



## Aluminum Electrolytic Capacitors

+85°C Low Leakage, Axial Lead

### FEATURES

Small size - High voltage - General purpose

### APPLICATIONS

Inverters – DC link – AC/DC motor controls – Solar inverters

<b>Operating Temperature Range</b>		<b>-40°C to +85°C</b>												
<b>Capacitance Tolerance</b>		<b>±20% at 120 Hz, 20°C</b>												
<b>Surge Voltage</b>	<b>WVDC</b>	<b>10</b>	<b>16</b>	<b>25</b>	<b>35</b>	<b>50</b>								
	<b>SVDC</b>	13	20	32	44	63								
<b>Dissipation Factor</b>	<b>WVDC</b>	<b>10</b>	<b>16</b>	<b>25</b>	<b>35</b>	<b>50</b>								
	<b>Tan δ</b>	.2	.16	.14	.12	.1								
<b>Leakage Current</b>		<b>2 Minutes</b>												
		.002CV or 0.4uA, Whichever is greater												
<b>Low Temperature Stability Impedance Ratio (120 Hz)</b>	<b>WVDC</b>	<b>10</b>	<b>16</b>	<b>25</b>	<b>35</b>	<b>50</b>								
	<b>-25°C to +20°C</b>	3	2	2	2	2								
	<b>-40°C to +20°C</b>	8	6	4	3	3								
<b>Load Life</b>		<b>2000 hours at 105°C with rated WVDC and ripple current applied</b>												
		<b>Capacitance Change</b>	≤20% of initial measured value											
		<b>Dissipation Factor</b>	≤150% of maximum specified value											
		<b>Leakage Current</b>	≥100% of maximum specified value											
<b>Shelf Life</b>		<b>1000 hours at 105°C with no voltage applied</b>												
		<b>Capacitance Change</b>	≤20% initial measured value											
		<b>Dissipation Factor</b>	≤200% of maximum specified value											
		<b>Leakage Current</b>	≥100% of maximum specified value											
<b>Ripple Current Multipliers</b>		<b>Capacitance</b>	<b>Frequency (Hz)</b>					<b>Temperature (°C)</b>						
		<b>uF</b>	<b>50</b>	<b>120</b>	<b>400</b>	<b>1k</b>	<b>10k</b>	<b>50k</b>	<b>+85</b>	<b>+70</b>	<b>+60</b>	<b>+30</b>		
		<b>C≤10</b>	.8	1.0	1.3	1.45	1.65	1.7	1.0	1.3	1.5	1.8		
		<b>10&lt;C≤100</b>	.8	1.0	1.23	1.36	1.48	1.53	1.0	1.3	1.5	1.8		



D	5	6.3	8
d	0.5	0.5	0.6
B	0.5	0.5	0.5

$L_1 = L + 1.0\text{mm Max.}$  mm  
 $D_1 = D + B \text{ Max.}$

# TLS

+85°C, Low Leakage current  
2000 hours

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +85°C	Dims DxL (mm)
1	50	<b>105TLS050M</b>	165.786	10	5x13
1.5	50	<b>155TLS050M</b>	110.524	22	5x13
2.2	50	<b>225TLS050M</b>	75.358	23	5x13
3.3	50	<b>335TLS050M</b>	50.238	30	5x13
4.7	50	<b>475TLS050M</b>	35.274	35	5x13
6.8	50	<b>685TLS050M</b>	24.38	45	5x13
10	35	<b>106TLS035M</b>	19.894	50	5x13
10	50	<b>106TLS050M</b>	16.579	55	6.3x13
15	25	<b>156TLS025M</b>	15.473	55	5x13
15	50	<b>156TLS050M</b>	11.052	70	6.3x13
22	16	<b>226TLS016M</b>	12.057	60	5x13
22	35	<b>226TLS035M</b>	9.043	80	6.3x13
22	50	<b>226TLS050M</b>	7.536	95	6.3x16
33	10	<b>336TLS010M</b>	10.048	65	5x13

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +85°C	Dims DxL (mm)
33	25	<b>336TLS025M</b>	7.033	90	6.3x13
33	35	<b>336TLS035M</b>	6.0286	105	6.3x16
33	50	<b>336TLS050M</b>	5.0238	130	8x16
47	16	<b>476TLS016M</b>	5.644	100	6.3x13
47	25	<b>476TLS025M</b>	4.938	120	6.3x16
47	50	<b>476TLS050M</b>	3.527	155	8x16
68	10	<b>686TLS010M</b>	4.876	105	6.3x13
68	16	<b>686TLS016M</b>	3.901	130	6.3x16
68	35	<b>686TLS035M</b>	2.926	170	8x16
100	10	<b>107TLS010M</b>	3.316	145	6.3x16
100	16	<b>107TLS016M</b>	2.653	180	8x16
100	25	<b>107TLS025M</b>	2.321	190	8x16
100	35	<b>107TLS035M</b>	1.989	230	8x20