

TLS

+85°C Low Leakage Axial Lead Aluminum Electrolytic Capacitors



Features

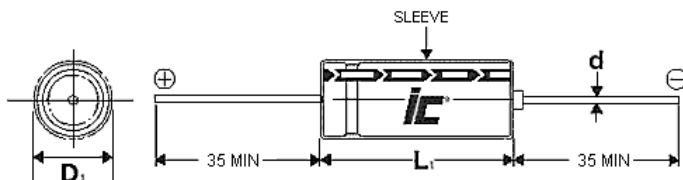
- Standard case sizes
- Low leakage current
- Lead free leads
- Long life

Applications

- Alternate to Tantalums
- Coupling
- Filtering
- De-coupling

Specifications

Operating Temperature Range		-40°C to +85°C										
Capacitance Tolerance		+20% at 120 Hz, 20°C										
Surge voltage	WVDC	10	16	25	35	50						
	SVDC	13	20	32	44	63						
Dissipation Factor	WVDC	10	16	25	35	50						
	Tan δ	.2	.16	.14	.12	.1						
Leakage current		10 to 100 WVDC										
		1 Minutes					2 Minutes					
		.03CV or 4uA, Whichever is greater					.01CV or 3uA, Whichever is greater					
Low temperature stability Impedance ratio (120 Hz)	WVDC	10	16	25	35	50						
	-25°C to +20°C	3	2	2	2	2						
	-40°C to +20°C	8	6	4	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									
Ripple Current Multipliers		Capacitance	Frequency (Hz)					Temperature (°C)				
		uF	50	120	400	1k	10k	50k	+85	+70	+60	+30
		C≤10	.8	1.0	1.3	1.45	1.65	1.7	1.0	1.3	1.5	1.8
		10<C≤100	.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

L₁=L+1.0mm Max. mm
D₁=D+B Max.



TLS

+85°C, Low Leakage current
2000 hours

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

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