



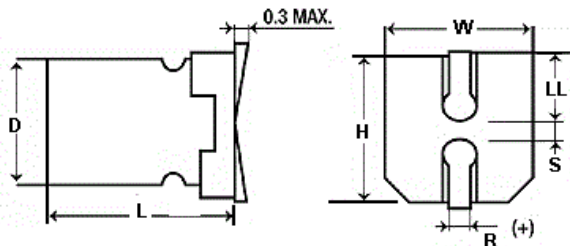
FEATURES

High Temperature – Very Low ESR – High Ripple Current – Stable with Temperature – High Frequency

APPLICATIONS

DC-DC Converters – Voltage Regulators – Decoupling

| | | | | | | |
|--|---------------|---|----------------------------------|----------------|-----------------|----|
| Operating Temperature Range | | -55°C to +105°C | | | | |
| Capacitance Tolerance | | +20% at 120 Hz, 20°C | | | | |
| Surge Voltage | WVDC | 2.5 | 4 | 6.3 | 10 | 16 |
| | SVDC | 1.15 x rated WVDC | | | | |
| Dissipation Factor 120 Hz, 20°C | | 12% MAX | | | | |
| Leakage Current | | 2 Minutes | | | | |
| | | 0.2CV or 280uA, whichever is greater | | | | |
| Low Temperature Stability Impedance Ratio (100 kHz) | -55°C/ +20°C | ≤1.25 | | | | |
| | +105°C/ +20°C | ≤1.25 | | | | |
| Load Life | | 2000 hours at 105°C with rated WVDC applied | | | | |
| | | 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 | | | |
| Damp Heat test | | 1000 hours at 60°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 | | | |
| Resistance to Soldering Heat | | Capacitors placed on a 230°C hot plate for 75 seconds with their electrode terminations facing downward will fulfill the following conditions after being cooled to room temperature | | | | |
| | | 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 | | | |
| Ripple Current Multipliers | | Frequency (Hz) | | | | |
| | | 120Hz≤f<1kHz | 1kHz≤f<10kHz | 10kHz≤f<100kHz | 100kHz≤f<500kHz | |
| | | 0.05 | 0.3 | 0.7 | 1.0 | |



| D+0.5 | W±0.2 | H±0.2 | LL±0.2 | R±0.15 | S±0.2 |
|-------|-------|-------|--------|--------|-------|
| 6.3 | 6.6 | 6.6 | 2.1 | .65 | 1.9 |
| 8 | 8.3 | 8.3 | 2.8 | .95 | 3.2 |
| 10 | 10.3 | 10.3 | 3.1 | .95 | 3.5 |

UVR

+105°C Low ESR, High Ripple Current

| 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) 120 kHz, +105°C | Dims DxL (mm) |
|------------------|------|----------------|-------------------------------------|---------------------------------------|----------------------|---|---------------|
| 39 | 16 | 396UVR016MEW | 5.101 | 50 | 280 | 1620 | 6.3x6 |
| 47 | 6.3 | 476UVR6R3MEW | 4.233 | 70 | 500 | 1600 | 6.3x6 |
| 47 | 10 | 476UVR010MEW | 4.233 | 50 | 280 | 1620 | 6.3x6 |
| 68 | 16 | 686UVR016MEW | 2.926 | 30 | 280 | 2200 | 6.3x6 |
| 100 | 6.3 | 108UVR6R3MFE | 0.1989 | 15 | 1260 | 3500 | 8x10.2 |
| 100 | 6.3 | 107UVR6R3MEW | 1 | 50 | 280 | 1620 | 6.3x6 |
| 100 | 16 | 107UVR016MEW | 1.9894 | 25 | 320 | 2700 | 6.3x6 |
| 120 | 10 | 127UVR010MEW | 1.6579 | 25 | 280 | 2320 | 6.3x6 |
| 150 | 6.3 | 157UVR6R3MEW | 1.3263 | 50 | 280 | 1620 | 6.3x6 |
| 150 | 10 | 157UVR010MEW | 1.3263 | 27 | 300 | 2320 | 6.3x6 |
| 150 | 16 | 157UVR016MFF | 1.3263 | 22 | 480 | 3150 | 8x8 |
| 180 | 16 | 187UVR016MFBJ | 1.1052 | 16 | 576 | 4040 | 8x12 |
| 220 | 6.3 | 227UVR6R3MEW | 0.9043 | 15 | 280 | 2450 | 6.3x6 |
| 220 | 16 | 227UVR016MFF | 0.9043 | 22 | 704 | 3150 | 8x8 |
| 220 | 16 | 227UVR016MFE | 0.9043 | 22 | 704 | 3450 | 8x10.2 |
| 270 | 16 | 277UVR016MFE | 0.7368 | 20 | 864 | 3600 | 8x10.2 |
| 270 | 16 | 277UVR016MFBJ | 0.7368 | 13 | 864 | 5200 | 8x12 |
| 330 | 2.5 | 337UVR2R5MEW | 0.6029 | 17 | 280 | 2900 | 6.3x6 |
| 330 | 4 | 337UVR004MEW | 0.6029 | 17 | 280 | 2900 | 6.3x6 |
| 330 | 6.3 | 337UVR6R3MEF | 0.6029 | 15 | 416 | 2700 | 6.3x8 |
| 330 | 6.3 | 337UVR6R3MEW | 0.6029 | 25 | 416 | 2200 | 6.3x6 |
| 330 | 10 | 337UVR010MFBJ | 0.6029 | 14 | 660 | 4390 | 8x12 |
| 330 | 16 | 337UVR016MFBJ | 0.6029 | 16 | 1056 | 4720 | 8x12 |
| 330 | 16 | 337UVR016MGU | 0.6029 | 13 | 1056 | 4100 | 10x12.5 |
| 390 | 2.5 | 397UVR2R5MEW | 0.5101 | 17 | 280 | 3390 | 6.3x6 |
| 470 | 6.3 | 477UVR6R3MEK | 0.4233 | 15 | 582 | 2700 | 6.3x9 |
| 470 | 6.3 | 477UVR6R3MFBJ | 0.4233 | 12 | 592 | 4780 | 8x12 |
| 470 | 10 | 477UVR010MFBJ | 0.4233 | 25 | 940 | 3500 | 8x12 |
| 470 | 16 | 477UVR016MFBJ | 0.4233 | 14 | 1504 | 4040 | 8x12 |
| 470 | 16 | 477UVR016MGU | 0.4233 | 13 | 1504 | 4100 | 10x12.5 |
| 560 | 2.5 | 567UVR2R5MFE | 0.3553 | 12 | 280 | 4210 | 8x10.2 |
| 560 | 2.5 | 567UVR2R5MEW | 0.3553 | 16 | 280 | 3500 | 6.3x6 |
| 560 | 4 | 567UVR004MFE | 0.3553 | 14 | 544 | 3950 | 8x10.2 |
| 560 | 4 | 567UVR004MFBJ | 0.3553 | 13 | 448 | 4520 | 8x12 |
| 560 | 6.3 | 567UVR6R3MFF | 0.3553 | 20 | 706 | 2500 | 8x8 |
| 560 | 6.3 | 567UVR6R3MFBJ | 0.3553 | 12 | 706 | 4780 | 8x12 |
| 680 | 2.5 | 687UVR2R5MFBJ | 0.2926 | 10 | 340 | 5020 | 8x12 |
| 680 | 4 | 687UVR004MFF | 0.2926 | 13 | 544 | 3950 | 8x8 |
| 680 | 6.3 | 687UVR6R3MGE | 0.2926 | 15 | 857 | 3500 | 10x10.2 |
| 680 | 16 | 687UVR016MGU | 0.2926 | 18 | 2176 | 4750 | 10x12.5 |
| 820 | 2.5 | 827UVR2R5MFE | 0.2426 | 12 | 410 | 4210 | 8x10.2 |
| 820 | 6.3 | 827UVR6R3MGU | 0.2426 | 12 | 1033 | 4500 | 10x12.5 |
| 820 | 6.3 | 827UVR6R3MFBJ | 0.2426 | 12 | 1033 | 4260 | 8x12 |
| 1000 | 2.5 | 108UVR2R5MFF | 0.1989 | 12 | 500 | 4260 | 8x8 |
| 1000 | 4 | 108UVR004MGE | 0.1989 | 140 | 800 | 4850 | 10x10.2 |
| 1500 | 6.3 | 158UVR6R3MGE | 0.13263 | 10 | 1890 | 4850 | 10x10.2 |
| 2200 | 6.3 | 228UVR6R3MGU | 0.0943 | 12 | 2772 | 5250 | 10x12.5 |