

ALUMINUM ELECTROLYTIC CAPACITOR

Suntan®

105°C, HIGH FREQUENCY, LOW IMPEDANCE

TS13D CD286

FEATURES

- Load life of 2000 hours at 105°C
- Switch power supply



◆ Specifications

I T E M S	PERFORMANCE CHARACTERISTICS														
Operating Temperature Range(°C)	-55~+105														
Rated Voltage Range (V)	6.3~100														
Capacitance Range (μ F)	0.47~15000														
Capacitance Tolerance(25°C, 120Hz)	$\pm 20\%$														
Leakage Current(μ A)	I=0.02CV or 3 whichever is greater (at 25°C, after 2 minutes) C: Nominal Capacitance (μ F) V: Rated Voltage (V)														
Dissipation Factor(25°C, 120Hz)	Rate Voltage	6.3	10	16	25	35	50	63	100						
	Tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08						
	Add 0.02 per 1000 μ F or move.														
Characteristics of Low Temperature	Impedance at -10°C, 100KHz<200% of initial specified value at +20°C, 100KHz (Impedance ratio at 100KHz)														
Load Life (+105°C)	After life test at condition stated in the table below, the capacitors shall meet the following requirement. <table border="1"> <thead> <tr> <th>Case Dia</th> <th>Test time (hrs)</th> </tr> </thead> <tbody> <tr> <td>$\Phi D \leq 8$</td> <td>1000</td> </tr> <tr> <td>$\Phi D > 8$</td> <td>2000</td> </tr> </tbody> </table>									Case Dia	Test time (hrs)	$\Phi D \leq 8$	1000	$\Phi D > 8$	2000
Case Dia	Test time (hrs)														
$\Phi D \leq 8$	1000														
$\Phi D > 8$	2000														
Ripple current applied	Leakage Current	Not more than the specified value.													
	Capacitance Change	Within $\pm 20\%$ of the initial value													
	Dissipation Factor	Not more than 200% of the specified value.													
Shelf Life (+105°C)	1000 hours. No voltage applied. After test: U_R to be applied for 30 minutes, 24 to 48 hours before measurement.														

◆ Dimensions

mm

ΦD	5 6.3 8 10 13 16 18
F	2.0 2.5 3.5 5.0 7.5
Φd ± 0.05	0.5 0.6 0.8
a Max	D<18 L<35.5 +1.5 -1.0
b Max	D<18 0.5 D≥18 1.0

◆ Multiplier for ripple current

Frequency coefficient

Freq(Hz) Cap(μ F)	120	1K	10K	100K
0.47~4.7	0.40	0.68	0.78	1.0
5.6~47	0.50	0.76	0.87	1.0
56~270	0.70	0.85	0.90	1.0
330~1000	0.80	0.93	0.98	1.0
1200~15000	0.90	0.95	1.0	1.0

Temperature coefficient

Temperatu re	+70	+85	+105
Factor	1.96	1.68	1.0

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◆ STANDARD RATINGS

V μF \	6.3V	10V	16V	25V	35V	50V	63V	100V
1	--	--	--	--	--	5x11	--	
2.2	--	--	--	--	--	5x11	--	
3.3	--	--	--	--	--	5x11	--	
4.7	--	--	--	--	5x11	5x11	--	
6.8	--	--	--	--	5x11	5x11	--	
10	--	--	--	--	5x11	5x12	5x12	6.3x11
15	--	--	5x12	--	5x11	5x12	--	
18	--	--	--	--	5x11	5x12	--	
22	--	--	--	5x11	5x11	6.3x11	6.3x11	8x12
27	--	--	--	--	5x11	6.3x11	--	
33	--	--	--	--	6.3x11	6.3x11	6.3x11	10x13
39	--	--	--	--	6.3x11	6.3x11	--	
47	--	--	5x11	5x11	6.3x11	6.3x12	8x12	10x17
56	--	--	5x11	5x11	6.3x11	6.3x12	--	
68	--	--	5x12	5x12	6.3x11	8x12	10x13	10x21
82	--	--	--	6.3x11	6.3x11	8x12	--	
100	--	5x11	6.3x11	6.3x11	8x12	8x12	10x17	13x20
120	--	5x11	6.3x11	6.3x11	8x12	8x16	--	
150	5x11	5x11	6.3x11	8x12	8x12	8x19	--	
180	5x11	6.3x11	6.3x11	8x12	8x14	8x19	--	
220	6.3x11	6.3x11	6.3x11	8x12	10x17	10x17	10x21	16x26
270	6.3x11	6.3x11	8x12	8x14	10x17	10x21	--	
330	6.3x11	8x12	8x12	10x12	10x17	10x21	13x20	16x26
390	6.3x12	8x12	--	8x19	10x17	13x20	--	
470	6.3x12	8x12	8x12	10x17	10x17	13x20 13x21	13x20	16x31
560	8x12	8x12	8x16	8x19	10x25	13x21	--	
680	8x12	8x12	8x16	10x17	13x20	13x25	16x26	
820	8x14	8x16	8x19	10x25	13x20	13x25	--	
1000	8x16	8x16	10x17	10x21	13x25	13x25	16x26	
1200	8x16	10x17	10x21	13x20	16x20	13x30	16x30	
1500	8x16	10x21	13x20	13x20	16x20	16x26	--	
1800	10x17	10x25	13x20	13x25	16x26	16x32	--	
2200	10x17	13x20	13x20	13x25	16x26	16x35	18x40	
2700	10x21	13x21	16x26	13x25	16x35	18x40	--	
3300	13x20	13x20	13x30	16x26	16x35	18x40	--	
3900	13x25	--	16x26	16x26	18x40	--	--	
4700	13x25	13x25	16x26	16x26	--	--	--	
5600	16x26	16x30	16x35	--	--	--	--	
6800	16x26	13x30	18x25	--	--	--	--	
8200	16x32	16x35	--	--	--	--	--	
10000	16x35	16x40	--	--	--	--	--	

Note: Specification are subject to change without notice. For more detail and update, please visit our website.