

SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

New

FXR3 Series

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

• Conform RoHS

Features

• FXR3 series has smaller case size (ave.9%) and higher ripple current (ave.20%) compared with FX2 series. These features are accomplished by new heat radiation structure and low ESR material.



Product Specifications

Items	Specifications
Temperature range	-40°C ~ +85°C
Rated voltage	400,450V.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.

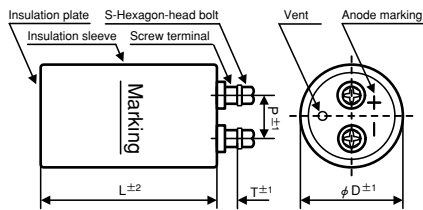
Ripple current correction coefficient

Temperature (°C)	40	60	85		
Correction coefficient	1.89	0.67	1.00		
Frequency (Hz)	50/60	120	300	1k	≥10K
Correction coefficient	0.7	1.0	1.1	1.3	1.4

Terminal shapes: M5 for ø64; M6 for ø77, 90.

Terminal permissible currents: 60Arms for M5; 100Arms for M6.

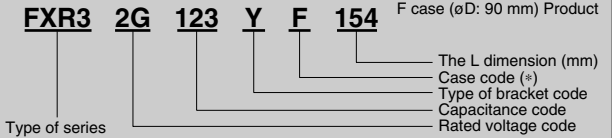
Please use this type of capacitor at a terminal current below the permissible.



(unit : mm)

φ D	P	S	T	Cap material
64	28.6	M5×10	4.5	PPS
77	32.0	M6×12	5.5	PPS
90	32.0	M6×12	3.0	PPS

Product code : (Example) FXR3 type 400 V 12,000μF±20%
F case (øD: 90 mm) Product



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 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
400 2G (450)	3900	64×95	0.20	15.5	26	28	22	FXR32G392YD095
	4700	64×125	0.20	18.0	21	22	22	FXR32G472YD125
	5600	64×150	0.20	20.5	18	19	22	FXR32G562YD150
		77×97	0.20	19.8	18	19	23	FXR32G562YE097
	6800	64×167	0.20	23.6	15	16	22	FXR32G682YD167
		77×127	0.20	23.0	15	16	23	FXR32G682YE127
	8200	77×152	0.20	26.3	12	12	23	FXR32G822YE152
		90×99	0.20	25.8	12	12	23	FXR32G822YF099
	10000	77×169	0.20	30.3	10	10	23	FXR32G103YE169
		90×129	0.20	29.9	10	10	23	FXR32G103YF129
	12000	90×154	0.20	33.9	8	10	23	FXR32G123YF154
	15000	77×232	0.20	41.3	8	10	23	FXR32G153YE232
18000	90×234	0.20	48.0	6	9	23	FXR32G183YF234	
22000	90×234	0.20	53.0	6	8	23	FXR32G223YF234	
450 2W (500)	2700	64×95	0.20	11.7	39	41	22	FXR32W272YD095
	3300	64×109	0.20	13.0	32	34	22	FXR32W332YD109
	3900	64×125	0.20	14.9	26	28	22	FXR32W392YD125
	4700	64×150	0.20	17.0	21	22	22	FXR32W472YD150
	5600	64×167	0.20	19.4	18	19	22	FXR32W562YD167
	6800	64×190	0.20	22.1	15	15	22	FXR32W682YD190
	8200	77×169	0.20	24.9	12	12	23	FXR32W822YE169
	10000	77×192	0.20	28.3	10	10	23	FXR32W103YE192
		90×154	0.20	28.1	10	10	23	FXR32W103YF154
	12000	90×194	0.20	32.9	8	10	23	FXR32W123YF194
	15000	90×234	0.20	39.8	8	10	23	FXR32W153YF234

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

