



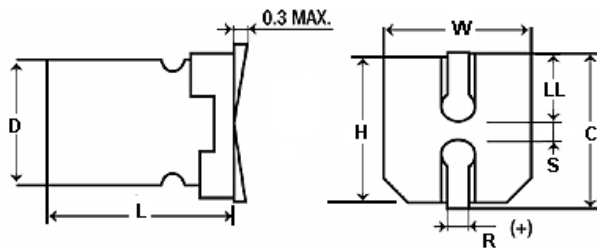
FEATURES

Small Size - Extended Life - Low Cost

APPLICATIONS

Filtering - Bypass - Coupling - Blocking

| | | | | | | | | | | |
|--|-----------------------|---|----------------------------------|-----------|-----------|-----------|-------------------------|-----|-----|-----|
| Operating Temperature Range | | -55°C to +105°C | | | | | | | | |
| Capacitance Tolerance | | ±20% at 120 Hz, 20°C | | | | | | | | |
| Surge voltage | WVDC | 6.3 | 10 | 16 | 25 | 35 | 50 | | | |
| | SVDC | 7.9 | 13 | 20 | 32 | 44 | 63 | | | |
| Dissipation Factor | WVDC | 6.3 | 10 | 16 | 25 | 35 | 50 | | | |
| | tan δ | .3 | .22 | .18 | .14 | .12 | .12 | | | |
| Leakage current | | 2 Minutes | | | | | | | | |
| | | .01CV or 3uA, Whichever is greater | | | | | | | | |
| Low temperature stability Impedance ratio (120 Hz) | Rated WVDC | 6.3 | 10 | 16 | 25 | 35 | 50 | | | |
| | -25°C to +20°C | 4 | 3 | 2 | 2 | 2 | 2 | | | |
| | -40°C to +20°C | 8 | 6 | 4 | 4 | 3 | 3 | | | |
| Load Life | | 1000 hours at 105°C with rated WVDC and ripple current applied | | | | | | | | |
| | | Capacitance change | ≤25% of initial measured value | | | | | | | |
| | | Dissipation factor | ≤200% of maximum specified value | | | | | | | |
| | | Leakage current | ≤100% of maximum specified value | | | | | | | |
| Shelf Life | | 1000 hours at 85°C with no voltage applied | | | | | | | | |
| | | Capacitance change | ≤25% of initial measured value | | | | | | | |
| | | Dissipation factor | ≤200% of maximum specified value | | | | | | | |
| | | Leakage current | ≤100% of maximum specified value | | | | | | | |
| Resistance to soldering heat | | Capacitors placed on a 250°C hot plate for 30 seconds with their electrode terminations facing downward will fulfill the following conditions after being cooled to room temperature | | | | | | | | |
| | | Capacitance change | ≤10% of initial measured value | | | | | | | |
| | | Dissipation factor | ≤100% of maximum specified value | | | | | | | |
| | | Leakage current | ≤100% of maximum specified value | | | | | | | |
| Ripple Current Multipliers | | Frequency (Hz) | | | | | Temperature (°C) | | | |
| | | 50 | 120 | 400 | 1k | 10k | 100k | 105 | 85 | 70 |
| | | 0.8 | 1.0 | 1.0 | 1.1 | 1.3 | 1.5 | 1.0 | 1.0 | 1.0 |



| D | L | W±0.2 | H±0.2 | C±0.2 | R | LL±0.2 | S±0.2 |
|-----|---------------|-------|-------|-------|---------|--------|-------|
| 4 | 5.4 +0.1/-0.2 | 4.3 | 4.3 | 5.0 | 0.5~0.8 | 1.8 | 1.0 |
| 5 | 5.4 +0.1/-0.2 | 5.3 | 5.3 | 6.0 | 0.5~0.8 | 2.1 | 1.4 |
| 6.3 | 5.4 +0.1/-0.2 | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.4 | 2.2 |
| 6.3 | 5.8 +0.1/-0.2 | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.4 | 2.2 |
| 6.3 | 7.7 +0.1/-0.2 | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.4 | 2.2 |
| 8 | 6.2 +0.1/-0.2 | 8.3 | 8.3 | 9.0 | 0.7~1.0 | 2.9 | 3.2 |
| 8 | 10.5+0.1/-0.2 | 8.3 | 8.3 | 9.0 | 0.7~1.0 | 2.9 | 3.2 |
| 10 | 10.5+0.1/-0.2 | 10 | 10 | 11.0 | 0.7~1.0 | 3.2 | 4.6 |

SMH

+105°C, General Purpose
1000 hours

| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR (Ω) 120 Hz, +20°C | Maximum RMS Ripple Current (mA) 120 Hz, +105°C | Dims DxL (mm) |
|------------------|------|-------------------------------|-------------------------------------|--|---------------|
| 0.1 | 50 | 104SMH050M | 1989.44 | 2.3 | 4x5.4 |
| 0.22 | 50 | 224SMH050M | 904.29 | 3.4 | 4x5.4 |
| 0.33 | 50 | 334SMH050M | 602.86 | 4.1 | 4x5.4 |
| 0.47 | 50 | 474SMH050M | 423.28 | 5 | 4x5.4 |
| 1 | 50 | 105SMH050M | 198.94 | 10 | 4x5.4 |
| 2.2 | 50 | 225SMH050M | 90.43 | 16 | 4x5.4 |
| 3.3 | 50 | 335SMH050M | 60.286 | 16 | 4x5.4 |
| 4.7 | 35 | 475SMH035M | 49.383 | 22 | 4x5.4 |
| 4.7 | 50 | 475SMH050M | 42.33 | 23 | 5x5.4 |
| 10 | 16 | 106SMH016M | 33.157 | 28 | 4x5.4 |
| 10 | 35 | 106SMH035M | 23.21 | 30 | 5x5.4 |
| 10 | 50 | 106SMH050M | 19.894 | 32 | 6.3x5.4 |
| 22 | 6.3 | 226SMH6R3M | 21.1 | 29 | 4x5.4 |
| 22 | 16 | 226SMH016M | 15.07 | 39 | 5x5.4 |
| 22 | 35 | 226SMH035M | 10.55 | 60 | 6.3x5.4 |
| 22 | 50 | 226SMH050M | 9.04 | 32 | 6.3x5.8 |
| 33 | 10 | 336SMH010M | 12.06 | 34 | 5x5.4 |
| 33 | 16 | 336SMH016M | 33.158 | 35 | 5x5.4 |
| 33 | 25 | 336SMH025M | 8.038 | 65 | 6.3x5.4 |
| 33 | 35 | 336SMH035M | 7.033 | 42 | 6.3x5.4 |
| 33 | 35 | 336SMH035MFT | 23.211 | 84 | 8x6.5 |
| 33 | 50 | 336SMH050M | 6.03 | 70 | 6.3x7.7 |
| 47 | 6.3 | 476SMH6R3M | 9.877 | 46 | 5x5.4 |
| 47 | 16 | 476SMH016M | 7.055 | 70 | 6.3x5.4 |
| 47 | 35 | 476SMH035M | 4.938 | 80 | 6.3x7.7 |
| 47 | 50 | 476SMH050M | 4.23 | 80 | 6.3x7.7 |
| 100 | 6.3 | 107SMH6R3M | 4.642 | 71 | 6.3x5.4 |
| 100 | 16 | 107SMH016M | 3.3157 | 70 | 6.3x5.4 |
| 100 | 25 | 107SMH025M | 2.653 | 100 | 6.3x7.7 |
| 100 | 50 | 107SMH050M | 1.989 | 230 | 8x10.5 |
| 150 | 10 | 157SMH010M | 2.653 | 86 | 6.3x6 |
| 150 | 16 | 157SMH016M | 2.21 | 95 | 6.3x7.7 |
| 220 | 16 | 227SMH016M | 1.507 | 120 | 6.3x7.7 |
| 220 | 25 | 227SMH025ML10 | 1.2057 | 435 | 10x10.5 |
| 220 | 25 | 227SMH025MFE | 1.2057 | 320 | 8x10.5 |
| 220 | 35 | 227SMH035M | 1.06 | 190 | 8x10.5 |
| 220 | 50 | 227SMH050M | 0.904 | 375 | 10x10.5 |
| 330 | 6.3 | 337SMH6R3M | 1.407 | 290 | 6.3x7.7 |
| 330 | 16 | 337SMH016ML10 | 1.005 | 195 | 10x10.5 |
| 330 | 25 | 337SMH025M | 0.8038 | 220 | 8x10.5 |
| 330 | 35 | 337SMH035M | 0.704 | 450 | 10x10.5 |
| 470 | 16 | 477SMH016M | 0.7055 | 340 | 8x10.5 |
| 470 | 25 | 477SMH025M | 0.5644 | 490 | 10x10.5 |
| 680 | 16 | 687SMH016M | 0.488 | 310 | 10x10.5 |
| 1000 | 6.3 | 108SMH6R3M | 0.4642 | 340 | 8x10.5 |
| 1500 | 6.3 | 158SMH6R3M | 0.3316 | 475 | 10x10.5 |