

# SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

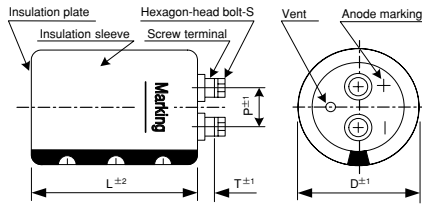
## FX3 Series

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

- Conform RoHS

### Features

- FX3 series is the product developed for the purpose of the miniaturization as a capacitor for primary side filters of an inverter, DC servo, and a chopper control circuit.



(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

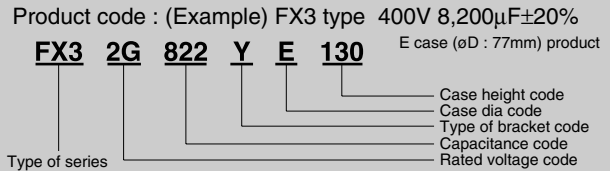
### Product Specifications

Items	Specifications
Temperature range	-40°C ~ +85°C
Rated voltage	400-500V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	0.01CV (μA) or 5 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 5000 hours: Capacitance change : Within ±15% of initial value Dissipation factor : Not more than 175% of initial value specified Leakage current : Not more than initial value specified
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

Terminal permissible current : 60Arms for M5



### Bracket

- See page 21, 22 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 (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	2200	51×96	0.20	8.4	46	48	21	FX32G222YC096
	2700	51×115	0.20	10.0	38	40	21	FX32G272YC115
	3300	51×130	0.20	11.6	30	32	21	FX32G332YC130
	3900	64×96	0.20	12.3	26	28	22	FX32G392YD096
	4700	64×115	0.20	14.5	21	22	22	FX32G472YD115
	5600	64×130	0.20	16.5	18	19	22	FX32G562YD130
	6800	77×115	0.20	17.5	15	15	24	FX32G682YE115
450	8200	77×130	0.20	20.1	12	15	24	FX32G822YE130
	1800	51×96	0.20	7.2	71	73	21	FX32W182YC096
	2200	51×115	0.20	8.6	58	60	21	FX32W222YC115
	3300	51×155	0.20	11.9	39	41	21	FX32W332YC155
	4700	64×155	0.20	15.5	27	29	22	FX32W472YD155
	5600	64×171	0.20	15.9	23	25	22	FX32W562YD171
	6800	64×195	0.20	18.4	19	21	22	FX32W682YD195
500	8200	77×171	0.20	22.5	16	18	24	FX32W822YE171
	1500	51×115	0.20	7.6	74	80	21	FX32H152YC115
	1800	51×130	0.20	8.7	53	50	21	FX32H182YC130
	2200	64×96	0.20	9.4	40	35	22	FX32H222YD096
	2700	64×130	0.20	11.7	37	33	22	FX32H272YD130
	3300	77×115	0.20	13.1	36	32	24	FX32H332YE115
	3900	77×130	0.20	14.9	27	29	24	FX32H392YE130
	4700	77×155	0.20	17.5	25	25	24	FX32H472YE155
	5600	77×171	0.20	19.9	23	21	24	FX32H562YE171
	6800	90×157	0.20	22.5	20	18	24	FX32H682YF157
8200	90×171	0.20	25.5	17	16	24	FX32H822YF171	

## 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

