.6 | 2.7 | 0.5~0.8 | 1.8 |
| 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 |

◆標準品一覧表／STANDARD SIZE

Size φDXL(mm), Rated Ripple Current(mA r.m.s./105°C,100kHz), ESR(Ω MAX/20°C, 100kHz)

| Vdc | Cap (μF) | Size (φDXL) | Ripple | ESR |
|-----|----------|-------------|--------|------|
| 6.3 | 100 | 6.3×6.1 | 300 | 0.26 |
| | 220 | 6.3×6.1 | 300 | 0.26 |
| | 330 | 6.3×8 | 600 | 0.16 |
| | 470 | 8×10.5 | 850 | 0.08 |
| | 1000 | 8×10.5 | 850 | 0.08 |
| | 1500 | 10×10.5 | 1190 | 0.06 |
| | 1800 | 10×10.5 | 850 | 0.08 |
| 10 | 150 | 6.3×6.1 | 300 | 0.26 |
| | 220 | 6.3×8 | 600 | 0.16 |
| | 330 | 8×10.5 | 850 | 0.08 |
| | 470 | 8×10.5 | 850 | 0.08 |
| | 680 | 8×10.5 | 850 | 0.08 |
| | 1000 | 10×10.5 | 1190 | 0.06 |
| | 1200 | 10×10.5 | 850 | 0.08 |
| 16 | 47 | 6.3×6.1 | 300 | 0.26 |
| | 100 | 6.3×6.1 | 300 | 0.26 |
| | | 6.3×8 | 600 | 0.16 |
| | 220 | 6.3×8 | 600 | 0.16 |
| | 330 | 8×10.5 | 850 | 0.08 |
| | 470 | 8×10.5 | 850 | 0.08 |
| | 680 | 10×10.5 | 1190 | 0.06 |
| | 820 | 10×10.5 | 850 | 0.08 |

| Vdc | Cap (μF) | Size (φDXL) | Ripple | ESR |
|-----|----------|-------------|---------|------|
| 25 | 33 | 6.3×6.1 | 300 | 0.26 |
| | 68 | 6.3×6.1 | 300 | 0.26 |
| | 100 | 6.3×8 | 600 | 0.16 |
| | 150 | 8×10.5 | 850 | 0.08 |
| | 220 | 8×10.5 | 850 | 0.08 |
| | 330 | 8×10.5 | 850 | 0.08 |
| | 470 | 10×10.5 | 1190 | 0.06 |
| | 560 | 10×10.5 | 850 | 0.08 |
| | 35 | 33 | 6.3×6.1 | 300 |
| 47 | | 6.3×6.1 | 300 | 0.26 |
| 68 | | 6.3×8 | 600 | 0.16 |
| 100 | | 6.3×8 | 600 | 0.16 |
| | | 8×10.5 | 850 | 0.08 |
| 150 | | 8×10.5 | 850 | 0.08 |
| 220 | | 8×10.5 | 850 | 0.08 |
| 330 | | 10×10.5 | 1190 | 0.06 |
| 390 | | 10×10.5 | 850 | 0.08 |