

HZR Series 105°C Withstanding Vibration(耐振动)



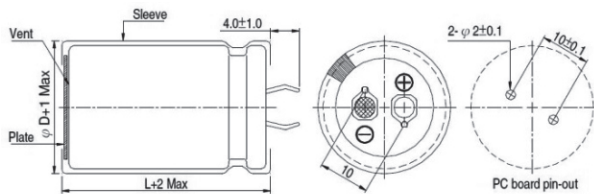
- Long Life,2000 hours at 105°C(U_R,I_R applied)
- Withstanding Vibration
- Designed for withstanding vibration
- RoHS Compliant

SPECIFICATIONS AND CHARACTERISTICS IN BRIEF

Item	Performance Characteristics									
Standard	IEC 60384-4									
Temperature Range	-40°C (10V to 100V) 、 -25°C (160V to 550V) to +105 °C(Operating) -55°C to +110°C (Storage)									
Rated Working Voltage Range U _R	10V to 550V									
Surge Voltage U _s	1.10 x U _R (for U _R > 250 VDC) , 1.15 x U _R (for U _R ≤250 VDC)									
Nominal Capacitance Range	56 μ F to 82000 μ F									
Capacitance Tolerance	±20%(120HZ , +20°C)									
Leakage Current I _L	= 0.01 x C _R x U _R (μA) or 6mA whichever is the smaller. Note, C _R is in μF.							Test Condition: U _R , 5mins., 20°C		
Characteristics at low Temperature	Max. impedance ratio at 120 Hz	U _R (V)		10~100	160~250	315~385	400~450	500~550		
		Z -25 °C / Z 20 °C		4	4	6	8	8		
		Z -40 °C / Z 20 °C		15	15	-	-	-		
tan δ	Working Voltage(V)	10	16	25	35	50	63	80	100	160~550
	tan δ(max) (120HZ, +20°C)	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.20
Operational Life Time +105°C, U _R , I _R	Can Diameter		22,25	2000 hrs	End of Life Requirement: ΔC/C ≤ ±20% tan δ ≤ 2 x initial tan δ value I _L ≤ initial specified limi					
			30,35	2000 hrs						
+105°C, U _R	Can Diameter		22,25	4000 hrs						
			30,35	5000 hrs						
Shelf Life +105°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 kΩ resistor, if necessary.									

SPECIFICATIONS

Unit:mm



RIPPLE CURRENT MULTIPLIER

Freq(HZ)	50	120	1K	10K	100K
Coefficient	0.80	1.00	1.20	1.35	1.40

Mounting

These capacitors are designed to be mounted by their terminations alone, and may be used in any position.

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STANDARD RATINGS								
Voltage (V)	10		16		25		35	
	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
2700							22×25	1.58
3300							22×30	1.93
3900							22×30	2.05
4700					22×25	1.96	22×35	2.23
5600					22×30	2.10	22×35	2.51
6800			22×25	2.10	22×30	2.10	22×40	2.60
8200			22×30	2.30	22×40	2.62	22×45	3.12
			22×25	2.30	22×35	2.53	25×35	3.00
10000	22×30	2.19	22×35	2.57	22×35	2.86	22×50	3.23
	22×25	2.16	22×30	2.53	25×30	2.84	25×40	3.23
12000	30×30	2.20	22×30	2.82	22×40	3.18	25×45	3.61
	22×25	2.17	25×25	2.66	25×35	3.13	30×35	3.61
15000	22×35	2.61	22×35	3.32	22×50	3.67	30×40	4.32
	22×30	2.59	25×30	3.28	25×40	3.60	35×35	3.67
18000	22×35	2.90	22×40	3.58	25×45	4.21	30×45	4.66
	25×30	2.77	25×35	3.58	30×35	4.21	35×40	5.14
22000	22×40	3.41	25×40	4.00	30×40	4.67	35×45	5.74
	25×30	3.31	30×30	3.94	35×35	4.68		
27000	22×45	3.64	25×45	4.48	30×45	5.42	35×50	6.21
	25×35	3.64	30×35	4.34	35×40	5.42		
33000	25×40	4.10	25×50	4.94	35×45	6.08		
	30×30	4.12	30×40	4.84				
39000	25×45	4.76	30×45	5.50	35×50	6.80		
	30×35	4.69	35×35	5.41				
47000	30×40	5.20	30×50	6.12				
	35×35	5.00	35×40	6.12				
56000	30×45	5.93	35×45	6.86				
68000	30×50	6.75						
	35×40	6.73						
82000	35×50	7.65						

Maximum Allowable Ripple Current (A rms) at 105°C 120HZ

Case Size ΦD×L(mm)

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STANDARD RATINGS								
Voltage (V)	50		63		80		100	
	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
680							22×25	1.49
820							22×25	1.67
1000					22×25	1.40	22×35	1.82
1200					22×30	1.62	22×40	1.91
					22×25	1.59	22×30	1.91
1500			22×25	1.52	22×35	1.89	22×35	2.21
1800	22×25	1.53	22×30	1.84	22×40	2.07	22×40	2.49
			22×25	1.71	22×35	2.03	25×35	2.49
2200	22×30	1.86	22×35	2.16	22×40	2.28	22×45	2.81
	22×25	1.74	22×30	2.12	25×30	2.28	25×40	2.88
2700	22×35	1.99	22×40	2.27	22×45	2.64	25×45	3.25
	22×30	1.99	22×35	2.25	25×35	2.64	30×35	3.24
3300	22×40	2.17	22×40	2.42	22×50	2.93	25×50	3.67
	22×30	2.17	25×30	2.42	25×40	2.93	30×40	3.65
3900	22×35	2.45	22×45	2.79	25×45	3.26	30×45	4.14
	25×30	2.41	25×35	2.78	30×35	3.26	35×35	4.05
4700	22×40	2.71	22×50	3.14	25×50	3.85	30×50	4.62
	25×30	2.41	25×40	3.03	30×40	3.74	35×40	4.61
5600	22×45	3.09	25×45	3.42	30×45	4.10	35×45	5.16
	25×35	3.03	30×35	3.43	35×35	4.06		
6800	25×40	3.48	25×50	3.97	30×50	4.66	35×50	5.41
	30×35	3.48	30×40	4.41	35×40	4.63		
8200	25×45	3.93	30×45	4.32	35×45	5.25		
	30×35	3.48	35×35	4.94				
10000	30×40	4.52	30×50	5.67				
	35×35	4.43						
12000	30×50	5.04	35×50	5.80				
	35×40	5.04						
15000	35×45	5.80						
18000	35×50	6.04						

Maximum Allowable Ripple Current (A rms) at 105°C 120HZ

Case Size ΦD×L(mm)

HZR Series 105°C Withstanding Vibration(耐振动)

STANDARD RATINGS

Voltage (V)	160		200		250		350	
	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
120							22×30	0.82
150							22×35	0.95
180					22×25	1.03	22×40	1.06
220			22×25	1.02	22×30 22×25	1.08 1.06	22×40 25×35	1.26 1.31
270	22×25	1.10	22×30	1.19	22×30	1.22	22×45	1.46
330	22×30	1.33	22×30 22×25	1.34 1.30	22×35 22×30	1.44 1.42	22×50 25×40	1.60 1.69
390	22×30 22×25	1.40 1.40	22×35 22×30	1.49 1.49	20×40 22×35	1.65 1.61	25×45 30×35	1.84 1.91
470	20×35 22×30	1.63 1.59	22×40 22×35	1.74 1.69	22×40 25×35	1.85 1.85	30×40	2.17
560	22×40 22×35	1.84 1.85	22×40 25×30	1.87 1.85	22×45 25×35	2.12 2.02	30×45	2.34
680	22×40 25×30	2.02 2.00	22×45 25×35	2.12 2.12	25×40 30×35	2.29 2.32	35×40	2.70
820	22×45 25×35	2.30 2.27	22×50 25×40	2.41 2.41	25×50 30×35	2.58 2.56	35×50	2.97
1000	22×50 25×40	2.59 2.57	25×45 30×35	2.81 2.70	30×45 35×35	3.05 2.98		
1200	25×45 30×35	2.94 2.93	25×50 30×40	3.10 3.10	30×50 35×40	3.42 3.31		
1500	30×40 30×35	3.39 3.38	30×50 35×40	3.54 3.45	35×45	3.71		
1800	30×45 35×35	3.69 3.67	35×45	3.93	35×50	3.88		
2200	35×45	4.25	35×50	4.50				
2700	35×50	4.77						

Maximum Allowable Ripple Current (A rms) at 105°C 120HZ

Case Size ΦD×L(mm)

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STANDARD RATINGS								
Voltage (V)	400		450		500		550	
Cap (μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
56			22×25	0.52				
68	22×25	0.64	22×30	0.60				
82	22×30	0.70	22×35	0.68				
100	25×30	0.81	22×35	0.76	25×30	0.81	30×40	0.88
120	25×35	0.97	22×40	0.85	30×30	0.90	30×40	0.96
150	22×35	1.06	22×40	1.01	30×35	1.08	30×40	1.13
	25×40	1.09	25×35	1.07				
180	30×35	1.31	22×50	1.13	30×40	1.26	35×40	1.40
			25×40	1.20	35×30	1.17		
220	22×45	1.35	25×45	1.36	30×45	1.44	35×45	1.45
	25×35	1.40	30×35	1.40	35×35	1.35		
270	25×40	1.53	25×50	1.49	30×50	1.62	35×50	1.61
	30×35	1.56	30×40	1.62	35×40	1.53		
330	25×50	1.71	30×45	1.82	35×45	1.80	35×50	1.81
	30×40	1.76		1.85				
	35×30	1.76						
390	30×40	1.94	30×50	2.02	35×50	2.07		
	35×35	1.95	35×40	2.30				
470	30×50	2.15	35×45	2.44				
	35×40	2.18						
560	35×45	2.44						
680	35×50	2.66						

Maximum Allowable Ripple Current (A rms) at 105°C 120HZ

Case Size ΦD×L(mm)

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.