

# SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

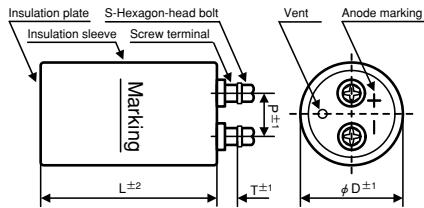
## FXR Series

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

- Conform RoHS

### Features

- Ripple Current increased by 37% (without wind) or 50% (with 0.5m/s wind) by new heat radiation constructions in case of ø90
- 500V added in the series.



(unit : mm)

φ D	P	S	T	Cap material
64	28.6	M5×10	5.0	PPS
77	32.0	M6×12	3.0	PPS
90	32.0	M6×12	3.0	PPS

### Product Specifications

Items	Specifications
Temperature range	-40°C ~ +85°C
Rated voltage	350 ~ 500V.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.

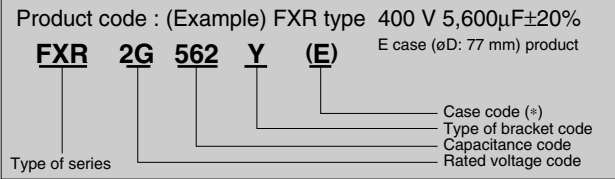
### Ripple current correction coefficient

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
Forced wind (m/s)	< 0.5	0.5 ≤			
Correction coefficient	1.0	1.1			

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.



(\* ) 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 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	
350 2V (400)	3900	64×115	0.15	14.6	25	26	22	FXR2V392Y	
	4700	64×131	0.15	16.9	20	21	22	FXR2V472Y	
	5600	64×155	64×155	0.15	19.8	17	18	22	FXR2V562YD
			77×121	0.15	21.6	17	18	23	FXR2V562YE
			90×106	0.15	22.3	17	18	23	FXR2V562YF
	6800	77×137	77×137	0.15	25.0	14	15	23	FXR2V682YE
			90×121	0.15	26.2	14	15	23	FXR2V682YF
			77×161	0.15	29.3	12	12	23	FXR2V822YE
	8200	90×137	90×137	0.15	30.1	12	12	23	FXR2V822YF
			10000	90×161	0.15	35.7	9	9	23
400 2G (450)	2700	64×100	0.15	11.5	38	40	22	FXR2G272Y	
	3300	64×131	0.15	14.2	30	32	22	FXR2G332Y	
	3900	64×155	64×155	0.15	16.5	26	28	22	FXR2G392Y
			64×155	0.15	18.1	21	22	22	FXR2G472YD
			77×137	0.15	20.8	21	22	23	FXR2G472YE
	4700	90×106	90×106	0.15	20.5	21	2	23	FXR2G472YF
			77×137	0.15	22.7	18	19	23	FXR2G562YE
			90×121	0.15	23.8	18	19	23	FXR2G562YF
	5600	77×161	77×161	0.15	26.6	15	16	23	FXR2G682YE
			90×137	0.15	27.4	15	16	23	FXR2G682YF
			8200	90×161	0.15	32.2	12	12	23
	10000	90×161	0.15	35.7	10	10	23	FXR2G103Y	

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450 2W (500)	2200	64×100	0.15	10.4	46	48	22	FXR2W222Y	
	2700	64×131	0.15	12.8	38	40	22	FXR2W272Y	
	3300	64×155	0.15	15.2	30	32	22	FXR2W332Y	
	3900	64×155	64×155	0.15	16.5	27	29	22	FXR2W392YD
		77×121	77×121	0.15	18.0	27	29	23	FXR2W392YE
		90×106	90×106	0.15	18.6	27	29	23	FXR2W392YF
	4700	77×137	77×137	0.15	20.8	21	22	23	FXR2W472YE
		90×121	90×121	0.15	21.8	21	22	23	FXR2W472YF
	5600	77×161	77×161	0.15	24.2	18	19	23	FXR2W562YE
		90×137	90×137	0.15	24.9	18	19	23	FXR2W562YF
	6800	90×161	90×161	0.15	29.4	15	16	23	FXR2W682Y
8200	90×161	90×161	0.15	32.2	12	12	23	FXR2W822Y	
10000	90×178	90×178	0.15	36.9	10	10	23	FXR2W103Y	
500 2H (550)	1500	64×115	0.15	8.6	74	78	22	FXR2H152Y	
	1800	64×131	0.15	10.0	62	65	22	FXR2H182Y	
	2200	64×155	0.15	11.7	51	54	22	FXR2H222Y	
	2700	77×121	0.15	15.0	41	43	23	FXR2H272Y	
	3300	77×161	77×161	0.15	18.5	34	36	23	FXR2H332YE
		90×106	90×106	0.15	14.7	34	36	23	FXR2H332YF
	3900	77×161	77×161	0.15	20.2	29	30	23	FXR2H392YE
		90×121	90×121	0.15	19.0	29	30	23	FXR2H392YF
	4700	90×137	90×137	0.15	21.8	24	25	23	FXR2H472Y
	5600	90×161	90×161	0.15	25.3	20	21	23	FXR2H562Y
	6800	90×178	90×178	0.15	29.0	16	17	23	FXR2H682Y

## 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

