

## FXW Series Useful of 8,000 hours at 85°C

- Conform RoHS

### Features

- Capacitance has been increased by 35% compared with FX2 series by special etched foil technology and new structure of element.
- High reliability series with the warranty of 5,000 hours realized through improvement of the HCGWA series into a longer-life type.

HCGWA  
P.76

→  
Long-life

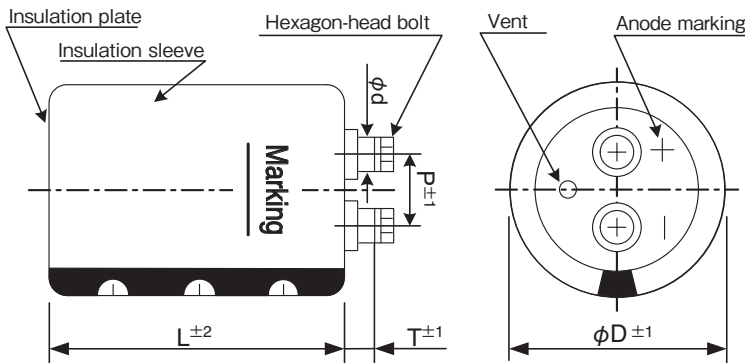
FXW



### Product Specifications

Items	Specifications
Temperature range	-10°C ~ +85°C
Rated voltage	350 ~ 450V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	0.01CV (µA) or 7 mA, 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 5,000 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)

φ D	P	T	φ d	Hexagon-head bolt	Cap material
77	31.5	5.0	10.0	M5×10	Phenol resin
90	31.5	5.0	10.0	M5×10	Phenol resin
101	31.5	3.0	14.0	M6×12	PPS resin

### Ripple current correction coefficient

Temperature (°C)	40	60	70	85
Correction coefficient	2.2	1.9	1.6	1.00
Frequency (Hz)	120	300	1K	≥10K
Correction coefficient	1.0	1.1	1.3	1.4

Terminal allowance current : 60Arms for M5 ; 100Arms for M6  
Please use this type of capacitor at a terminal current below the permissible.

### Product code

(Example) FXW Series 400V 24,000 µF ±20%

**FXW 2G 243 Y F 236 (PH)**

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

Refer to page 21 for product code.

### 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.

# SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

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
350	13,000	77×155	0.70	12.8	25	26	26	FXW2V133YE155PH
	17,000	77×195	0.70	16.1	19	20	26	FXW2V173YE195PH
		90×157	0.70	15.6	19	20	26	FXW2V173YF157PH
	22,000	77×235	0.70	19.8	17	18	26	FXW2V223YE235PH
	24,000	90×196	0.70	20.3	16	18	26	FXW2V243YF196PH
	30,000	90×236	0.70	24.5	12	13	26	FXW2V303YF236PH
		101×195	0.70	23.5	12	13	36	FXW2V303YG195
38,000	101×237	0.70	28.6	10	12	36	FXW2V383YG237	
400	11,000	77×155	0.70	11.8	31	32	26	FXW2G1133YE155PH
	13,000	77×195	0.70	14.1	26	27	26	FXW2G1333YE195PH
	15,000	90×157	0.70	14.7	23	24	26	FXW2G1533YF157PH
	16,000	77×235	0.70	16.9	21	22	26	FXW2G1633YE235PH
	19,000	90×196	0.70	18.1	21	22	26	FXW2G1933YF196PH
	24,000	90×236	0.70	21.9	17	18	26	FXW2G2433YF236PH
		101×195	0.70	21.0	17	18	36	FXW2G2433YG195
30,000	101×237	0.70	25.4	13	14	36	FXW2G3033YG237	
450	9,000	77×155	0.70	10.6	38	39	26	FXW2W902YE155PH
	11,000	77×195	0.70	12.9	31	32	26	FXW2W1133YE195PH
	12,000	90×157	0.70	13.1	28	29	26	FXW2W1233YF157PH
	14,000	77×235	0.70	15.8	25	27	26	FXW2W1433YE235PH
	16,000	90×196	0.70	16.6	23	25	26	FXW2W1633YF196PH
	20,000	90×236	0.70	20.0	19	20	26	FXW2W2033YF236PH
		101×195	0.70	19.2	19	20	36	FXW2W2033YG195
	25,000	101×237	0.70	23.2	17	18	36	FXW2W2533YG237

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

