

SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

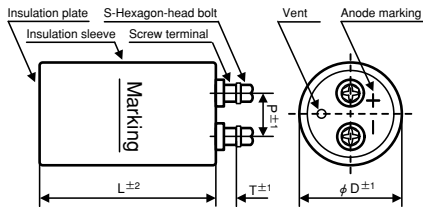
FX2 Series

Useful of 8,000 hours at 85°C
(Warranty of 5,000 hours at 85°C)

- Conform RoHS

Features

- Developed specially for the demand of higher voltage with compact size.
- The size is reduced by around 14% of conventional FXA type through development of electrolyte liquid.
- 500V and 550V added in the series.



(unit : mm)

φ D	P	S	T	Cap material
51	22.0	M5×10	5.5	Phenol
64	28.6	M5×10	5.5	Phenol
77	32.0	M5×10	5.0	Phenol
90	32.0	M5×10	5.0	Phenol
101	41.5	M8×16	11.0	Phenol

Product Specifications

Items	Specifications
Temperature range	-40°C ~ +85°C
Rated voltage	400 ~ 550V.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. (85°C, 120Hz)
High-temperature load	After the rated voltage with specified ripple current is applied at 85°C for 5000 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.

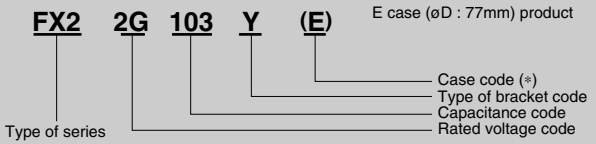
Ripple current correction coefficient

Temperature (°C)	40	60	85		
Correction coefficient	1.89	1.67	1.00		
Frequency (Hz)	50/60	120	300	1K	≥10K
Correction coefficient	0.7	1.0	1.1	1.3	1.4

In accordance with the permissible current, ripple current should be under 60Arms at M5 terminal (case code A~F) under 120 Arms at M8 terminal (case code G).

For case code G (φ100) items, M6 terminal is also available, and ripple current should be under 100Arms.

Product code : (Example) FX2 type 400V 10,000μF±20%



*() 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, 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 Code (Surge Voltage) (V. DC)	Capacitance (μF)	Case size φDXL(mm)	tanδ 20°C, 120Hz	Ripple current 85°C, 120Hz (Arms)	ESR(typ.) 20°C, 100Hz (mΩ)	Z max 20°C, 10kHz (mΩ)	ESL(typ.) (nH)	Product name
400 2G (450)	2200	51×115	0.15	8.8	46	48	21	FX22G222Y
	2700	51×130	0.15	10.2	38	40	21	FX22G272Y
	3300	64×96	0.15	11.0	30	32	22	FX22G332Y
	3900	64×115	0.15	12.8	26	28	22	FX22G392Y
	4700	64×130	0.15	14.8	21	22	22	FX22G472Y
	5600	77×115	0.15	16.2	18	19	24	FX22G562Y
	6800	77×130	0.15	18.7	15	15	24	FX22G682Y
	8200	77×155	0.15	22.0	12	15	24	FX22G822Y
	10000	77×195	0.15	26.7	10	15	24	FX22G103YE
		90×131	0.15	24.2	10	15	24	FX22G103YF
	12000	90×157	0.15	28.5	8	13	24	FX22G123Y
	15000	90×196	0.15	34.8	8	10	24	FX22G153Y
	18000	90×236	0.15	41.2	6	9	24	FX22G183Y
22000	101×237	0.15	47.0	6	8	33	FX22G223Y	
450 2W (500)	1800	51×115	0.15	7.6	56	58	21	FX22W182Y
	2200	51×130	0.15	8.8	46	48	21	FX22W222Y
	2700	64×96	0.15	9.5	38	40	22	FX22W272Y
	3300	64×115	0.15	11.2	30	35	22	FX22W332Y
	3900	64×130	0.15	12.8	27	32	22	FX22W392Y
	4700	77×115	0.15	14.1	21	21	24	FX22W472Y
	5600	77×130	0.15	16.2	20	20	24	FX22W562Y
	6800	77×155	0.15	19.1	15	18	24	FX22W682Y
	8200	77×195	0.15	23.0	14	16	24	FX22W822YE
		90×131	0.15	21.0	14	17	24	FX22W822YF
	10000	90×171	0.15	25.7	10	15	24	FX22W103Y
		90×196	0.15	29.7	9	12	24	FX22W123YF
	12000	101×175	0.15	29.3	9	12	33	FX22W123YG
		90×236	0.15	35.9	7	10	24	FX22W153YF
	15000	101×195	0.15	34.2	7	10	33	FX22W153YG
18000		101×237	0.15	40.5	6	10	33	FX22W183Y

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Rated Voltage Code (Surge Voltage) (V. DC)	Capacitance (μF)	Case size øDXL(mm)	tanδ 20°C, 120Hz	Ripple current 85°C, 120Hz (Arms)	ESR(typ.) 20°C, 100Hz (mΩ)	Z max 20°C, 10kHz (mΩ)	ESL(typ.) (nH)	Product name
500 2H (550)	1200	51×115	0.20	6.2	93	100	21	FX22H122YC
		64×96	0.20	6.3	93	100	22	FX22H122YD
	1500	51×130	0.20	7.3	74	80	21	FX22H152YC
		64×96	0.20	7.1	74	80	22	FX22H152YD
	1800	64×115	0.20	8.3	53	50	22	FX22H182Y
	2200	64×130	0.20	9.6	40	35	22	FX22H222Y
	2700	77×115	0.20	10.7	37	33	24	FX22H272Y
	3300	77×130	0.20	12.4	36	32	24	FX22H332Y
	3900	77×155	0.20	14.4	27	29	24	FX22H392Y
		77×171	0.20	16.5	25	25	24	FX22H472YE
	4700	90×131	0.20	15.8	25	25	24	FX22H472YF
		77×195	0.20	19.0	23	21	24	FX22H562YE
	5600	90×157	0.20	18.6	23	21	24	FX22H562YF
		90×171	0.20	21.2	20	18	24	FX22H682Y
	8200	90×196	0.20	24.5	17	16	24	FX22H822YF
		101×175	0.20	24.2	17	16	33	FX22H822YG
10000	90×236	0.20	29.3	14	12	24	FX22H103YF	
	101×195	0.20	27.9	14	14	33	FX22H103YG	
12000	101×237	0.20	33.1	12	12	33	FX22H123Y	
550 2L (600)	1000	51×130	0.20	5.9	112	120	21	FX22L102Y
	1200	64×115	0.20	6.8	93	100	22	FX22L122Y
	1500	64×130	0.20	8.0	74	80	22	FX22L152Y
	1800	77×115	0.20	8.7	61	50	24	FX22L182Y
	2200	77×130	0.20	10.1	53	50	24	FX22L222Y
	2700	77×155	0.20	12.0	40	35	24	FX22L272Y
	3300	77×155	0.20	13.3	38	32	24	FX22L332Y
	3900	90×157	0.20	15.5	30	27	24	FX22L392Y
	4700	90×171	0.20	17.6	25	20	24	FX22L472Y
	5600	90×196	0.20	20.3	20	17	24	FX22L562Y
	6800	90×236	0.20	24.1	17	17	24	FX22L682Y
	8200	101×237	0.20	27.3	15	15	33	FX22L822Y

Life time graph

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

