

# HZH 系列 Series

## 特点 Features

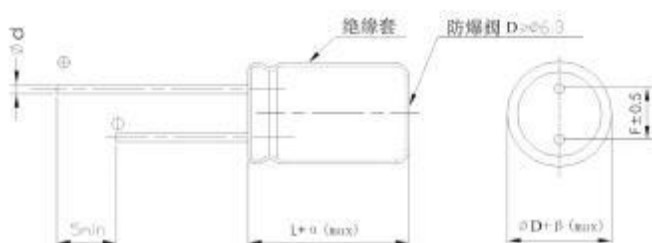
- 低阻抗, 9 mm高度, 105°C 2000-4000小时。  
Low impedance, with 9mm height, 105°C 2000-4000hours.
- 符合RoHS标准。  
Adapted to the RoHS directive.



## 主要技术性能 Specifications

项目 Items	特性 Performance Characteristics							
使用温度范围 Operating Temperature Range	-55~+105°C							
额定电压范围 Rated Voltage Range	6.3~100 V							
标称电容容量范围 Nominal Capacitance Range	4.7~1000μF							
标称电容容量允许偏差 Capacitance Tolerance	± 20% (120Hz, +20°C)							
漏电流 Leakage Current	I≤0.01CV or 3(μA) 2分钟(at 20°C, after 2 minutes) 取较大者 (whichever is greater)							
损耗角正切值 (tgδ) Dissipation Factor (+20°C, 120Hz)	U <sub>r</sub> (V)	6.3	10	16	25	35	50-100	
	tgδ	0.22	0.19	0.16	0.14	0.12	0.10	
温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	U <sub>r</sub> (V)	6.3	10	16	25	35	50	100
	Z-25°C / Z+20°C	4	3	2	2	2	2	2
	Z-40°C / Z+20°C	8	6	4	3	3	3	3
耐久性 Load Life	D	5-6.3	8	10				
	Load life	2000h	3000h	4000h				
	+105°C加额定电压, 恢复16小时后: After applying rated voltage at 105°C and then resumed for 16 hours: 电容变化率 Capacitance change : ±25%初始测量值以内 ±25% of the initial measured value 漏电流 Leakage current : ≤初始规定值 ≤the initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值数 ≤2times of the initial specified value							
高温贮存 Shelf Life	+105°C, 1000小时贮存后, 恢复16小时后: After storage for 1000 hours at +105°C then resumed for 16 hours: 电容变化率 Capacitance change : ±25%初始测量值以内 ±25% of the initial measured value 漏电流 Leakage current : ≤2倍初始规定值 ≤2times of the initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值数 ≤2times of the initial specified value							

## 外形图及尺寸表 Case Size Table



单位 Unit: mm

∅D	5	6.3	8	10
F	2.0	2.5	3.5	5.0
d	0.5			0.6
α(max)	1.5			
β(max)	0.5			

## 频率修正系数 Frequency Coefficient

Freq.(Hz)	120	1K	10K	100K
CAP(μF)				
~180	0.4	0.75	0.90	1
220~560	0.5	0.85	0.94	1
560~1000	0.6	0.87	0.95	1

尺寸 Dimensions

CAP(μF)		WV	6.3V(0J)			10V(1A)			16V(1C)		
			Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple
68	680							5×9	0.65	0.65	
100	101		5×9	0.65	150	5×9	0.65	220	5×9	0.60	
150	151		5×9	0.60	220	6.3×9	0.50	280	6.3×9	0.50	
220	221		6.3×9	0.40	350	6.3×9	0.40	380	6.3×9	0.45	
330	331		6.3×9	0.35	380	6.3×9	0.35	405			
470	471		6.3×9	0.25	405	8×9	0.30	550	8×9	0.40	
			8×9	0.19	500				10×9	0.35	
560	561		8×9	0.18	550	8×9	0.30	550	10×9	0.30	
680	681		8×9	0.15	760	10×9	0.25	820			
			10×9	0.13	820						
820	821		10×9	0.12	850	10×9	0.20	970			
1000	102		10×9	0.11	970						

CAP(μF)		WV	25V(1E)			35V(1V)			50V(1H)		
			Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple
15	150							5×9	0.55	100	
22	220							5×9	0.55	120	
33	330		5×9	0.65	120	5×9	0.55	120	6.3×9	0.40	
47	470		5×9	0.60	150	5×9	0.55	150	6.3×9	0.35	
68	680		5×9	0.50	150	6.3×9	0.50	350	8×9	0.30	
100	101					8×9	0.45	550	8×9	0.25	
150	151		6.3×9	0.35	380	8×9	0.40	550	10×9	0.20	
220	221		8×9	0.25	550	10×9	0.35	820			
330	331		8×9	0.20	610						
470	471		10×9	0.15	970						

CAP(μF)		WV	63V(1J)			100V(2A)		
			Size	ESR	Ripple	Size	ESR	Ripple
4.7	4R7				5×9	2.5	80	
6.8	6R8				5×9	2.5	90	
10	100		5×9	1.7	100	6.3×9	1.7	
15	150		5×9	1.7	120	6.3×9	1.7	
22	220		5×9	1.2	150	8×9	1.2	
33	330		6.3×9	0.55	220	8×9	1.0	
47	470		6.3×9	0.55	300	10×9	0.55	
68	680		8×9	0.25	500			
100	101		10×9	0.20	760			

Size φD×L(mm)  
 Maximum Allowable Ripple Current (mA rms) at 105°C 100KHz  
 Maximum ESR (Ω) at 20°C 100KHz