

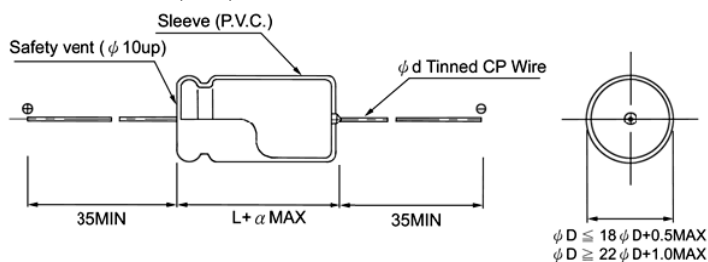
## HFA SERIES

105°C Axial Type, 卧式适合一般高温及信赖性较高之消费性产品或一般工业用产品  
 Standard size for popular circuit.  
 Available in taping configuration for automatic insertion.

### SPECIFICATION:

ITEMS	CHARACTERISTIC										
Rated Voltage Range 定格电压范围	6.3v ~ 100v DC					160v ~ 450v DC					
Operating Temperature 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=0.03CV or 4 μ A . whichever is greater after 3 minutes application of rated voltage					I=0.03CV+10 μ A max. after 3 minutes application of rated voltage					
	I=Leakage C=Rated capacitance V=Working voltage										
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)	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.10	0.20	0.25
Low Temperature Characteristics at 120Hz 低温稳定特性	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
	DF(tan δ)	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.10	0.20	0.25
Load Life 高温负载寿命	After 1,000 hours application of rated voltage at 105°C, capacitors meet the characteristics Meet the characteristics requirements mentioned below										
	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									

### DIMENSIONS (mm)



φ D	5 ~ 13	16 ~ 22	25
φ d	0.6	0.8	0.8
α	1.5		

# RICHEY ALUMINUM ELECTROLYTIC CAPACITORS

HFA SERIES

Standard Products Table 寸法表 DxL(mm)

WV	6.3v		10v		16v		25v		35v		50v		63v		100v	
	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA
0.47											5x13	5			5x13	9
1											5x13	10			5x13	14
2.2											5x13	18			5x13	19
3.3											5x13	22			6.3x13	27
4.7											5x13	26			6.3x13	32
10											5x13	36	6.3x13	44	6.3x16	52
22							5x13	48	6.3x13	57	6.3x16	69	6.3x16	73	8x16	85
33					5x13	54	6.3x13	64	6.3x16	76	6.3x16	82	6.3x16	88	8x20	115
47			5x13	57	6.3x13	70	6.3x16	85	6.3x16	88	6.3x16	100	8x16	115	8x20	135
100	6.3x16	89	6.3x16	105	6.3x16	115	6.3x16	120	8x16	140	8x16	155	8x20	185	10x26	240
220	6.3x16	145	6.3x16	155	8x16	185	8x16	200	8x20	240	10x21	290	10x26	340	13x31	430
330	8x16	200	8x16	220	8x16	230	8x20	270	10x21	330	10x26	400	13x26	460	16x31	570
470	8x16	240	8x16	250	8x20	310	10x21	370	10x26	430	13x26	530	13x31	590	16x41	770
1000	10x21	430	10x21	460	10x26	550	13x26	640	13x31	750	16x31	890	16x31	940	22x41	1210
2200	13x26	720	13x26	780	13x31	910	16x31	1040	16x31	1120	18x41	1360	22x41	1520		
3300	13x26	860	13x31	980	16x31	1140	16x31	1200	16x41	1430	22x41	1660	22x51	1740		
4700	13x31	1060	16x31	1220	16x31	1300	18x41	1540	22x41	1740	22x51	1860				
6800	16x31	1300	16x31	1370	16x41	1620	22x41	1810	22x51	1910	▲DxL : Case size (mm)					
10000	16x41	1620	18x41	1690	22x41	1900	22x51	1980	25x51	2510						
15000	18x41	1740	22x41	1950	22x51	2050					▲mA : Rated Ripple Current (mA rms)					
22000	22x41	2000	22x51	2080												

W.V	160v		200v		250v		350v		400v		450v	
	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA	DxL	mA
1			6.3x13	10	6.3x16	11	6.3x16	10	8x16	12	8x16	12
2.2			6.3x16	17	8x16	20	8x16	17	8x20	19	10x21	22
3.3			8x16	24	8x16	24	8x20	24	10x21	27	10x21	27
4.7	8x16	28	8x16	28	8x20	32	10x21	33	10x21	33	10x26	36
10	8x20	43	10x21	50	10x21	50	13x26	60	13x26	60	13x31	67
22	10x26	85	13x26	100	13x26	100	16x31	110	16x31	110	16x41	130
33	13x26	120	13x26	120	13x31	135	16x31	135	16x41	160	18x41	165
47	13x31	155	13x31	155	16x31	175	16x41	185	18x41	200	22x41	220
100	16x31	270	16x41	300	16x41	300	22x41	310	22x51	330		
220	22x41	510	22x41	510	22x51	540						

Specific capacitance value or size may acceptable per request