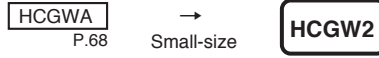


HCGW2 Series Useful of 4,000 hours at 85°C

- Conform RoHS

Features

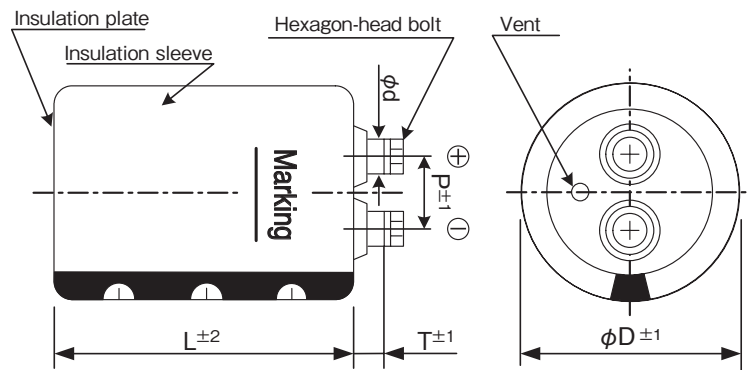
- Capacitance is increased by around 20%, of conventional HCGWA series through development of etched foil technology.



Product Specifications

Items	Specifications
Temperature range	-10°C ~ +85°C
Rated voltage	400 ~ 500V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	0.01CV (µA) or 7mA, whichever is smaller or less (20°C, after 5 minutes) [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. (85°C, 120Hz)
Endurance	After the rated voltage with specified ripple current is applied at 85°C for 2,000 hours : Capacitance change : Within ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Shelf life	The following specification shall be meet when the capacitor are restored to 20°C after storage of 500 hours at 85°C with no voltage applied. Before the measurement, the capacitor shall be preconditioned by applying the voltage treatment according to Item 4.1 of JIS C 5101-4. Capacitance change : Within ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Others	JIS C 5101-4

Dimensions



(unit : mm)

φD	P	T	φd	Hexagon-head bolt	Cap material
77	31.5	9.0	12.0	M6×12	Phenol resin
90	31.5	8.0	12.0	M6×12	Phenol resin

Ripple current correction coefficient

Temperature (°C)	40	60	70	85
Correction coefficient	2.2	1.9	1.6	1.0
Frequency (Hz)	120	300	1k	≥10k
Correction coefficient	1.0	1.1	1.3	1.4

Terminal allowance current : 100Arms for M6
Please use this type of capacitor at a terminal current below the permissible.

Product code

(Example) HCGW2 Series 400V 18,000 µF ±20%

HCGW2 2G 183 Y F 150 PH

- Type of series
- Sealing code
- Case height code
- Case dia code
- Type of bracket code
- Capacitance code
- Rated voltage code

Refer to page 19 for product code.

Bracket

- Refer to page 20-21 for shapes and dimensions.
- Product names in the Standard Products Table correspond to the bracket for Type Y, but Type I bracket may be used (Type of bracket code = I).
- If bracket are not necessary, enter "N" for type of bracket code.
- Bracket will be delivered separately.

Standard Products Table

Rated Voltage (V. DC)	Capacitance (μF)	Case size φD×L(mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 85°C, 120Hz	ESR(typ.) (mΩ) 20°C, 100Hz	Z max (mΩ) 20°C, 10kHz	ESL(typ.) (nH)	Product name
400	13,000	77×148	0.70	13.0	26	27	24	HCGW22G133YE148PH
	16,000	77×188	0.70	15.5	21	22	24	HCGW22G163YE188PH
	18,000	90×150	0.70	16.4	19	20	24	HCGW22G183YF150PH
	20,000	77×228	0.70	18.8	17	18	24	HCGW22G203YE228PH
	23,000	90×190	0.70	19.8	15	16	24	HCGW22G233YF190PH
	29,000	90×230	0.70	23.9	12	13	24	HCGW22G293YF230PH
450	10,000	77×148	0.70	10.9	40	42	24	HCGW22W103YE148PH
	14,000	77×188	0.70	13.8	29	30	24	HCGW22W143YE188PH
	15,000	90×150	0.70	14.3	27	29	24	HCGW22W153YF150PH
	18,000	77×228	0.70	17.0	22	23	24	HCGW22W183YE228PH
	20,000	90×190	0.70	17.6	20	21	24	HCGW22W203YF190PH
	25,000	90×230	0.70	21.2	16	17	24	HCGW22W253YF230PH
500	7,500	77×148	0.70	9.5	47	48	24	HCGW22H752YE148PH
	10,000	77×188	0.70	11.7	36	38	24	HCGW22H103YE188PH
	11,000	90×150	0.70	12.2	33	34	24	HCGW22H113YF150PH
	13,000	77×228	0.70	14.5	28	29	24	HCGW22H133YE228PH
	15,000	90×190	0.70	15.3	24	25	24	HCGW22H153YF190PH
	18,000	90×230	0.70	18.1	20	21	24	HCGW22H183YF230PH

ALUMINUM ELECTROLYTIC CAPACITORS

Life time graph

Useful life depending on ambient temperature T_a and ripple current operating conditions I versus rated ripple current at 85°C, 120Hz

