

SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

NEW!

WF Series

Useful of 4,000 hours at 85°C

- Conform RoHS

Features

- Capacitance is increased by 10%, from conventional HCGW2 series by increasing the capacitance of the anode foil and by using a special winding structure.

HCGW2
P.74

→
10% larger
capacitance

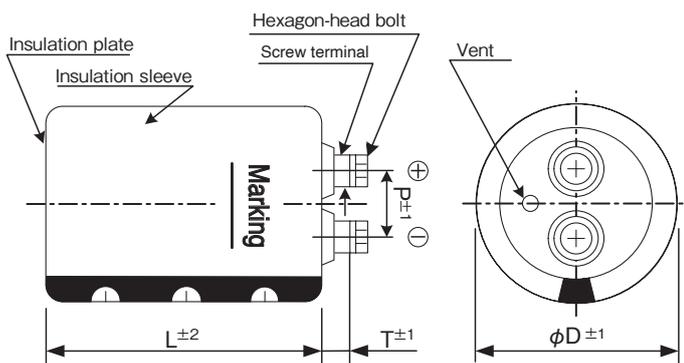
WF



Product Specifications

Items	Specifications
Temperature range	-10 ~ +85°C
Rated voltage	400V.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

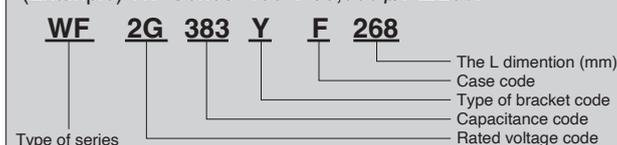
Temperature (°C)	40	60	70	85
Correction coefficient	2.2	1.9	1.6	1.0
Frequency (Hz)	120	300	1k	≥10k
Correction coefficient	1.0	1.1	1.3	1.4

Terminal permissible current is limited to 100Arms. (Even if calculated the permissible ripple current with the correction coefficient exceeds 100Arms) Please consult us when the ripple voltage exceeds 50 Vp-p.

Refer to page 21 for product code.

Product code

(Example) WF Series 400 V 38,000 μF ±20%



Bracket

- Refer to page 22-23 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 the type of bracket code.
- Bracket will be delivered separately.

Standard Products Table

Rated Voltage (V. DC)	Capacitance (μ F)	Case size ϕ D \times L (mm)	$\tan\delta$ 20°C, 120Hz	Ripple current (Arms) 85°C, 120Hz	ESR (typ.) (m Ω) 20°C, 100Hz	Z max (m Ω) 20°C, 10kHz	ESL (typ.) (nH)	Product name
400	14,000	77 \times 148	0.70	13.5	24	25	24	WF2G143YE148
	18,000	77 \times 188	0.70	16.5	19	20	24	WF2G183YE188
	20,000	90 \times 150	0.70	17.3	17	18	24	WF2G203YF150
	25,000	90 \times 190	0.70	20.6	14	15	24	WF2G253YF190
	38,000	90 \times 268	0.70	29.3	9	9	24	WF2G383YF268

Life time graph

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

