

ALUMINUM ELECTROLYTIC CAPACITOR

HCGF5A

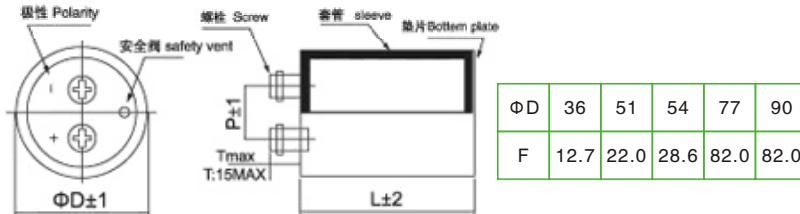
- Used in inverter
- Development specially for the demand of higher voltage with compact size Warranty of 5000 hours at 85°C



SPECIFICATIONS

Item	Characteristics	
Operating temperature	-25°C ~ +85°C	
Rated voltage range	400~450V	
Capacitance tolerance(+20°C, 120Hz)	± 20%(120Hz, +20°C)	
Leakage current	$I \leq 0.01CV$ (μA) or 5mA after 5minutes, Whichever is smaller	
Dissipation factor($\tg \delta$) (20°C, 120Hz)	Voltage(V)	400,450V
	$\tg \delta$	0.15
Load life	After applying rated voltage for 5000 hours at +85°C and then resumed 16 hours: Capacitance change: ± 15% Initial measured value Leakage current: ≤ Initial specified value Dissipation factor: ≤ 175% Initial specified value	
Shelf life	After storage for 1000 hours at +85°C, UR to be applied for 30minutes and then resumed 16 hours Capacitance change: ± 15% Initial measured value Leakage current: ≤ Initial specified value Dissipation factor: ≤ 175% Initial specified value	

CASE SIZE TABLE



MULTIPLIER FOR RIPPLE CURRENT

FREQUENCY COEFFICIENT

Frequency(Hz)	50,60	120	300	1k	≥10K
Factor	0.7	1.0	1.1	1.3	1.4

TEMPERATURE COEFFICIENT

Temperature(°C)	40	60	70	85
Factor	1.0	2.0	0.62	0.37

STANDARD RATING

Rated Voltage (V.D.C)	Surge Voltage (V.D.C)	Rated capacitance (μF)	Leakage Current MAX(mA)	Dissipation Factor MAX	Ripple Current 85°C120Hz (Arms)	Outline Size	
						Code	$\Phi D \times L$ (mm)
400	450	2200	5.0	0.15	8.8	C12R	51 × 115
		2700	5.0	0.15	10.2	C13R	51 × 130
		3300	5.0	0.15	11.0	D10R	63.5 × 96
		3900	5.0	0.15	12.8	D12R	63.5 × 115
		4700	5.0	0.15	14.8	D13R	63.5 × 130
		5600	5.0	0.15	16.2	E12R	76 × 115
		6800	5.0	0.15	18.7	E13R	16 × 130
		8200	5.0	0.15	22.0	E16R	76 × 155
		10000	5.0	0.15	26.7	E20R	76 × 195
			5.0	0.15	24.2	F13R	89 × 131
		12000	5.0	0.15	28.5	F16R	89 × 157
		15000	5.0	0.15	34.8	F20R	89 × 196
		18000	5.0	0.15	41.2	F24R	89 × 236
		22000	5.0	0.15	47.0	G24R	101 × 237

Rated Voltage (V.D.C)	Surge Voltage (V.D.C)	Rated capacitance (μ F)	Leakage Current MAX(mA)	Dissipation Factor MAX	Ripple Current 85°C120Hz (Arms)	Outline Size	
						Code	$\Phi D \times L$ (mm)
450	500	1800	5.0	0.15	7.6	C12R	51×115
		2200	5.0	0.15	8.8	C13D	51×130
		2700	5.0	0.15	9.5	D10R	63.5×96
		3300	5.0	0.15	11.2	D12R	63.5×115
		3900	5.0	0.15	12.8	D13R	63.5×130
		4700	5.0	0.15	14.1	E12R	76×115
		5600	5.0	0.15	16.2	E13R	76×130
		6800	5.0	0.15	19.1	E16R	76×155
		8200	5.0	0.15	23.0	E20R	76×195
			5.0	0.15	21.0	F13R	89×131
		10000	5.0	0.15	25.7	F17R	89×171
		12000	5.0	0.15	29.7	F20R	89×196
			5.0	0.15	29.3	G18R	101×175
		15000	5.0	0.15	35.9	F24R	89×236
			5.0	0.15	34.2	G20R	101×195
		18000	5.0	0.15	40.2	G24R	101×237

Rated ripple current(A,+85°C, 120Hz)