



FEATURES

Small Size - Low Cost

APPLICATIONS

Filtering - Bypass - Coupling - Blocking

Operating Temperature Range		-40°C to +85°C										
Capacitance Tolerance		+20% at 120 Hz, 20°C										
Surge voltage	WVDC	4	6.3	10	16	25	35	50	63	100		
	SVDC	5.2	7.9	13	20	32	44	63	79	125		
Dissipation Factor	WVDC	4	6.3	10	16	25	35	50	63	100		
	tan δ	.35	.28	.24	.2	.16	.14	.12	.12	.1		
Leakage current		2 Minutes										
		.01CV or 3uA, Whichever is greater										
Low temperature stability Impedance ratio (120 Hz)	Rated WVDC		4	6.3	10	16	25	35	50	63	100	
	-25°C to +20°C	D<8	7	4	3	2	2	2	2	2	2	
		D≥8	7	5	4	3	2	2	2	2	2	
	-40°C to +20°C	D<8	15	8	6	4	4	3	3	3	3	
D≥8		15	10	8	6	4	3	3	3	3		
Load Life		2000 hours at 85°C with rated WVDC and ripple current applied										
		Capacitance change	≤20% 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	≤20% 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 250C 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	≤200% of maximum specified value									
		Leakage current	≤100% of maximum specified value									
Ripple Current Multipliers		Frequency (Hz)					Temperature (°C)					
		50	120	400	1k	10k	100k	85	70	65		
		0.7	1.0	1.17	1.36	1.5	1.5	1.0	1.35	1.35		



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	2.4	3.2
8	10.2+0.1/-0.2	8.3	8.3	9.0	0.7~1.0	2.8	3.2
10	10.2+0.1/-0.2	10	10	11.0	0.7~1.0	3.2	4.6

SML

+85°C Standard, 2000 hrs

WVDC	Capacitance (µF)	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +85°C	Dims DxL (mm)
4	33	336SML004M	17.58	31	4x5.4
4	47	476SML004M	12.35	37	4x5.4
4	100	107SML004M	5.83	63	5x5.4
4	150	157SML004M	3.868	84	6.3x5.4
4	220	227SML004M	2.64	110	6.3x5.4
4	470	477SML004M	1.24	150	6.3x7.7
4	1000	108SML004MD8	0.58	300	8x10.5
6.3	22	226SML6R3M	21.1	31	4x5.4
6.3	47	476SML6R3MD4	9.877	40	4x5.4
6.3	47	476SML6R3M	9.877	52	5x5.4
6.3	68	686SML6R3M	6.826	50	5x5.4
6.3	100	107SML6R3M	4.642	54	5x5.4
6.3	220	227SML6R3M	2.11	91	6.3x5.8
6.3	330	337SML6R3M	1.407	188	6.3x7.7
6.3	330	337SML6R3MD8	1.407	190	8x6.2
6.3	470	477SML6R3M	0.9877	380	8x10.5
6.3	1000	108SML6R3M	0.464	370	8x10.5
6.3	1500	158SML6R3M	0.3095	750	10x10.5
10	33	336SML010MD4	12.057	34	4x5.4
10	33	336SML010M	12.057	48	5x5.4
10	150	157SML010M	2.653	88	6.3x5.4
10	220	227SML010M	1.8086	250	8x6.5
10	470	477SML010MD8	0.8466	390	8x10.5
10	1000	108SML010M	0.398	580	10x10.5
16	10	106SML016M	33.16	26	4x5.4
16	22	226SML016MD4	12.057	30	4x5.4
16	22	226SML016M	12.057	44	5x5.4
16	47	476SML016MD5	7.055	52	5x5.4
16	47	476SML016M	7.055	75	6.3x5.4
16	68	686SML016M	4.876	78	6.3x5.4
16	100	107SML016M	3.316	103	6.3x5.4
16	150	157SML016M	2.21	135	6.3x7.7
16	220	227SML016M	1.507	162	6.3x7.7
16	220	227SML016MD8	1.507	280	8x10.5
16	470	477SML016M	0.56	350	8x10.5
16	470	477SML016MD10	0.7055	330	10x10.5
25	22	226SML025MD5	12.06	38	5x5.4
25	33	336SML025MD5	8.038	46	5x5.4
25	33	336SML025M	8.038	67	6.3x5.4
25	47	476SML025M	5.644	70	6.3x5.4
25	100	107SML025M	2.653	145	8x6.2
25	220	227SML025MD8	1.206	230	8x10.5
25	220	227SML025M	1.206	250	10x7.7
25	330	337SML025M	0.7	270	8x10.5
25	330	337SML025MD10	0.7	340	10x10.5
25	470	477SML025M	0.49	430	10x10.5
35	4.7	475SML035M	49.38	20	4x5.4
35	10	106SML035MD4	23.21	24	4x5.4
35	10	106SML035M	23.21	34	5x5.4
35	22	226SML035M	10.55	59	6.3x5.4
35	33	336SML035M	7.033	65	6.3x5.4
35	47	476SML035M	4.938	70	6.3x5.8
35	47	476SML035MD8	4.938	105	8x6.2
35	100	107SML035M	2.321	132	6.3x7.7
35	150	157SML035MD8	1.547	220	8x10.5
35	220	227SML035M	0.9	270	8x10.5
35	220	227SML035MD10	0.9	310	10x10.5
35	330	337SML035M	0.703	360	10x10.5

SML

+85°C Standard, 2000 hrs

WVDC	Capacitance (µF)	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +85°C	Dims DxL (mm)
50	0.1	104SML050MD4	1989.44	3.2	4x5.4
50	0.22	224SML050MD4	904.29	4.7	4x5.4
50	0.33	334SML050MD4	602.86	5.7	4x5.4
50	0.47	474SML050MD4	423.28	6.8	4x5.4
50	1	105SML050MD4	198.944	10	4x5.4
50	2.2	225SML050MD4	90.429	15	4x5.4
50	3.3	335SML050M	60.29	18	4x5.4
50	4.7	475SML050M	42.33	24	4x5.4
50	4.7	475SML050MD5	42.33	25	5x5.4
50	10	106SML050MD5	19.894	41	5x5.4
50	10	106SML050M	19.894	43	6.3x5.4
50	22	226SML050M	9.043	71	6.3x5.4
50	33	336SML050M	6.029	85	6.3x7.7
50	33	336SML050MD8	6.029	95	8x6.2
50	47	476SML050M	4.23	105	6.3x7.7
50	47	476SML050MD8	4.23	140	8x10.5
50	100	107SML050M	1.99	200	8x10.5
50	100	107SML050MD10	1.99	250	10x10.5
50	220	227SML050M	0.9043	320	10x10.5
63	10	106SML063M	19.89	34	6.3x5.4
63	22	226SML063M	9.04	70	6.3x7.7
63	22	226SML063MD8	9.043	120	8x10.5
63	33	336SML063M	6.03	117	8x10.5
63	47	476SML063M	4.23	170	8x10.5
63	100	107SML063M	1.99	280	10x10.5
100	3.3	335SML100M	50.24	28	6.3x5.8
100	4.7	475SML100MD8	3.53	60	8x10.5
100	10	106SML100M	16.57	50	6.3x7.7
100	10	106SML100MD8	16.579	85	8x10.5
100	22	226SML100M	7.54	120	8x10.5
100	33	336SML100M	5.02	100	8x10.5
100	47	476SML100M	3.5274	130	10x10.5