

SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

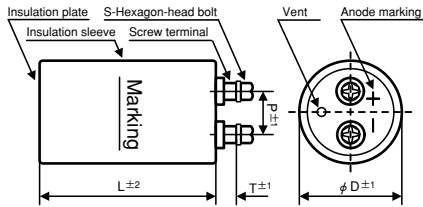
HCGF6A Series

Useful of 4,000 hours at 85°C (Warranty of 2,000 hours at 85°C)

• Conform RoHS

Features

- The size is reduced by about 14% of the HCGF5A series and the rating 500 V DC is added in the series. A super large case product of $\phi 100$ is also added.



(unit : mm)

ϕD	P	S	T	Cap material
51	22.0	M5×10	4.5	PPS
64	28.6	M5×10	4.5	PPS
77	32.0	M5×10	4.5	PPS
90	32.0	M5×10	4.0	PPS
101	32.0	M6×12	3.0	PPS

Product Specifications

Items	Specifications
Temperature range	-25°C ~ +85°C
Rated voltage	400 ~ 500V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	0.01CV (μA) or 5mA, whichever is smaller or less [C = nominal capacitance (μF), V = rated voltage (V)]
Dissipation factor	Less than the value specified in the standard products table. (20°C, 120Hz)
Permissible ripple current	As specified in the standard products table. (40°C, 120Hz)
High-temperature load	After the rated voltage with specified ripple current is applied at 85°C for 2000 hours: Capacitance tolerance: ±15% or less of the initial value Dissipation factor: 175% or less of the specified initial value Leakage current: Specified initial value or less
Others	JIS C 5101-4.

Ripple current correction coefficient

Temperature (°C)	40	60	70	85	
Correction coefficient	1.0	0.75	0.62	0.37	
Frequency (Hz)	50/60	120	300	1k	≥10K
Correction coefficient	0.7	1.0	1.1	1.3	1.4

Ripple current should be under 60Arms at M5 (100Arms at M6 for G case) in accordance with from the permissible current.

ALUMINUM ELECTROLYTIC CAPACITORS

Product code : (Example) HCGF6A Series A case 400V 10,000 μF ±20%

HCGF6 A 2G 103 Y (F)



*() Case code in parentheses : If two types of shape exist for the same rating, enter the case code.

Bracket

- See page 51 for shapes and dimensions.
- Product names in the Standard Products Table correspond to the bracket for Type Y (Type I for $\phi 36$ only), but Type I bracket may be used (Type of bracket Code = 1).
- If bracket are not necessary, enter "N" for the type of bracket code.
- Bracket will be delivered separately.

Standard Products Table

Rated Voltage Code (Surge Voltage) (V, DC)	Capacitance (μF)	Case size ϕDXL (mm)	$\tan \delta$ 20°C, 120Hz	Ripple current 40°C, 120Hz (Arms)	ESR(typ.) 20°C, 100Hz (m Ω)	Z max 20°C, 10kHz (m Ω)	ESL (typ.) (nH)	Product name
400 2G (450)	2200	51×115	0.20	16.5	61	63	21	HCGF6A2G222Y
	2700	51×130	0.20	19.2	50	52	21	HCGF6A2G272YC
		64×96	0.20	18.7	50	52	22	HCGF6A2G272YD
	3300	64×96	0.20	20.7	41	42	22	HCGF6A2G332Y
	3900	64×115	0.20	24.1	35	37	22	HCGF6A2G392Y
	4700	64×130	0.20	27.8	29	32	22	HCGF6A2G472Y
	5600	77×115	0.20	30.6	25	28	24	HCGF6A2G562Y
	6800	77×130	0.20	35.4	22	25	24	HCGF6A2G682Y
	8200	77×155	0.20	41.6	18	21	24	HCGF6A2G822Y
	10000	77×195	0.20	50.5	17	20	24	HCGF6A2G103YE
		90×131	0.20	45.8	17	19	24	HCGF6A2G103YF
	12000	90×157	0.20	53.8	12	15	24	HCGF6A2G123Y
	15000	90×196	0.20	65.7	10	13	24	HCGF6A2G153Y
		90×236	0.20	77.7	9	12	24	HCGF6A2G183YF
	18000	101×175	0.20	69.8	9	12	33	HCGF6A2G183YG
101×237		0.20	86.8	8	11	33	HCGF6A2G223Y	

SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

Rated Voltage Code (Surge Voltage) (V, DC)	Capacitance (μF)	Case size øDXL(mm)	tanδ 20°C, 120Hz	Ripple current 40°C, 120Hz (Arms)	ESR (typ.) 20°C, 100Hz (mΩ)	Z max 20°C, 10kHz (mΩ)	ESL (typ.) (nH)	Product name
450 2W (500)	1800	51×115	0.20	14.9	77	80	21	HCGF6A2W182Y
	2200	51×130	0.20	17.3	63	65	21	HCGF6A2W222YC
		64×96	0.20	16.9	63	65	22	HCGF6A2W222YD
	2700	64×96	0.20	18.7	52	54	22	HCGF6A2W272Y
	3300	64×115	0.20	22.2	42	44	22	HCGF6A2W332Y
	3900	64×130	0.20	25.3	38	40	22	HCGF6A2W392Y
	4700	77×115	0.20	28.1	34	36	24	HCGF6A2W472Y
	5600	77×130	0.20	32.1	31	33	24	HCGF6A2W562Y
	6800	77×155	0.20	37.9	25	27	24	HCGF6A2W682Y
	8200	77×195	0.20	45.8	21	23	24	HCGF6A2W822YE
		90×131	0.20	41.5	21	23	24	HCGF6A2W822YF
	10000	90×171	0.20	50.6	17	19	24	HCGF6A2W103Y
	12000	90×196	0.20	58.7	16	18	24	HCGF6A2W123YF
		101×175	0.20	57.0	16	18	33	HCGF6A2W123YG
15000	90×236	0.20	70.9	15	17	24	HCGF6A2W153YF	
	101×195	0.20	66.5	15	17	33	HCGF6A2W153YG	
18000	101×237	0.20	78.5	14	16	33	HCGF6A2W183Y	
500 2H (550)	1200	51×115	0.20	12.2	112	120	21	HCGF6A2H122YC
		64×96	0.20	12.5	112	120	22	HCGF6A2H122YD
	1500	51×130	0.20	14.3	90	96	21	HCGF6A2H152YC
		64×96	0.20	13.9	90	96	22	HCGF6A2H152YD
	1800	64×115	0.20	16.4	75	80	22	HCGF6A2H182Y
	2200	64×130	0.20	19.0	61	65	22	HCGF6A2H222Y
	2700	77×115	0.20	21.3	50	53	24	HCGF6A2H272Y
	3300	77×130	0.20	24.6	45	48	24	HCGF6A2H332Y
	3900	77×155	0.20	28.7	38	41	24	HCGF6A2H392Y
	4700	77×171	0.20	32.9	34	37	24	HCGF6A2H472YE
		90×131	0.20	31.4	34	37	24	HCGF6A2H472YF
	5600	77×195	0.20	37.8	28	31	24	HCGF6A2H562YE
		90×157	0.20	36.7	28	31	24	HCGF6A2H562YF
	6800	90×171	0.20	41.8	23	25	24	HCGF6A2H682Y
	8200	90×196	0.20	48.5	21	23	24	HCGF6A2H822YF
		101×175	0.20	47.1	21	23	33	HCGF6A2H822YG
	10000	90×236	0.20	57.9	17	19	24	HCGF6A2H103YF
		101×195	0.20	54.3	17	19	33	HCGF6A2H103YG
	12000	101×237	0.20	64.1	16	18	33	HCGF6A2H123Y

ALUMINUM ELECTROLYTIC CAPACITORS

Life time graph

Useful life depending on ambient temperature T_a and ripple current operating conditions I_r versus rated ripple current at 40°C, 120Hz

