

Screw Terminal Aluminum Electrolytic Capacitors NSTLW Series

FEATURES

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

*****EXPANDED***
VALUE RANGE**

**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 ~ 18,000μF		
Capacitance Tolerance		±20% (M)		
Max. Leakage Current (μA) After 5 minutes (20°C)		Whichever is smaller $3 \times \sqrt{C(\mu F)V}$ or 5mA		
Max. Tan δ at 120Hz/20°C	W.V. (Vdc)	350	400	450
	0.20	≤ 2700μF	≤ 2200μF	≤ 1800μF
	0.25	~ 18000μF	~ 15000μF	~ 12000μF
Surge Voltage	W.V. (Vdc)	350	400	450
	S.V. (Vdc)	400	450	500
Low Temperature Impedance Ratio at 120Hz	W.V. (Vdc)	350	400	450
	Z-25°C/Z+25°C	8	8	8
Load Life Test 5,000 hours at +105°C	Capacitance Change	Within ±20% of initial measured value		
	Tan δ	Less than 200% of specified maximum value		
	Leakage Current	Less than specified maximum value		
Shelf Life Test 500 hours at +105°C (no load)	Capacitance Change	Within ±20% of initial measured value		
	Tan δ	Less than 200% of specified maximum value		
	Leakage Current	Less than specified maximum value		
Surge Voltage Test 1000 Cycles of 30 seconds duration every 6 minutes at 15~35°C	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	6.0
	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	6.0
	77	31.4	44.5	49.0	4.5	7.0	14	5.5
	90	31.4	50.8	56.0	4.5	8.0	16	5.5

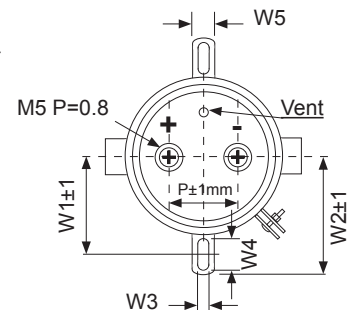
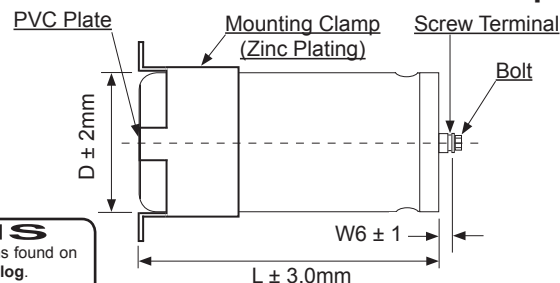
See Standard Values Table for "L" dimensions

PART NUMBER SYSTEM

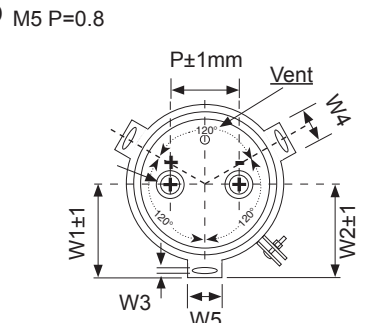
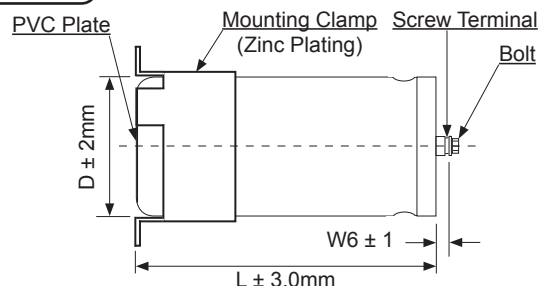
NSTLW 103 M 350V 90X151 P2 F

Series Capacitance Code Voltage Rating Tolerance Code Case Size (mm) RoHS compliant
P2 or P3 (2 point or 3 point clamp)
or blank for no hardware

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

Part Number	Voltage	Cap. (μ F)	Tan δ Max.	Max. Leakage Current (μ A)	Max. Ripple Current (Arms@105°C)	Case Size		
					120Hz	D	L	P
NSTLW182M350V51X98F	350	1800	0.20	2381	5.5	51	98	21.8
NSTLW222M350V51X118F	350	2200	0.20	2632	6.2	51	118	21.8
NSTLW272M350V51X138F	350	2700	0.20	2916	7.0	51	138	21.8
NSTLW332M350V64X109F	350	3300	0.25	3224	8.4	64	109	28.2
NSTLW392M350V64X119F	350	3900	0.25	3504	9.2	64	119	28.2
NSTLW472M350V64X139F	350	4700	0.25	3847	10.2	64	139	28.2
NSTLW562M350V77X121F	350	5600	0.25	4200	12.6	77	121	31.4
NSTLW682M350V64X189F	350	6800	0.25	4628	12.6	64	189	28.2
NSTLW682M350V77X141F	350	6800	0.25	4628	14.1	77	141	31.4
NSTLW822M350V90X121F	350	8200	0.25	5000	18.3	90	121	31.4
NSTLW103M350V77X191F	350	10000	0.25	5000	17.5	77	191	31.4
NSTLW103M350V90X151F	350	10000	0.25	5000	20.8	90	151	31.4
NSTLW123M350V90X191F	350	12000	0.25	5000	23.5	90	191	31.4
NSTLW153M350V90X221F	350	15000	0.25	5000	26.5	90	221	31.4
NSTLW183M350V90X241F	350	18000	0.25	5000	29.0	90	241	31.4
NSTLW122M400V51X98F	400	1200	0.20	2078	4.7	51	98	21.8
NSTLW152M400V51X118F	400	1500	0.20	2323	5.3	51	118	21.8
NSTLW182M400V51X118F	400	1800	0.20	2545	5.8	51	118	21.8
NSTLW222M400V51X138F	400	2200	0.20	2814	6.5	51	138	21.8
NSTLW272M400V64X119F	400	2700	0.25	3117	8.0	64	119	28.2
NSTLW332M400V64X139F	400	3300	0.25	3446	8.9	64	139	28.2
NSTLW392M400V64X149F	400	3900	0.25	3746	9.7	64	149	28.2
NSTLW472M400V77X121F	400	4700	0.25	4113	12.0	77	121	31.4
NSTLW562M400V64X189F	400	5600	0.25	4489	11.8	64	189	28.2
NSTLW562M400V77X141F	400	5600	0.25	4489	13.2	77	141	31.4
NSTLW682M400V90X141F	400	6800	0.25	4947	18.0	90	141	31.4
NSTLW822M400V77X191F	400	8200	0.25	5000	16.3	77	191	31.4
NSTLW822M400V90X151F	400	8200	0.25	5000	19.5	90	151	31.4
NSTLW103M400V90X191F	400	10000	0.25	5000	22.1	90	191	31.4
NSTLW123M400V90X221F	400	12000	0.25	5000	24.1	90	221	31.4
NSTLW153M400V90X241F	400	15000	0.25	5000	27.4	90	241	31.4
NSTLW102M450V51X98F	450	1000	0.20	2012	4.3	51	98	21.8
NSTLW122M450V51X118F	450	1200	0.20	2204	4.8	51	118	21.8
NSTLW152M450V51X118F	450	1500	0.20	2464	5.3	51	118	21.8
NSTLW182M450V51X138F	450	1800	0.20	2700	5.9	51	138	21.8
NSTLW222M450V64X119F	450	2200	0.25	2984	7.2	64	119	28.2
NSTLW272M450V64X139F	450	2700	0.25	3306	8.0	64	139	28.2
NSTLW332M450V64X149F	450	3300	0.25	3655	8.9	64	149	28.2
NSTLW392M450V64X189F	450	3900	0.25	3974	9.9	64	189	28.2
NSTLW392M450V77X141F	450	3900	0.25	3974	11.0	77	141	31.4
NSTLW472M450V90X121F	450	4700	0.25	4362	14.6	90	121	31.4
NSTLW562M450V90X141F	450	5600	0.25	4762	16.2	90	141	31.4

Note: Above part numbers include no mounting clamp. For parts with a mounting clamp add "P2" or "P3" to the part number suffix.

Ex: NSTLW472M450V90X121F (no clamp), NSTLW472M450V90X121P2F (2 point clamp), NSTLW472M450V90X121P3F (3 point clamp).



Screw Terminal Aluminum Electrolytic Capacitors

STANDARD VALUES, CASE SIZES AND SPECIFICATIONS

Part Number	Voltage	Cap. (μ F)	Tan δ Max.	Max. Leakage Current (μ A)	Max. Ripple Current (Arms@105°C)	Case Size		
					120Hz	D	L	P
NSTLW682M450V77X191F	450	6800	0.25	5000	14.9	77	191	31.4
NSTLW682M450V90X151F	450	6800	0.25	5000	17.8	90	151	31.4
NSTLW822M450V90X191F	450	8200	0.25	5000	20.0	90	191	31.4
NSTLW103M450V90X221F	450	10000	0.25	5000	22.4	90	221	31.4
NSTLW123M450V90X241F	450	12000	0.25	5000	24.6	90	241	31.4

Note: Above part numbers include no mounting clamp. For parts with a mounting clamp add "P2" or "P3" to the part number suffix.

Ex: NSTLW472M450V90X121F (no clamp), NSTLW472M450V90X121P2F (2 point clamp), NSTLW472M450V90X121P3F (3 point clamp).

RIPPLE CURRENT FREQUENCY CORRECTION FACTORS

Frequency (Hz)	60(50)	120(100)	300	500	1K	5K ~
Correction Factor	0.80	1.00	1.17	1.23	1.30	1.40