

WR Series 85°C Long Life (超长寿命)

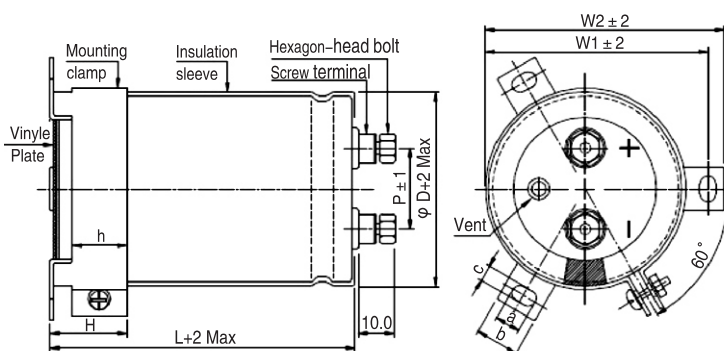
- Long Life, 22000~27000 hours at 85°C (U_R, I_R applied)
- High Reliability at high Voltage
- RoHS Compliant



SPECIFICATIONS AND CHARACTERISTICS IN BRIEF

Item	Performance Characteristics	
Standard	IEC 60384-4	
Temperature Range	-25°C to +85°C (Operating) -40°C to +100°C (Storage)	
Rated Working Voltage Range U_R	250V to 450V	
Surge Voltage U_s	1.10 x U_R	
Nominal Capacitance Range	100 μ F to 15000 μ F	
Capacitance Tolerance	$\pm 20\%$ (120HZ, +20°C)	
Leakage Current I_L	= 0.0065 x C_R x U_R (μ A) or 6mA whichever is the smaller. Note, C_R is in μ F.	Test Condition: U_R , 5mins., 20°C
Characteristics at low Temperature	Max. impedance ratio at 120 Hz	U_R (V) 250 ~ 450 Z -25 °C / Z 20 °C 8
$\tan \delta$	The values shown in the standard ratings tables, at 120HZ, 20°C	
Operational Life Time +85°C, U_R , I_R	Can Diameter 35 22000 hrs 51 23000 hrs 64 25000 hrs 76,90 27000 hrs	End of Life Requirement: $\Delta C/C$ $\leq \pm 20\%$ $\tan \delta$ ≤ 2 x initial $\tan \delta$ value I_L \leq initial specified limit
+85°C, U_R	Can Diameter 35 38000 hrs 51,64 40000 hrs 76,90 45000 hrs	
Shelf Life +85°C	After leaving capacitors under no load at 105°C for 1000 hours, Capacitors shall meet specified value for load life characteristics listed above.	
Others	If the capacitors are stored more than 1 year, the Leakage Current may increase. Please apply voltage through about 1 k Ω resistor, if necessary.	

SPECIFICATIONS



ΦD	P	W1	W2	H	h	a	b	c	Unit:mm
51	22.0	61.0	65.5	21.0	15.0	7.0	12.0	4.5	
64	28.6	72.5	78.0	25.0	20.0	7.0	14.0	4.5	
77	32.0	85.5	91.0	35.0	20.0	8.0	16.0	4.5	
90	32.0	101	106	34.5	20.0	8.0	16.0	5.0	

Screw specifications:
Plus hexagon-headed screw: M5 x 0.8 x 10
Max. screw tightening torque: 3.23Nm

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STANDARD RATINGS

Voltage (V)	250			350			400		
	Case Size	tan δ	Ripple Current	Case Size	tan δ	Ripple Current	Case Size	tan δ	Ripple Current
220				35×51	0.20	1.4	35×51	0.20	1.5
330	35×51	0.20	1.5	35×60	0.20	1.8	35×80	0.20	2.0
470	35×60	0.20	1.9	35×80	0.20	2.2	35×100	0.20	2.4
680	35×80	0.20	2.4	35×100	0.20	2.7	51×80	0.20	3.4
1000	35×100	0.20	2.9	51×80	0.20	3.9	51×100	0.20	4.1
1500	51×80	0.20	4.1	51×100	0.20	4.8	64×100	0.20	6.2
2200	51×100	0.20	5.1	64×100	0.20	6.6	64×120	0.20	6.7
3300	64×100	0.20	7.4	64×120	0.20	7.6	76×110	0.20	7.7
4700	64×120	0.20	7.9	76×110	0.20	10.2	76×150	0.20	10.9
6800	76×110	0.20	10.3	76×150	0.20	11.8	76×220	0.20	12.3
10000	76×150	0.20	12.6	76×220	0.20	13.6	90×220	0.20	17.3
12000	76×170	0.20	13.2	90×190	0.20	16.3			
15000	90×140	0.20	15.3	90×220	0.20	19.1			

Maximum Allowable Ripple Current (A rms) at 85°C 120HZ

Case Size ΦD×L(mm)

Voltage (V)	420			450					
	Case Size	tan δ	Ripple Current	Case Size	tan δ	Ripple Current			
100									
150	35×51	0.20	1.3	35×51	0.25	1.4			
220	35×80	0.20	1.6	35×80	0.25	1.8			
330	35×100	0.20	2.0	35×100	0.25	2.2			
470	51×80	0.20	2.9	51×80	0.25	3.2			
680	51×100	0.20	3.6	51×100	0.25	3.9			
1000	51×120	0.20	4.4	51×120	0.25	4.7			
1500	64×120	0.20	6.2	64×120	0.25	6.5			
2200	76×110	0.20	8.1	76×110	0.25	8.5			
2700	76×120	0.20	8.7	76×120	0.25	8.9			
3300	76×150	0.20	9.8	76×150	0.25	9.9			
4700	90×150	0.20	11.0	90×150	0.25	13.2			
8200	90×220	0.20	16.7	90×220	0.25	17.4			

Maximum Allowable Ripple Current (A rms) at 85°C 120HZ

Case Size ΦD×L(mm)

RIPPLE CURRENT MULTIPLIER

Freq(HZ)	50	120	1K	10K~
Coefficient	0.80	1.00	1.15	1.20

Specifications are subject to change without notice. Should a safety or technical concern arise regarding the product, please be sure to contact our sales offices or agents immediately.