



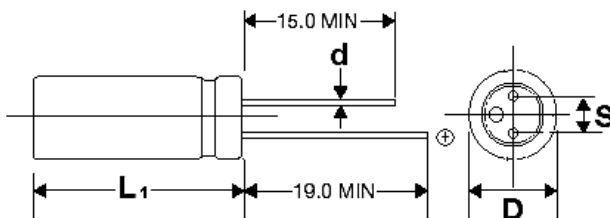
FEATURES

Small Size - High Temperature – Low ESR – High Ripple Current
– Stable with Temperature – High Frequency

APPLICATIONS

Power Units – LED Lighting – Telecommunications

| | | | | | | | | | |
|---|---------------------|--|-----------|----------------------------------|-----------|-----------|------------|------------|--|
| Operating Temperature Range | | -55°C to +125°C | | | | | | | |
| Capacitance Tolerance | | +20% at 120 Hz, 20°C | | | | | | | |
| Surge Voltage | WVDC | 16 | 25 | 35 | 50 | 63 | 100 | 160 | |
| | SVDC | 1.15 x rated WVDC | | | | | | | |
| Dissipation Factor 120 Hz, 20°C | | 12% MAX | | | | | | | |
| Leakage Current | | 2 Minutes | | | | | | | |
| | | See standard part listing | | | | | | | |
| Low Temperature Stability Impedance Ratio (120 Hz) | -25°C/ +20°C | ≤1.15 | | | | | | | |
| | -55°C/ +20°C | ≤1.25 | | | | | | | |
| Load Life | | 2000 hours(1500 Hours for WVDC>35V) at 125°C with rated WVDC applied | | | | | | | |
| | | Capacitance Change | | ≤30% of initial measured value | | | | | |
| | | Dissipation Factor | | ≤300% of maximum specified value | | | | | |
| | | ESR | | ≤300% of maximum specified value | | | | | |
| | | Leakage Current | | ≤100% of maximum specified value | | | | | |
| Humidity test | | 1000 hours at 20°C with rated voltage applied at 90-95% R.H. | | | | | | | |
| | | Capacitance Change | | ≤20% of initial measured value | | | | | |
| | | Dissipation Factor | | ≤150% of maximum specified value | | | | | |
| | | ESR | | ≤150% of maximum specified value | | | | | |
| | | Leakage Current | | ≤100% of maximum specified value | | | | | |
| Surge Voltage test | | 1000 cycles at 125°C with rated surge voltage applied for 30 seconds through a 1kΩ resistor and discharged for 5 minutes and 30 seconds | | | | | | | |
| | | Capacitance Change | | ≤20% of initial measured value | | | | | |
| | | Dissipation Factor | | ≤150% of maximum specified value | | | | | |
| | | ESR | | ≤150% of maximum specified value | | | | | |
| | | Leakage Current | | ≤100% of maximum specified value | | | | | |
| Failure Rate | | 0.5% /1000 hours Maximum (60% confidence level at 125°C) | | | | | | | |
| Ripple Current Multipliers | | Frequency (Hz) | | | | | | | |
| | | 120 | 1k | 10k | 100k-300K | | | | |
| | | .05 | .3 | .7 | 1.0 | | | | |



| | | |
|-------|-----|-----|
| D+0.5 | 8 | 10 |
| S+0.5 | 3.5 | 5.0 |
| d | 0.6 | 0.6 |

L₁=L+1.5mm MAX

AVG

+125°C Highest capacitance & Voltage

| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR (Ω) 120 Hz, +20°C | Maximum ESR (mΩ) 100 kHz, +20°C | Leakage Current (µA) | Maximum RMS Ripple Current (mA) 100 kHz, +105°C | Dims DxL (mm) |
|------------------|------|----------------|-------------------------------------|---------------------------------------|----------------------|---|---------------|
| 4.7 | 160 | 475AVG160MFBJ | 42.3284 | 130 | 150 | 720 | 8x12 |
| 6.8 | 160 | 685AVG160MFBJ | 29.2564 | 130 | 217 | 720 | 8x12 |
| 12 | 160 | 126AVG160MGBJ | 16.5786 | 130 | 384 | 960 | 10x12 |
| 15 | 100 | 156AVG100MFBJ | 13.2629 | 40 | 300 | 1850 | 8x12 |
| 22 | 100 | 226AVG100MFBJ | 9.0429 | 40 | 440 | 1850 | 8x12 |
| 33 | 100 | 336AVG100MGBJ | 6.0286 | 38 | 660 | 2100 | 10x12 |
| 47 | 35 | 476AVG035MFF | 4.2328 | 30 | 329 | 2600 | 8x8 |
| 47 | 50 | 476AVG050MFBJ | 4.2328 | 32 | 470 | 2250 | 8x12 |
| 47 | 100 | 476AVG100MGBJ | 4.2328 | 38 | 940 | 2100 | 10x12 |
| 68 | 35 | 686AVG035MFF | 2.9256 | 30 | 476 | 2600 | 8x8 |
| 68 | 50 | 686AVG050MFBJ | 2.9256 | 32 | 680 | 2250 | 8x12 |
| 82 | 50 | 826AVG050MFBJ | 2.4261 | 32 | 820 | 2250 | 8x12 |
| 82 | 63 | 826AVG063MFBJ | 2.4261 | 32 | 1033 | 2100 | 8x12 |
| 100 | 25 | 107AVG025MFF | 1.9894 | 24 | 500 | 2900 | 8x8 |
| 100 | 35 | 107AVG035MFBJ | 1.9894 | 26 | 700 | 2950 | 8x12 |
| 100 | 63 | 107AVG063MFBJ | 1.9894 | 32 | 1260 | 2100 | 8x12 |
| 120 | 50 | 127AVG050MFBJ | 1.6579 | 32 | 1200 | 2250 | 8x12 |
| 120 | 50 | 127AVG050MGBJ | 1.6579 | 28 | 1200 | 2620 | 10x12 |
| 150 | 25 | 157AVG025MFF | 1.32629 | 24 | 750 | 2900 | 8x8 |
| 150 | 35 | 157AVG035MFBJ | 1.32629 | 26 | 1050 | 2950 | 8x12 |
| 150 | 63 | 157AVG063MGBJ | 1.32629 | 28 | 1890 | 2550 | 10x12 |
| 180 | 35 | 187AVG035MFBJ | 1.1052 | 26 | 1260 | 2950 | 8x12 |
| 180 | 50 | 187AVG050MGBJ | 1.1052 | 28 | 1800 | 2650 | 10x12 |
| 180 | 63 | 187AVG063MGBJ | 1.1052 | 28 | 2268 | 2550 | 10x12 |
| 220 | 25 | 227AVG025MFBJ | 0.90429 | 18 | 1100 | 4250 | 8x12 |
| 220 | 35 | 227AVG035MGBJ | 0.90429 | 24 | 1540 | 3400 | 10x12 |
| 220 | 35 | 227AVG035MFBJ | 0.90429 | 26 | 1540 | 2950 | 8x12 |
| 220 | 50 | 227AVG050MGBJ | 0.90429 | 28 | 2200 | 2620 | 10x12 |
| 330 | 16 | 337AVG016MFF | 0.60286 | 15 | 1056 | 4300 | 8x8 |
| 330 | 25 | 337AVG025MFBJ | 0.60286 | 18 | 1650 | 4250 | 8x12 |
| 330 | 35 | 337AVG035MGBJ | 0.60286 | 24 | 2310 | 3400 | 10x12 |
| 390 | 35 | 397AVG035MGBJ | 0.5101 | 24 | 2730 | 3400 | 10x12 |
| 470 | 16 | 477AVG016MFBJ | 0.42328 | 13 | 1504 | 4650 | 8x12 |
| 470 | 16 | 477AVG016MFF | 0.42328 | 15 | 1504 | 4300 | 8x8 |
| 470 | 25 | 477AVG025MFBJ | 0.42328 | 18 | 2350 | 4250 | 8x12 |
| 470 | 25 | 477AVG025MGBJ | 0.42328 | 16 | 2350 | 4700 | 10x12 |
| 560 | 25 | 567AVG025MGBJ | 0.3553 | 16 | 2800 | 4700 | 10x12 |
| 680 | 25 | 687AVG025MGBJ | 0.29256 | 16 | 3400 | 4700 | 10x12 |
| 820 | 16 | 827AVG016MGBJ | 0.24261 | 12 | 2624 | 5600 | 10x12 |
| 820 | 16 | 827AVG016MFBJ | 0.24261 | 13 | 2624 | 4650 | 8x12 |
| 1000 | 16 | 108AVG016MGBJ | 0.2 | 12 | 3200 | 5600 | 10x12 |
| 1200 | 16 | 128AVG016MGBJ | 0.16579 | 12 | 3840 | 5600 | 10x12 |
| 1500 | 16 | 158AVG016MGBJ | 0.132629 | 12 | 4800 | 5600 | 10x12 |