

RADIAL ALUMINIUM ELECTROLYTIC CAPACITORS

KME Series

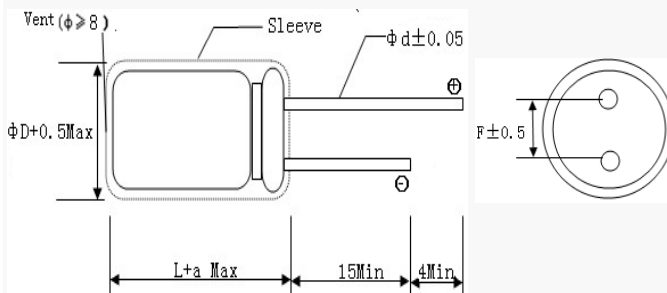
2000-3000h at 105°C

- Miniatured
- Low Impedance ,High Current
- Switching Power Supply

■ SPECIFICATION

| Items | Characteristics | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|--------------------|---------------------------|---------------|---------------------------------------|-----------------|---------------------------------------|--------|------|-----------------|-------------------------------|------|------|------|------|------|------|------|------|
| Operating Temperature Range(°C) | -55~+105°C | | | | | | | | | | | | | | | | | | |
| Voltage range (V) | 6.3~100V | | | | | | | | | | | | | | | | | | |
| Capacitance Range (μF) | 0.47~18000μF | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (at20°C,120Hz) | | | | | | | | | | | | | | | | | | |
| leakage current (μA) | After 2 minute at 20°C application of rated voltage, leakage current is not more than 0.01CV or 3μA, whichever is greater C:Nominal Capacitance (μF) V :Rated Voltage (V) | | | | | | | | | | | | | | | | | | |
| Dissipation Factor(Tanδ) | <table border="1"> <thead> <tr> <th>WV(V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Tanδ(max)</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table> <p>(at 20°C,120Hz)</p> | WV(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | Tanδ(max) | 0.18 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | 0.08 |
| WV(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | |
| Tanδ(max) | 0.18 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | 0.08 | | | | | | | | | | | |
| LowTemperature Characteristics | <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3~100V</th> </tr> </thead> <tbody> <tr> <td>Z-55°C/Z+20°C</td> <td>3</td> </tr> </tbody> </table> | Rated Voltage (V) | 6.3~100V | Z-55°C/Z+20°C | 3 | | | | | | | | | | | | | | |
| Rated Voltage (V) | 6.3~100V | | | | | | | | | | | | | | | | | | |
| Z-55°C/Z+20°C | 3 | | | | | | | | | | | | | | | | | | |
| Load Life | <p>The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated rippled current is applied for 2000-3000 hours at 105°C</p> <table border="1"> <thead> <tr> <th>Capacitance change</th> <th>Within± 20% initial value</th> <th>Case Dia</th> <th>Life time(hours)</th> </tr> </thead> <tbody> <tr> <td>D.F.(Tanδ)</td> <td>Not more than 300% of specified value</td> <td>ΦD≤6.3</td> <td>2000</td> </tr> <tr> <td>leakage current</td> <td>Not more than specified value</td> <td>ΦD≥8</td> <td>3000</td> </tr> </tbody> </table> | Capacitance change | Within± 20% initial value | Case Dia | Life time(hours) | D.F.(Tanδ) | Not more than 300% of specified value | ΦD≤6.3 | 2000 | leakage current | Not more than specified value | ΦD≥8 | 3000 | | | | | | |
| Capacitance change | Within± 20% initial value | Case Dia | Life time(hours) | | | | | | | | | | | | | | | | |
| D.F.(Tanδ) | Not more than 300% of specified value | ΦD≤6.3 | 2000 | | | | | | | | | | | | | | | | |
| leakage current | Not more than specified value | ΦD≥8 | 3000 | | | | | | | | | | | | | | | | |
| Shelf Life | <p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000hours at 105°C without voltage applied .Before the measurement ,the capacitor shall be preconditioned by applying voltage according to Item 4</p> <table border="1"> <thead> <tr> <th>Capacitance change</th> <th>Within± 20% initial value</th> </tr> </thead> <tbody> <tr> <td>D.F.(Tanδ)</td> <td>Not more than 200% of specified value</td> </tr> <tr> <td>leakage current</td> <td>Not more than specified value</td> </tr> </tbody> </table> | Capacitance change | Within± 20% initial value | D.F.(Tanδ) | Not more than 200% of specified value | leakage current | Not more than specified value | | | | | | | | | | | | |
| Capacitance change | Within± 20% initial value | | | | | | | | | | | | | | | | | | |
| D.F.(Tanδ) | Not more than 200% of specified value | | | | | | | | | | | | | | | | | | |
| leakage current | Not more than specified value | | | | | | | | | | | | | | | | | | |

■ DIMENSIONS(mm)



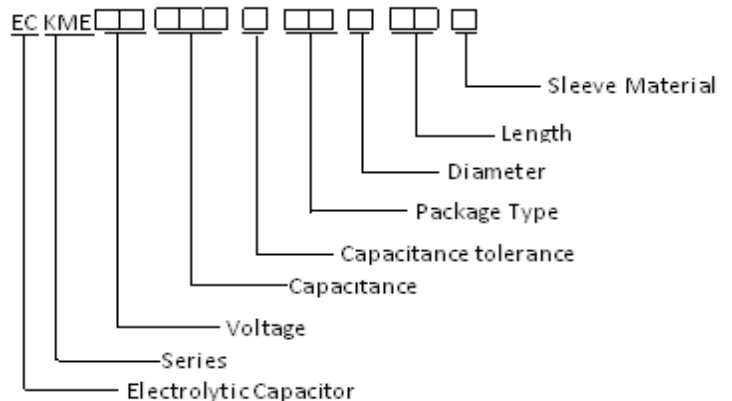
(Unit: mm)

| φ D | 5 | 6.3 | 8 | 10 | 13 | 16 | 18 |
|-----|-----|-----|-----|-----|-----|-----|-----|
| F | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| φ d | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 |
| a | 1.5 | 1.5 | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 |

● Temperature Coefficient

| Temperature(°C) | +70 | +85 | +105 |
|-----------------|------|------|------|
| Coefficient | 1.08 | 1.68 | 1.00 |

■ PART NUMBERING SYSTEM



● Frequency Coefficient

| Frequency | 120Hz | 1KHz | 10KHz | 100KHz |
|------------|-------|------|-------|--------|
| Cap(μF) | | | | |
| 12~180 | 0.40 | 0.75 | 0.90 | 1.00 |
| 220~500 | 0.50 | 0.63 | 0.93 | 1.00 |
| 680~1800 | 0.60 | 0.86 | 0.95 | 1.00 |
| 2200~3900 | 0.75 | 0.90 | 0.97 | 1.00 |
| 4700~18000 | 0.85 | 0.95 | 0.98 | 1.00 |

| U _R (Surge Voltage) Code | Rated Capaci- tance | Max Impedance 20°C 100kHz | Rated Ripple Current 105°C 100kHz | Size D×L φ | P/N |
|--|---------------------------|------------------------------------|---|------------------|-----|
| (V) | (μF) | (Ω) | (mA rms) | (mm) | -- |
| 6.3 (8) 0J | 150 | 0.75 | 175 | 5x11 | |
| | 330 | 0.33 | 290 | 6.3x12 | |
| | 470 | 0.18 | 400 | 6.3x15 | |
| | 680 | 0.12 | 555 | 8x12 | |
| | 820 | 0.090 | 760 | 10x12.5 | |
| | 1000 | 0.090 | 730 | 8x16 | |
| | 1200 | 0.080 | 810 | 8x20 | |
| | | 0.068 | 1050 | 10x16 | |
| | 1500 | 0.052 | 1220 | 10x20 | |
| | 2200 | 0.045 | 1440 | 10x25 | |
| | 2700 | 0.037 | 1690 | 10x30 | |
| | 3300 | 0.038 | 1660 | 13x20 | |
| | 3900 | 0.030 | 1950 | 13x25 | |
| | 4700 | 0.025 | 2310 | 13x30 | |
| | | 0.022 | 2510 | 13x35 | |
| | 5600 | 0.029 | 2210 | 16x20 | |
| | | 0.017 | 2870 | 13x40 | |
| | | 0.022 | 2560 | 16x25 | |
| | 6800 | 0.028 | 2490 | 18x20 | |
| | | 0.019 | 3010 | 16x31.5 | |
| 10000 | 0.017 | 3150 | 16x35.5 | | |
| | 0.020 | 2740 | 18x25 | | |
| 12000 | 0.015 | 3710 | 16x40 | | |
| | 0.018 | 3330 | 18x31.5 | | |
| 15000 | 0.016 | 3680 | 18x35.5 | | |
| 18000 | 0.015 | 3800 | 18x40 | | |
| 10 (13) 1A | 100 | 0.65 | 175 | 5x11 | |
| | 220 | 0.32 | 290 | 6.3x12 | |
| | 330 | 0.22 | 400 | 6.3x15 | |
| | 470 | 0.13 | 555 | 8x12 | |
| | 680 | 0.090 | 730 | 8x16 | |
| | | 0.090 | 760 | 10x12.5 | |
| | 1000 | 0.080 | 810 | 8x20 | |
| | | 0.068 | 1050 | 10x16 | |
| | 1200 | 0.052 | 1220 | 10x20 | |
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| | 2200 | 0.038 | 1660 | 13x20 | |
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| | 5600 | 0.017 | 2870 | 13x40 | |
| | | 0.022 | 2560 | 16x25 | |
| | | 0.028 | 2490 | 18x20 | |
| | 6800 | 0.019 | 3010 | 16x31.5 | |
| 0.02 | | 2740 | 18x25 | | |
| 8200 | 0.017 | 3150 | 16x35.5 | | |
| | 0.018 | 3330 | 18x31.5 | | |
| 10000 | 0.015 | 3710 | 16x40 | | |
| | 0.016 | 3680 | 18x35.5 | | |
| 12000 | 0.015 | 3800 | 18x40 | | |

| U _R (Surge Voltage) Code | Rated Capaci- tance | Max Impedance 20°C 100kHz | Rated Ripple Current 105°C 100kHz | Size D×L φ | P/N |
|--|---------------------------|------------------------------------|---|------------------|-----|
| (V) | (μF) | (Ω) | (mA rms) | (mm) | -- |
| 16 (20) 1C | 47 | 0.85 | 175 | 5x11 | |
| | 100 | 0.4 | 290 | 6.3x12 | |
| | 220 | 0.22 | 400 | 6.3x15 | |
| | 330 | 0.12 | 555 | 8x12 | |
| | 470 | 0.090 | 730 | 8x16 | |
| | | 0.090 | 760 | 10x12.5 | |
| | 560 | 0.080 | 810 | 8x20 | |
| | 680 | 0.068 | 1050 | 10x16 | |
| | 1000 | 0.052 | 1220 | 10x20 | |
| | 1200 | 0.045 | 1440 | 10x25 | |
| | 1500 | 0.037 | 1690 | 10x30 | |
| | | 0.038 | 1660 | 13x20 | |
| | 2200 | 0.030 | 1950 | 13x25 | |
| | 2700 | 0.025 | 2310 | 13x30 | |
| | | 0.029 | 2210 | 16x20 | |
| | 3300 | 0.022 | 2510 | 13x35 | |
| | 3900 | 0.017 | 2870 | 13x40 | |
| | | 0.022 | 2560 | 16x25 | |
| | | 0.028 | 2490 | 18x20 | |
| | 4700 | 0.019 | 3010 | 16x31.5 | |
| 0.020 | | 2740 | 18x25 | | |
| 5600 | 0.017 | 3150 | 16x35.5 | | |
| | 0.018 | 3330 | 18x31.5 | | |
| 6800 | 0.015 | 3710 | 16x40 | | |
| 8200 | 0.016 | 3680 | 18x35.5 | | |
| 10000 | 0.015 | 3800 | 18x40 | | |
| 25 (32) 1E | 47 | 0.80 | 175 | 5x11 | |
| | 100 | 0.32 | 290 | 6.3x12 | |
| | 150 | 0.22 | 400 | 6.3x15 | |
| | 220 | 0.13 | 555 | 8x12 | |
| | 330 | 0.090 | 730 | 8x16 | |
| | | 0.090 | 760 | 10x12.5 | |
| | 390 | 0.080 | 810 | 8x20 | |
| | 470 | 0.068 | 1050 | 10x16 | |
| | 680 | 0.052 | 1220 | 10x20 | |
| | 820 | 0.045 | 1440 | 10x25 | |
| | 1000 | 0.037 | 1690 | 10x30 | |
| | | 0.038 | 1660 | 13x20 | |
| | 1500 | 0.030 | 1950 | 13x25 | |
| | 1800 | 0.025 | 2310 | 13x30 | |
| | | 0.029 | 2210 | 16x20 | |
| | 2200 | 0.022 | 2510 | 13x35 | |
| | | 0.028 | 2490 | 18x20 | |
| | 2700 | 0.017 | 2870 | 13x40 | |
| | | 0.022 | 2560 | 16x25 | |
| | 3300 | 0.019 | 3010 | 16x31.5 | |
| 0.020 | | 2740 | 18x25 | | |
| 3900 | 0.017 | 3150 | 16x35.5 | | |
| | 0.018 | 3330 | 18x31.5 | | |
| 4700 | 0.015 | 3710 | 16x40 | | |
| | 0.016 | 3680 | 18x35.5 | | |
| 5600 | 0.015 | 3800 | 18x40 | | |

RADIAL ALUMINIUM ELECTROLYTIC CAPACITORS

KME Series

■STANDARD RATINGS

| U _R (Surge Voltage) Code | Rated Capacitance | Max Impedance 20°C 100kHz | Rated Ripple Current 105°C 100kHz | Size D×L φ | P/N |
|-------------------------------------|-------------------|---------------------------|-----------------------------------|------------|-----|
| (V) | (μF) | (Ω) | (mA rms) | (mm) | -- |
| 50 (63) 1H | 0.47 | 5.50 | 17 | 5x11 | |
| | 1 | 4 | 30 | 5x11 | |
| | 2.2 | 2.5 | 43 | 5x11 | |
| | 3.3 | 2.2 | 53 | 5x11 | |
| | 4.7 | 1.9 | 88 | 5x11 | |
| | 10 | 1.5 | 100 | 5x11 | |
| | 22 | 0.9 | 155 | 5x11 | |
| | 33 | 0.62 | 230 | 6.3x12 | |
| | 47 | 0.45 | 260 | 6.3x12 | |
| | 68 | 0.31 | 360 | 6.3x15 | |
| | 100 | 0.22 | 485 | 8x12 | |
| | 120 | 0.160 | 635 | 8x16 | |
| | | 0.160 | 620 | 10x12.5 | |
| | 180 | 0.120 | 730 | 8x20 | |
| | 220 | 0.088 | 1050 | 10x16 | |
| | 270 | 0.082 | 1120 | 10x20 | |
| | 330 | 0.073 | 1250 | 10x25 | |
| | 390 | 0.054 | 1500 | 10x30 | |
| | 470 | 0.048 | 1660 | 13x20 | |
| | 560 | 0.044 | 1840 | 13x25 | |
| | 680 | 0.039 | 2220 | 13x30 | |
| | 820 | 0.033 | 2290 | 13x35 | |
| | | 0.042 | 1980 | 16x20 | |
| | 1000 | 0.029 | 2500 | 13x40 | |
| | | 0.034 | 2240 | 16x25 | |
| | 1200 | 0.028 | 2700 | 16x30 | |
| | | 0.029 | 2610 | 18x25 | |
| 1500 | 0.025 | 2800 | 16x35.5 | | |
| 1800 | 0.021 | 3200 | 16x40 | | |
| | 0.025 | 3000 | 18x31.5 | | |
| 2200 | 0.023 | 3100 | 18x35.5 | | |
| 2700 | 0.02 | 3400 | 18x40 | | |

| U _R (Surge Voltage) Code | Rated Capacitance | Max Impedance 20°C 100kHz | Rated Ripple Current 105°C 100kHz | Size D×L φ | P/N |
|-------------------------------------|-------------------|---------------------------|-----------------------------------|------------|-----|
| (V) | (μF) | (Ω) | (mA rms) | (mm) | -- |
| 100 (125) 2A | 5.6 | 1.9 | 57 | 5x11 | |
| | 8.2 | 1.3 | 74 | 6.3x12 | |
| | 12 | 1.1 | 78 | 6.3x12 | |
| | 18 | 0.62 | 85 | 6.3x15 | |
| | 22 | 0.53 | 275 | 8x12 | |
| | 27 | 0.47 | 319 | 10x12.5 | |
| | 33 | 0.35 | 360 | 8x16 | |
| | | 0.32 | 424 | 10x16 | |
| | 39 | 0.27 | 490 | 8x20 | |
| | 56 | 0.25 | 499 | 10x20 | |
| | 68 | 0.18 | 634 | 10x25 | |
| | | 0.20 | 613 | 13x15 | |
| | 100 | 0.15 | 739 | 10x30 | |
| | | 0.13 | 805 | 13x20 | |
| | 120 | 0.11 | 857 | 13x25 | |
| | | 0.13 | 706 | 16x15 | |
| | 150 | 0.12 | 871 | 18x15 | |
| | 180 | 0.090 | 1120 | 13x30 | |
| | | 0.110 | 916 | 16x20 | |
| | 220 | 0.075 | 1240 | 13x35 | |
| | | 0.081 | 1290 | 16x25 | |
| | 270 | 0.060 | 1330 | 13x40 | |
| | | 0.085 | 1170 | 18x20 | |
| | 330 | 0.059 | 1630 | 16x31.5 | |
| | | 0.071 | 1500 | 18x25 | |
| | 390 | 0.052 | 1750 | 16x35.5 | |
| | | 0.058 | 1630 | 18x31.5 | |
| | 470 | 0.045 | 1920 | 16x40 | |
| | 560 | 0.054 | 1920 | 18x35.5 | |
| | 680 | 0.041 | 2100 | 18x40 | |

Customer products are available on request