

LOAD LIFE – TEMPERATURE TABLES

Products: Liquid Electrolyte Aluminium Electrolytic Capacitors

When operating at temperatures less than the rated maximum, use the below table in estimation of load life – endurance performance (Hours) of liquid electrolyte Aluminium Electrolytic Capacitors.

					RATING (hours)	
+35C	+45C	+55C	+65C	+75C	+85C	
32,000	16,000	8,000	4,000	2,000	1,000	
64,000	32,000	16,000	8,000	4,000	2,000	
96,000	48,000	24,000	12,000	6,000	3,000	
128,000	64,000	32,000	16,000	8,000	4,000	
160,000	80,000	40,000	20,000	10,000	5,000	

						RATING (hours)	
+35C	+45C	+55C	+65C	+75C	+85C	+95C	+105C
128,000	64,000	32,000	16,000	8,000	4,000	2,000	1,000
256,000	128,000	64,000	32,000	16,000	8,000	4,000	2,000
384,000	192,000	96,000	48,000	24,000	12,000	6,000	3,000
512,000	256,000	128,000	64,000	32,000	16,000	8,000	4,000
640,000	320,000	160,000	80,000	40,000	20,000	10,000	5,000

								RATING (hours)	
+35C	+45C	+55C	+65C	+75C	+85C	+95C	+105C	+115C	+125C
512,000	256,000	128,000	64,000	32,000	16,000	8,000	4,000	2,000	1,000
768,000	384,000	192,000	96,000	48,000	24,000	12,000	6,000	3,000	1,500
1,024,000	512,000	256,000	128,000	64,000	32,000	16,000	8,000	4,000	2,000

16,000 hours = 1.83 years | 24,000 hours = 2.74 years
 32,000 hours = 3.65 years | 48,000 hours = 5.48 years
 64,000 hours = 7.31 years | 96,000 hours = 11.0 years
 128,000 hours = 14.6 years | 256,000 hours = 29.2 years

:: Wear-Out Accelerators

Electrical Overstress | Corrosive Agents | Reduced Pressure

:: Load Life Rating Follows Arrhenius Rate Law

Temperature increase of 10°C approximately doubles the rate of the reaction

- + End-seal and electrolyte directly relates to component load life rating
- + In-circuit wear out rate is chiefly dependent upon operating temperature

Impressum

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