

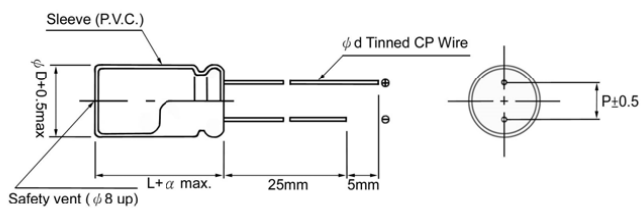
HFR SERIES

105 °C Radial lead polar, High Temperature Standard for general purpose.
 一般高温及信赖性较高之消费性产品.适用于一般民生用电子、
 通讯设备及工业用产品等

SPECIFICATION:

ITEMS	CHARACTERISTIC										
Rated Voltage Range(vdc) 额定电压	6.3v ~ 100v DC						160v ~ 450v DC				
Operating Temperature Range 使用温度范围	-40°C ~ +105°C						-25°C ~ +105°C				
Capacitance Tolerance 电容量容许差	±20%(M) at 20°C, 120Hz										
Leakage Current 漏泄电流	I=0.01CV or 3μA						I=0.03CV+15μA				
	Whichever is greater after 3 minutes						I = Leakage current(μA) C = Rated Capacitance(μF) V = Working Voltage (v)				
Dissipation Factor (tanδ) 损失角之正接	Add 0.02 per 1000μF for more than 1000μF(at 20°C, 120Hz)										
	Rated voltage(Vdc)	6.3	10	16	25	35	50	63	100	160~250	350~450
DF(tan δ)	0.24	0.20	0.17	0.15	0.12	0.10	0.10	0.10	0.10	0.20	0.25
Low Characteristics 低温特性	Max. impedance ratio at 120Hz to the 20°C value;										
	Rated voltage(Vdc)	6.3	10	16	25	35	50	63	100	160~250	350~450
	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2	8	12
	Z(-40°C)/Z(20°C)	10	8	6	4	3	3	3	3	--	--
Load Life 高温负载寿命	After 1000 hours application of Rated voltage at 105°C the capacitor shall meet the following limits										
	Capacitance change rate	≅ ±25% of initial value									
	DF(tan δ)	≅ 200% of the initial specified value									
	Leakage current	initial specified value									
Shelf Life 高温无负载寿命	AT 105°C no voltage applied after 500 hours the capacitor shall meet the following limits.										
	Capacitance change rate	≅ ±25% of initial value									
	DF(tan δ)	≅ 200% of the initial specified value									
	Leakage current	≅ 200% of the initial specified value									

Dimension (mm)



φ D	5	6.3	8	10	13	16	18	22
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10
φ d	0.5		0.6		0.8		0.8/1.0	
α	1.5							

RICHEY ALUMINUM ELECTROLYTIC CAPACITORS

HFR SERIES

Standard Products Table 寸法表

WV Cap	100v		160v		200v		250v		350v		400v		450v	
1	5x11	10					6.3x12	10	6.3x12	10	6.3x12	16	10x13	20
2.2	5x11	15	6.3x11	22	6.3x11	25	6.3x12	25	8x12	28	8x12	28	10x13	30
					8x12	28	8x12	29			10x13	35		
3.3	5x11	25	6.3x12	30	6.3x12	32	8x12	32	8x12	38	8x12	38	10x16	45
			8x12	36	8x12	40	10x13	42	10x13	47	10x13	50		
4.7	5x11	35	6.3x12	37	8x12	40	8x12	41	10x16	55	8x12	38	10x13	50
					10x13	50	10x13	52			10x13	48	10x16	55
											10x16	58		
6.8	5x11	46	10x13	54	10x13	60	10x13	62	10x16	65	10x16	65	10x20	80
10	5x11	50	8x12	55	10x13	64	10x16	88	10x16	95	10x16	60	13x20	85
	6.3x12	65	10x13	65	10x16	80					10x20	78	13x25	105
											13x20	98		
15	8 x12	80	10 x16	90	10 x16	110	10 x16	120	10 x20	140	10x20	80	16 x25	160
											13 x20	125		
22	8x12	83	8x20	120	10x16	140	10x20	145	13x20	165	13x20	150	13x25	125
			10x16	130							13x25	170	16x25	150
											16x18	146	16x32	180
33	8x12	120	10x20	175	10x20	190	13x20	170	13x25	220	13x26	190	16x25	185
	10x13	160					13x25	200			16x20	195	16x36	240
											16x25	230		
47	10x13	155	13x20	260	13x20	235	13x25	330	16x25	340	16x25	280	16x36	300
	10x16	210			13x25	290					16x32	315	18x40	360
											18x20	275		
68	10x16	230	13x25	300	13x25	330	16x25	350	16x32	370	16x32	320	18x32	305
											18x25	305	22x40	400
82											18x32	345		
100	10x20	255	13x25	325	13x25	335	16x32	425	18x32	455	18x32	400		
			16x25	400	16x25	395					18x36	440		
											22x27	360		
120										18 x40	450			
150	13x25	410	16x32	430	16x36	450	18x40	460	22x40	480	22x40	490		
220	13x25	430	16x32	530	18x32	520	22x40	680						
			16x36	620	18x36	580								
					18x40	650								
330	13x25	600	18x36	770	18x36	700								
	16x25	720	18x40	850	18x40	780								
					22x40	920								
470	16x25	740	22x40	950										
	16x32	870												
680	16x36	1200												
1000	18x40	1330												
	22x40	1500												

▲Case size φ DxL(mm)

▲Rated Ripple current (mA rms)at 105°C .120HZ