

Screw Terminal Aluminum Electrolytic Capacitors NSTLW Series

FEATURES

- LONG LIFE AT 105°C (5,000 HOURS)
- HIGH RIPPLE CURRENT
- HIGH VOLTAGE (UP TO 450VDC)

**RoHS
Compliant**

includes all homogeneous materials

*See Part Number System for Details

SPECIFICATIONS

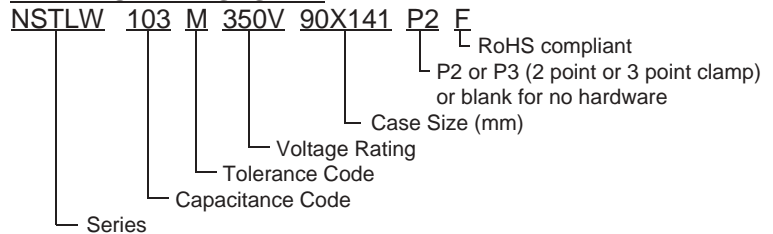
| | | | | |
|---|--------------------|---|----------|----------|
| Operating Temperature Range | | -25 ~ +105°C | | |
| Rated Voltage Range | | 350 ~ 450Vdc | | |
| Rated Capacitance Range | | 1,000 ~ 10,000μF | | |
| Capacitance Tolerance | | ±20% (M) | | |
| Max. Leakage Current (μA) After 5 minutes (20°C) | | $3 \times \sqrt{C(\mu F)V}$ | | |
| Max. Tan δ at 120Hz/20°C | W.V. (Vdc) | 350 | 400 | 450 |
| | 0.20 | ≤ 2700μF | ≤ 2200μF | ≤ 1800μF |
| Surge Voltage | 0.25 | ~ 10000μF | ~ 8200μF | ~ 6800μF |
| | W.V. (Vdc) | 350 | 400 | 450 |
| Low Temperature Impedance Ratio at 120Hz | S.V. (Vdc) | 400 | 450 | 500 |
| | W.V. (Vdc) | 350 | 400 | 450 |
| Load Life Test 5,000 hours at +105°C | Z-25°C/Z+25°C | 8 | 8 | 8 |
| | Capacitance Change | Within ±20% of initial measured value | | |
| Shelf Life Test 96 hours at +105°C (no load) | Tan δ | Less than 200% of specified maximum value | | |
| | Leakage Current | Less than specified maximum value | | |
| | Capacitance Change | Within ±10% of initial measured value | | |
| Surge Voltage Test 1000 Cycles of 30 seconds duration every 6 minutes at 15°~35°C | Tan δ | Less than 120% of specified maximum value | | |
| | Leakage Current | Less than specified maximum value | | |
| | Capacitance Change | Within ±15% of initial measured value | | |
| | Tan δ | Less than specified maximum value | | |
| | Leakage Current | Less than specified maximum value | | |

CASE AND CLAMP DIMENSIONS (mm)

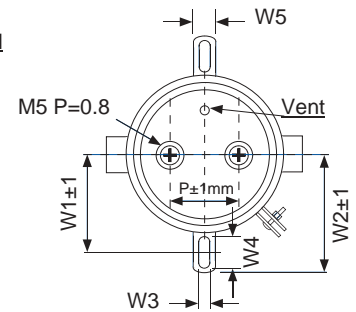
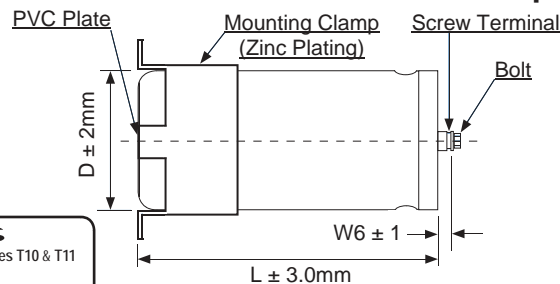
| | D | P | W1 | W2 | W3 | W4 | W5 | W6 |
|------------------|----|------|------|------|-----|-----|----|-----|
| 2 Point Clamp | 51 | 21.8 | 34.0 | 40.0 | 3.5 | 6.0 | 12 | 6.0 |
| | 64 | 28.2 | 40.0 | 45.0 | 4.5 | 7.0 | 12 | 6.5 |
| | 77 | 31.4 | 47.0 | 53.0 | 4.5 | 6.0 | 12 | 5.5 |
| | 90 | 31.4 | 54.0 | 60.0 | 4.5 | 6.0 | 14 | 5.5 |
| 3 Point Clamp | 51 | 21.8 | 32.5 | 37.5 | 4.5 | 6.0 | 12 | 6.0 |
| | 64 | 28.2 | 38.0 | 43.0 | 4.5 | 8.0 | 14 | 6.5 |
| | 77 | 31.4 | 43.5 | 49.0 | 4.5 | 7.0 | 14 | 5.5 |
| | 90 | 31.4 | 50.8 | 56.0 | 4.5 | 8.0 | 16 | 5.5 |

See Standard Values Table for "L" dimensions

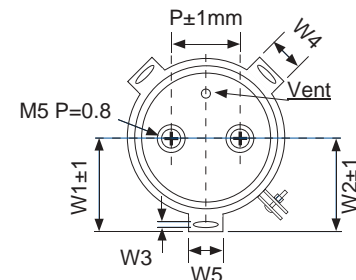
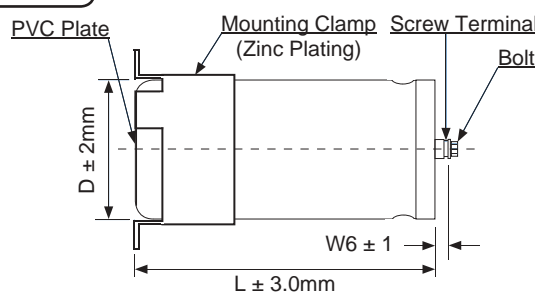
PART NUMBER SYSTEM



2 Point Clamp



3 Point Clamp



PRECAUTIONS

Please review the notes on correct use, safety and precautions found on pages T10 & T11 of NIC's Electrolytic Capacitor catalog.
Also found at www.niccomp.com/precautions
If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: tpmg@niccomp.com



Screw Terminal Aluminum Electrolytic Capacitors NSTLW Series

STANDARD VALUES, CASE SIZES AND SPECIFICATIONS

| Voltage (VDC) | Cap. (μF) | Tan δ Max. | Max. Leakage Current (μA) | Max. Ripple Current (Arms@105°C) | | Case Size | | |
|---------------|-----------|------------|---------------------------|----------------------------------|--------|-----------|------|------|
| | | | | 120Hz | 5KHz ~ | D | L | P |
| 350 | 1800 | 0.20 | 2381 | 5.51 | 7.71 | 51 | 98 | 21.8 |
| | 2200 | 0.20 | 2632 | 6.20 | 8.68 | 51 | 118 | 21.8 |
| | 2700 | 0.20 | 2916 | 6.95 | 9.73 | 51 | 138 | 21.8 |
| | 3300 | 0.20 | 3224 | 8.41 | 11.77 | 51 | 148 | 21.8 |
| | 3900 | 0.25 | 3504 | 9.18 | 12.85 | 64 | 119 | 28.2 |
| | 4700 | 0.25 | 3847 | 10.20 | 14.28 | 64 | 139 | 28.2 |
| | 4700 | 0.25 | 3847 | 11.40 | 15.96 | 77 | 101 | 31.4 |
| | 5600 | 0.25 | 4200 | 12.60 | 17.64 | 77 | 121 | 31.4 |
| | 6800 | 0.25 | 4628 | 14.10 | 19.74 | 77 | 141 | 31.4 |
| | 8200 | 0.25 | 5000 | 18.30 | 25.62 | 77 | 151 | 31.4 |
| | 10000 | 0.25 | 5000 | 20.40 | 28.56 | 90 | 141 | 31.4 |
| 400 | 1200 | 0.20 | 2078 | 4.69 | 6.56 | 51 | 98 | 21.8 |
| | 1500 | 0.20 | 2323 | 5.33 | 7.46 | 51 | 118 | 21.8 |
| | 1800 | 0.20 | 2545 | 5.80 | 8.12 | 51 | 118 | 21.8 |
| | 2200 | 0.20 | 2814 | 6.49 | 9.08 | 51 | 138 | 21.8 |
| | 2700 | 0.20 | 3117 | 8.00 | 11.20 | 51 | 148 | 21.8 |
| | 3300 | 0.20 | 3446 | 8.90 | 12.46 | 64 | 139 | 28.2 |
| | 3900 | 0.25 | 3746 | 9.69 | 13.56 | 64 | 149 | 28.2 |
| | 4700 | 0.25 | 4113 | 12.00 | 16.80 | 77 | 121 | 31.4 |
| | 5600 | 0.25 | 4489 | 13.20 | 18.48 | 77 | 141 | 31.4 |
| | 6800 | 0.25 | 4947 | 18.00 | 25.20 | 90 | 141 | 31.4 |
| 8200 | 0.25 | 5000 | 19.50 | 27.30 | 90 | 151 | 31.4 | |
| 450 | 1000 | 0.20 | 2012 | 4.26 | 5.96 | 51 | 98 | 21.8 |
| | 1200 | 0.20 | 2204 | 4.75 | 6.65 | 51 | 98 | 21.8 |
| | 1500 | 0.20 | 2464 | 5.27 | 7.37 | 51 | 118 | 21.8 |
| | 1800 | 0.20 | 2700 | 5.86 | 8.20 | 51 | 138 | 21.8 |
| | 1800 | 0.25 | 2700 | 6.36 | 8.90 | 64 | 99 | 28.2 |
| | 2200 | 0.25 | 2984 | 7.16 | 10.02 | 64 | 119 | 28.2 |
| | 2700 | 0.25 | 3306 | 8.02 | 11.22 | 64 | 139 | 28.2 |
| | 3300 | 0.25 | 3655 | 8.88 | 12.43 | 64 | 149 | 28.2 |
| | 3900 | 0.25 | 3974 | 10.10 | 14.14 | 77 | 121 | 31.4 |
| | 4700 | 0.25 | 4362 | 12.10 | 16.94 | 77 | 141 | 31.4 |
| | 4700 | 0.25 | 4362 | 14.60 | 20.44 | 90 | 121 | 31.4 |
| | 5600 | 0.25 | 4762 | 16.20 | 22.68 | 90 | 141 | 31.4 |
| | 6800 | 0.25 | 5000 | 17.80 | 24.92 | 90 | 141 | 31.4 |