

## ALUMINUM ELECTROLYTIC CAPACITOR --Low ESR

### AN018LER—CD289LER

- I Withstand Low ESR & long life
- I Life time: 105. C 5000 hours ( $\Phi D \geq 12.5$ )
- I Two or three dimensions with same ratings
- I For switching power supplies and other industrial, electronic products applications



### I SPECIFICATIONS

Item	Performance characteristics										
Rated Voltage Range	6.3V. DC~450V.DC										
Operating Temperature Range	-55°C~~+105°C										
Nominal Capacitance Range	0.47μF~15000μF										
Capacitance Tolerance	± 20%(M+20°C,120Hz)										
Leakage Current	After application of rated voltage for 2 minutes: $I \leq 0.01 CV$ or $3\mu A$ (Whichever is greater) 20 C (μF): Nominal Capacitance in μF;V. (V): V Rated Working Voltage in V										
Dissipation Factor	Rated Working Voltage	6.3	10	16	25	35	50	63	100		
	$\tan \delta$ (MAX) (20°C,120Hz)	0.18	0.16	0.14	0.12	0.12	0.10	0.09	0.08		
	When capacitance is over 1000μF, $\tan \delta$ shall be added 0.02 with increase of every 1000μF										
Temperature Stability	Rated Working Voltage				6.3	10	16	25~100			
	Impedance Ratio(120Hz)		(Z-25°C/z+20°C)		4	3	2	2			
			(Z-55°C/z+20°C)		8	6	4	3			
Load Life	After applying rated voltage for 5000 hours at + 105°C Capacitors meet the characteristics requirements measured at +20°C listed below										
	Capacitance Change	Within ± 25% of the initial measured value				Case Dia		Life Time			
	Leakage current	Less than the initial specified value						6.3-100WV	160-250WV		
	$\tan \delta$	Less than 200% the initial specified value						$\Phi D \leq 8$	3000	2000	
							$\Phi D = 10$	4000	2000		
							$\Phi D \geq 12.5$	5000	2000		
Self Life	After application of rated working voltage and maximum permissible ripple specified at +105°C for 2000 hours, Capacitors meet the characteristics requirements measured at +20°C listed below.										

### MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Cap (μF) \ Freq (Hz)	50(60)	100(120)	1K	10K	≥100K
0.47~4.7	0.35	0.42	0.60	0.80	1.00
10~33	0.45	0.55	0.75	0.90	1.00
47~330	0.60	0.70	0.85	0.95	1.00
470~1000	0.65	0.75	0.90	0.98	1.00
2200-15000	0.75	0.80	0.95	1.00	1.00