

RS Series 85°C

Features

General capacitors

Applications

- ◆ Frequency converters
- ◆ Professional power supplies
- ◆ Uninterruptible power supplies

Features

- ◆ Wide temperature range
- ◆ All-welded construction ensures reliable electrical contact
- ◆ Self-extinguishing electrolyte
- ◆ RoHS-compatible

Construction

- ◆ Charge-discharge proof, polar
- ◆ Aluminum case with insulating sleeve
- ◆ Poles with screw terminal connections
- ◆ Mounting with ring clips, clamps or threaded stud

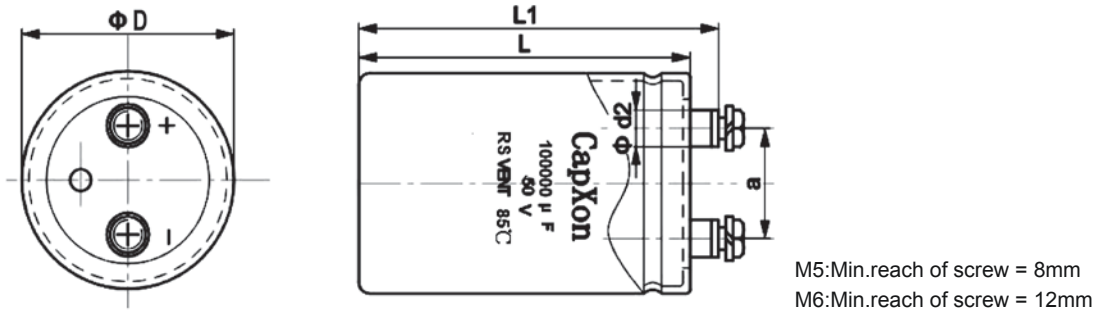


Specifications

Item	Performance Characteristics					
Rated voltage V_R	16... 100 V DC					
Surge voltage V_S	1.15 V_R					
Rated capacitance C_R	3300 ... 1000000 μF					
Capacitance tolerance	$\pm 20\%$					
tan δ (at 20°C , 120Hz)	Less than the value under table(%)					
	ΦD	35	51	63.5	76.2	89
	WV					
	16	60	70	80	120	140
	25	40	50	70	80	130
	35	30	50	60	70	90
	50	25	30	50	60	80
	63	20	25	30	40	60
80	20	20	25	30	50	
100	15	20	25	30	30	
Leakage Current I_{leak} (20 °C, 5 min)	$I_{\text{leak}} \leq 0.3\mu\text{A} * (C*V)^{0.7} + 4\mu\text{A}$					
Endurance test 85 °C; V_R	2000 h	Requirements: $\Delta C/C \leq \pm 20\%$ of initial value ESR ≤ 2 times initial specified limit leak \leq initial specified limit				
Vibration Resistance test	To IEC 60068-2-6, test Fc: Displacement amplitude 0.75 mm, frequency range 10 ... 55 Hz, acceleration max. 10 g, duration 3X2 h. Capacitor mounted by its body which is rigidly clamped to the work surface.					
Low Temperature Characteristics	$Z_{-25^\circ\text{C}} / Z_{20^\circ\text{C}}$		3			
	$Z_{-40^\circ\text{C}} / Z_{20^\circ\text{C}}$		12			
Sectional specification	IEC 60384-4 and JIS-C-5101					

Dimensional drawings

Ring clip/clamp mounting:



Dimensions

Terminal	Dimensions(mm) with insulating sleeve				
	$D \pm 2$	$L \pm 3$	$L_1 \pm 3$	$d_2 \text{ max.}$	$a \pm 0.5$
M5	35	50~120	56.5~126.5	10.3	12.7
M5	51	80~140	86.5~146.5	10.3	22
M5	63.5	80~140	86.5~146.5	10.3	28.6
M5	76.2/89	100~240	106.4~246.5	10.3	31.8
M6	76.2/89	100~240	106.4~246.5	17.5	31.8

Packing

Diameter D(mm)	Length L(mm)	Packing (pcs.)
35	$\leq 70\text{mm}$	120
	$> 70\text{mm}$	60
42	$\leq 70\text{mm}$	120
	$> 70\text{mm}$	60
51	$\leq 70\text{mm}$	70
	$> 70\text{mm}$	35
63.5	all	24
76.2	all	15
89	all	12

Accessories

The following items are included in the delivery package, but are not fastened to the capacitors.

	Thread	Maximum torque
For terminal	M5	2 Nm
	M6	2.5 Nm

Case Size

φ D x L (mm)

WV(V) Cap(μF)	16		25		35		50	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
6800							35x50	3.7
10000					35x60	4.5	35x60	5.0
15000			35x50	5.0	35x80	5.7	35x80	7.8
22000	35x60	7.3	35x60	7.7	35x80 35x100	8.0 9.0	35x100 35x120	11.5 12.8
33000	35x60 35x80	8.5 9.5	35x80	10	35x100	11.0	51x80 51x100	11.8 13.2
47000	35x80 35x100	11.0 12.0	35x100 35x105	12.5 13.0	35x120	13.7	51x100	14.7
68000	35x100 35x105 51x80	11.3 13.0 13.5	35x120 51x80	13.5 14.3	51x80 51x100	14.5 15.1	51x120 51x140	16.5 17.8
100000	35x120 51x80 51x100	13.5 14.0 15.0	51x100 51x105	15.5 16.0	51x120	19.2	63.5x120 63.5x140 76.2x100	19.0 21.5 19.5
150000	51x80 51x100 51x140	15.0 16.5 17.6	51x120 51x140 63.5x105	21.2 24.2 24.0	63.5x120	25.0	76.2x120 76.2x140	26.5 28.0
220000	51x120 63.5x105 63.5x120	17.8 20.0 21.5	63.5x120	25.8	76.2x100 76.2x140	26.0 27.4	76.2x160 89x130	32.7 32.5
330000	63.5x105 63.5x120 63.5x140	21.0 23.0 25.2	76.2x120 76.2x140	26.7 28.5	76.2x140 76.2x160	33.0 35.7	89x160	36.0
470000	76.2x120 76.2x140	25.5 27.5	76.2x150	31.3	89x170	39.0	89x220	41.0
680000	76.2x160	35.1	89x160	37.0	89x220	41.0		
820000	76.2x220	38.0	89x190	40.0				
1000000	89x200	41.1	89x220	42.0				

Ripple Current(A,rms) at 85°C 120Hz

WV(V) Cap(μF)	63		80		100	
	Size	Ripple	Size	Ripple	Size	Ripple
3300					35x60 35x80	4.1 5.8
4700			35x60	5.0	35x80	6.7
6800	35x50	5.0	35x60	6.0	35x80 35x105	8.0 8.7
10000	35x60 35x80	6.2 7.7	35x80	8.0	35x100 51x80	9.0 10.0
15000	35x80 35x105	8.7 10.0	35x120	11.0	51x80 51x100 51x105	11.0 12.4 13.0
22000	35x120 51x80	13.1 13.0	51x80	14.0	51x120 63.5x105	16.2 17.0
33000	51x100 51x105	13.9 14.0	51x120	16.1	51x140 76.2x105	21.3 23.0
47000	51x120 63.5x105	18.6 19.0	63.5x120	21.0	63.5x140 76.2x140	24.3 25.0
68000	63.5x120 76.2x105	21.3 22.0	63.5x140	24.1	76.2x140	26.4
100000	76.2x120 76.2x145	24.0 25.0	76.2x160	27.0	89x160	27.2
150000	76.2x160	27.0	89x160	30.0	89x230	29.0
220000	89x160	29.0	89x230	35.0		
330000	89x220	32.0				

Ripple Current(A,rms) at 85°C 120Hz