

Screw Terminal Aluminum Electrolytic Capacitors NSTL Series

FEATURES

- LONG LIFE AT 85°C (5,000 HOURS)
- HIGH RIPPLE CURRENT
- HIGH VOLTAGE (UP TO 500VDC)

**RoHS
Compliant**
includes all homogeneous materials

*See Part Number System for Details

SPECIFICATIONS

Operating Temperature Range	-25 ~ +85°C				
Rated Voltage Range	350 ~ 500Vdc				
Rated Capacitance Range	1,200 ~ 18,000μF				
Capacitance Tolerance	±20% (M)				
Max. Leakage Current (μA) After 5 minutes (20°C)	$3 \times \sqrt{C(\mu F)V}$ or 5mA, whichever is greater				
Max. Tan δ at 120Hz/20°C	W.V. (Vdc)	350	400	450	500
	0.20	≤ 3,300μF	≤ 2,700μF	≤ 1,800μF	-
	0.25	~ 18,000μF	~ 18,000μF	~ 12,000μF	≤ 1,800μF
	0.30	-	-	-	≤ 12,000μF
Surge Voltage	W.V. (Vdc)	350	400	450	500
	S.V. (Vdc)	400	450	500	550
Low Temperature Impedance Ratio at 120Hz	W.V. (Vdc)	350	400	450	500
	Z-25°C/Z+25°C	8	8	8	12
Load Life Test 5,000 hours at +85°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 96 hours at +85°C (no load)	Capacitance Change	Within ±10% of initial measured value			
	Tan δ	Less than 120% 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)

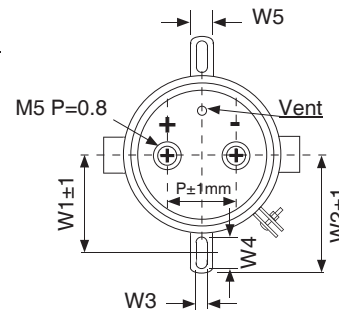
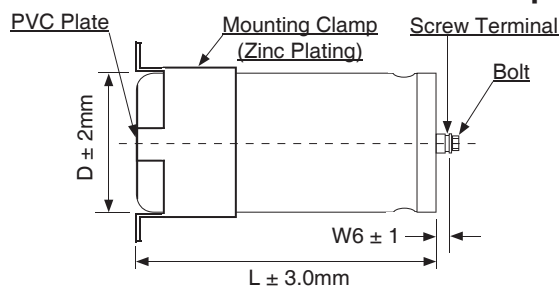
	D	P	W1	W2	W3	W4	W5	W6
2 Point Clamp	51	21.8	34.0	40.0	3.5	6.0	12	6.0
	64	28.2	40.0	45.0	4.5	7.0	12	6.0
	77	31.4	47.0	53.0	4.5	6.0	12	5.5
	90	31.4	54.0	60.0	4.5	6.0	14	5.5
3 Point Clamp	51	21.8	32.5	37.5	4.5	6.0	12	6.0
	64	28.2	38.0	43.0	4.5	8.0	14	6.0
	77	31.4	44.5	49.0	4.5	7.0	14	5.5
	90	31.4	50.8	56.0	4.5	8.0	16	5.5

PART NUMBER SYSTEM

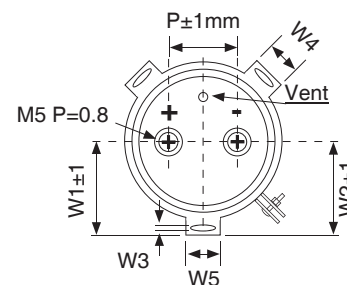
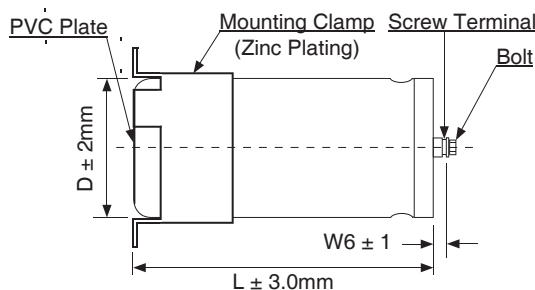
NSTL	103	M	350V	90X141	P2	F	
Series	Capacitance Code	Tolerance Code	Voltage Rating	Case Size (mm)	P2 or P3 (2 point or 3 point clamp) or blank for no hardware	RoHS compliant	

See Standard Values Table for "L" dimensions

2 Point Clamp



3 Point Clamp



STANDARD VALUES, CASE SIZES AND SPECIFICATIONS

Part Number	Cap. (μ F)	Voltage (VDC)	Tan δ Max.	Max. Leakage Current (μ A)	Max. Ripple Current (Arms @ 85°C)		Case Size		
					120Hz	5KHz ~	D	L	P
NSTL182M350V51X98 __F	1800	350	0.2	2381	7.8	10.92	51	98	21.8
NSTL222M350V51X118 __F	2200		0.2	2632	8.7	12.18	51	118	21.8
NSTL272M350V51X138 __F	2700		0.2	2916	9.8	13.72	51	138	21.8
NSTL332M350V51X148 __F	3300		0.2	3224	10.8	15.12	51	148	21.8
NSTL392M350V64X119 __F	3900		0.25	3504	12.9	18.06	64	119	28.2
NSTL472M350V64X139 __F	4700		0.25	3847	14.3	20.02	64	139	28.2
NSTL562M350V77X121 __F	5600		0.25	4200	17.8	24.92	77	121	31.4
NSTL682M350V64X189 __F	6800		0.25	4628	17.7	24.78	64	189	28.2
NSTL682M350V77X141 __F	6800		0.25	4628	19.8	27.72	77	141	31.4
NSTL822M350V77X151 __F	8200		0.25	5000	21.8	30.52	77	151	31.4
NSTL822M350V90X121 __F	8200		0.25	5000	25.8	36.12	90	121	31.4
NSTL103M350V77X191 __F	10000		0.25	5000	24.6	34.44	77	191	31.4
NSTL103M350V90X141 __F	10000		0.25	5000	28.8	40.32	90	141	31.4
NSTL123M350V90X191 __F	12000		0.25	5000	30.6	42.84	90	191	31.4
NSTL153M350V90X191 __F	15000		0.25	5000	36.2	50.68	90	191	31.4
NSTL183M350V90X221 __F	18000		0.25	5000	40.1	56.14	90	221	31.4
NSTL152M400V51X98 __F	1500	400	0.2	2323	6.9	9.66	51	98	21.8
NSTL182M400V51X118 __F	1800		0.2	2545	7.7	10.78	51	118	21.8
NSTL222M400V51X138 __F	2200		0.2	2814	8.6	12.04	51	138	21.8
NSTL272M400V51X148 __F	2700		0.2	3117	9.5	13.3	51	148	21.8
NSTL332M400V64X119 __F	3300		0.25	3446	11.5	16.1	64	119	28.2
NSTL392M400V64X139 __F	3900		0.25	3746	12.7	17.78	64	139	28.2
NSTL472M400V64X149 __F	4700		0.25	4113	13.8	19.32	64	149	28.2
NSTL472M400V77X121 __F	4700		0.25	4113	15.8	22.12	77	121	31.4
NSTL562M400V64X189 __F	5600		0.25	4489	15.4	21.56	64	189	28.2
NSTL562M400V77X141 __F	5600		0.25	4489	17.5	24.5	77	141	31.4
NSTL682M400V77X151 __F	6800		0.25	4947	19.2	26.88	77	151	31.4
NSTL682M400V90X121 __F	6800		0.25	4947	22.9	32.06	90	121	31.4
NSTL822M400V77X191 __F	8200		0.25	5000	21.4	29.96	77	191	31.4
NSTL822M400V90X141 __F	8200		0.25	5000	25.5	35.7	90	141	31.4
NSTL103M400V90X151 __F	10000		0.25	5000	27.9	39.06	90	151	31.4
NSTL123M400V90X191 __F	12000		0.25	5000	31.5	44.1	90	191	31.4
NSTL153M400V90X221 __F	15000		0.25	5000	35.8	50.12	90	221	31.4
NSTL183M400V90X241 __F	18000		0.25	5000	38.9	54.46	90	241	31.4

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 NSTL Series

STANDARD VALUES, CASE SIZES AND SPECIFICATIONS

Part Number	Cap. (μ F)	Voltage (VDC)	Tan δ Max.	Max. Leakage Current (μ A)	Max. Ripple Current (Arms@85°C)		Case Size		
					120Hz	5KHz ~	D	L	P
NSTL122M450V51X98__F	1200	450	0.2	2204	6.5	8.45	51	98	21.8
NSTL152M450V51X118__F	1500		0.2	2464	7.4	9.62	51	118	21.8
NSTL182M450V51X138__F	1800		0.2	2700	8.3	10.79	51	138	21.8
NSTL222M450V64X119__F	2200		0.25	2984	10.1	13.13	64	119	28.2
NSTL272M450V64X139__F	2700		0.25	3306	11.3	14.69	64	139	28.2
NSTL332M450V64X149__F	3300		0.25	3655	12.5	16.25	64	149	28.2
NSTL392M450V77X121__F	3900		0.25	3974	15.3	19.89	77	121	31.4
NSTL472M450V77X141__F	4700		0.25	4362	17	22.1	77	141	31.4
NSTL472M450V90X121__F	4700		0.25	4362	18.1	23.53	90	121	31.4
NSTL562M450V77X151__F	5600		0.25	4762	17.4	22.62	77	151	31.4
NSTL682M450V77X191__F	6800		0.25	5000	19.2	24.96	77	191	31.4
NSTL682M450V90X141__F	6800		0.25	5000	21	27.3	90	141	31.4
NSTL822M450V90X191__F	8200		0.25	5000	25.1	32.63	90	191	31.4
NSTL103M450V90X221__F	10000		0.25	5000	27.9	36.27	90	221	31.4
NSTL123M450V90X241__F	12000		0.25	5000	30	39	90	241	31.4
NSTL122M500V51X98__F	1200	500	0.25	2323	5.6	7.28	51	98	21.8
NSTL152M500V51X118__F	1500		0.25	2598	6.3	8.19	51	118	21.8
NSTL182M500V51X148__F	1800		0.25	2846	7.1	9.23	51	148	21.8
NSTL222M500V64X119__F	2200		0.3	3146	8.5	11.05	64	119	28.2
NSTL272M500V64X139__F	2700		0.3	3485	9.6	12.48	64	139	28.2
NSTL332M500V64X149__F	3300		0.3	3853	10.5	13.65	64	149	28.2
NSTL392M500V77X131__F	3900		0.3	4189	13.3	17.29	77	131	31.4
NSTL472M500V77X151__F	4700		0.3	4598	14.8	19.24	77	151	31.4
NSTL472M500V90X121__F	4700		0.3	4598	17.8	23.14	90	121	31.4
NSTL562M500V90X131__F	5600		0.3	5000	19.5	25.35	90	131	31.4
NSTL682M500V77X191__F	6800		0.3	5000	18.1	23.53	77	191	31.4
NSTL682M500V90X151__F	6800		0.3	5000	21.7	28.21	90	151	31.4
NSTL822M500V90X191__F	8200		0.3	5000	24.5	31.85	90	191	31.4
NSTL103M500V90X221__F	10000		0.3	5000	27.4	35.62	90	221	31.4
NSTL123M500V90X241__F	12000		0.3	5000	30.1	39.13	90	241	31.4