

ALUMINUM ELECTROLYTIC CAPACITORS

TYS series

FEATURES

- 105°C Miniaturized Long Life



SPECIFICATIONS

Item	Performance Characteristics					
Operating Temperature Range	-25°C ~ +105°C					
Rated Voltage Range	160V ~ 500W.V.					
Capacitance Range	10~560uF					
Capacitance Tolerance	±20% (20°C, 120Hz)					
Leakage Current (MAX)	$I = 0.04CV + 100\mu A$ (2minutes) $I = 0.02CV + 25\mu A$ (5minutes) I=Leakage Current(μA) , C=Nominal Capacitance(μF) , V=Rated Voltage(V)					
Dissipation Factor (tan δ)	Rated voltage (V)	200	250	400~450	500	MAX (20°C, 120Hz)
	Tan δ	0.15	0.15	0.20	0.20	
Low Temperature Stability Impedance Ratio	Rated voltage (V)	200	250	400	450~500	MAX (120Hz)
	Z(-25°C)/Z(+20°C)	3	5	8	17	
Load Life	After 2000 hours' application of rated voltage at 105°C, capacitors meet the characteristics requirement listed at right.					
	Leakage Current	not more than the specified value.				
	Capacitance Change	Within ±25% of initial value.				
	Dissipation Factor	not more than 200% of the specified value.				
Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours and applying voltage according to JIS C-5102 4-3, they meet the specified value for load life characteristics listed above.					
Standard	According to JIS C-5141					

MULTIPLIER FOR RIPPLE CURRENT

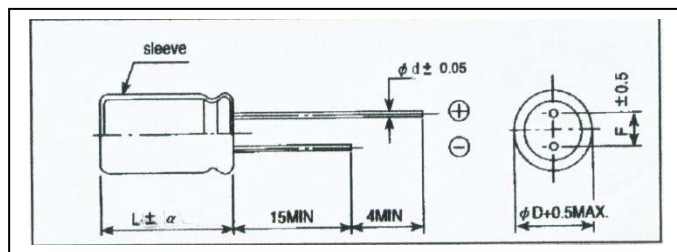
Frequency coefficient

Frequency(Hz)	60(50)	120	1k	10k	≥ 100k
Coefficient	0.8	1.0	1.25	1.40	1.50

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DIMENSIONS (mm)



φD	8	10	12.5	16	18
φd	0.6	0.6	0.6	0.8	0.8
F	3.5	5.0	5.0	7.5	7.5
α	$L \leq 16: \alpha = 1.5, L \geq 20: \alpha = 2.0$				

STANDARD SIZES AND PERMISSIBLE RIPPLE CURRENT

SIZE $\varphi D \times L$ (mm) Ripple Current(mA 105°C,) r.m.s

Cap(μF)	W.V	160		200		250		400		450		500	
		SIZE	RIPPLE (120HZ)	SIZE	RIPPLE (120HZ)	SIZE	RIPPLE (120HZ)	SIZE	RIPPLE (120HZ)	SIZE	RIPPLE (120HZ)	SIZE	RIPPLE (120HZ)
10	100	8x11.5	50	8X11.5	70	8x16	75	10X15 10X16	80 85	12.5x20	150	12.5x20	170
22	220	10x12.5	70	10X12.5	125	10x12.5	125	10X30 12.5X20	140 140	12.5x20	160	16x20	190
33	330	10x16	125	10X16	165	10x20	170	10X40 12.5X25	200 200	16x25	200	16X25	210
47	470	10x20	165	10X20 10X23	185 188	12.5x16	210	12.5X30 16X20	230 247	12.5x30 16x25 16x31.5 18x20	230 250 270 260	16x31.5	300
56	560	10x23	185	10X23	200	12.5x25	280	16X25	282	16x25 16x30 16x31.5 18x25	280 285 290 290	18x31.5	320
68	680	10x23	200	10X23	233	16x25	300	16X31.5 18X25	325 440	16x35.5	360	18x35.5	400
82	820	10x30	233	10X30	267	16x31.5	320	16X31.5 18X25	375 375	16x31.5 16X35.5 18x31.5	360 370 390	18x40	430
100	101	10x35	267	10X35	307	16x35.5	350	16x30 16X31.5 18x20	400 400 420	18X35.5	410	20X46. 5	450
120	121	12.5x25	307	10X40 12.5X25	353 353	18x25	413	18X31.5	500	18X35.5	515		
150	151	12.5x30	353	12.5X30 16X20	413 413	18x31.5	467	18X35.5	548	18X45	535		
180	181	12.5x35	413	12.5X35 16X25	467 467	18x35.5	533	18X40	628	20X46.5	535		
220	221	16x25	467	16X25	533	18x40	625	18X45	700				
270	271	16x31.5	533	16X31.5 18X25 18X31.5	580 580 625	18x45	690						
330	331	18x31.5	625	18X31.5	667								
390	391	18x35.5	667	18X35.5	753								
470	471	18x40	753	18X40	865								
560	561	18x45	865	18X45	927								