Aluminum Electrolytic Capacitors **XR** Series

Features

- Low Impedance, High Ripple Current
- Load Life of 2000 Hours at 105℃

Specification

Items	Performance
Capacitance Tolerance	±20% (at 120Hz, 25℃)
Rated Voltage Range	6.3 to 100 VDC
Capacitance Range	22 to 4700 uF
Operating Temperature Range	-40 to + 105℃
Leakage Current (at 25℃)	I≦0.01 CV or 3 (uA), whichever is greater. After 3 minutes application of working voltage. I= Leakage current (uA), C= Rated capacitance (uF), V= Rated voltage (V)
Dissipation Factor (Tan δ at 120Hz, 25℃)	See table below
Low Temperature characteristics (at 120Hz)	Impedance ration max. See table below
Load Life	Application of W.V. at +105℃, the capacitor shall meet the following limits. Capacitance change : ≦±25% of initial value Dissipation factor : ≦200% of initial specified value Leakage Current : ≦Initial specified value Life Time : 2000 hours for φD≧8
Shelf Life	After storage for 500 hours at 105℃, with no voltage applied and being stabilixed at + 25℃, Capacitor shall meet the limit specifed in load life.
Ripple Current & Frequency Multipliers	See table below
Ripple Current & Temperature Multipliers	See table below
Standards	Satisfied Characteristic W of JIS C

Rate Voltage	6.3	10	16	25	35	50	63	100
Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.1	0.1	0.10

For capacitance ＞1000uF, add 0.02 per 1000uF increase.

Rate Voltage	6.3	10	16	25	35	50	63	100
-25℃/25℃	4	3	2	2	2	2	2	2
-40℃/25℃	8	6	4	4	3	3	3	3

Freq.(Hz) / W.V.	120	1K	10K	100Kup
6.3 to 10	0.60	0.75	0.90	0.90
16 to 25	0.50	0.70	0.80	0.90
35 up	0.40	0.60	0.80	0.90

Temperature (℃)	85	105
Multiplier	1.10	0.90

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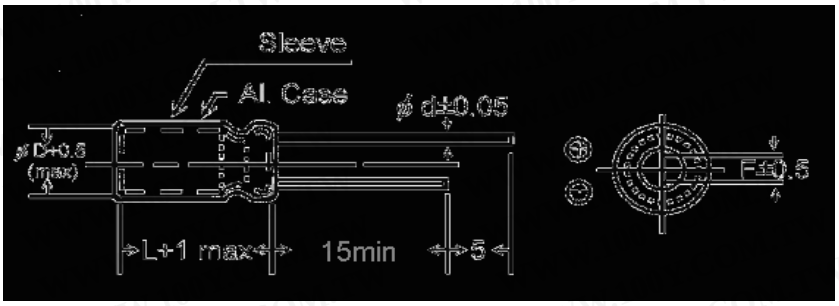

D	6.3	8	10	13
P	2.5	3.5	5.0	5.0
d	0.5		0.6	

DIMENSION & PERMISSIBLE RIPPLE CURRENT

VDC / uF	6.3V φ DxL (mm)	Ripple Current (mA/rms,105℃)	Impedance (Ω) 25℃,100KHz	VDC / uF	10V φ DxL (mm)	Ripple Current (mA/rms,105℃)	Impedance (Ω) 25℃,100KHz
470	8x12	390	0.200	**330**	8x12	490	0.200
680	8x14	490	0.200	**470**	8x14	500	0.100
820	10x13	500	0.080	**680**	8x16	650	0.095
1000	8x12	500	0.090	**1000**	8x14	800	0.070
	8x14	600	0.090		10x16	1000	0.060
1000	8x20	850	0.070	**1200**	10x16	1000	0.060
	10x13	700	0.060		10x20	1200	0.045
1200	8x20	600	0.100	**1500**	10x20	1200	0.045
	10x16	1000	0.060		10x25	1500	0.040
1500	8x20	800	0.070	**2200**	10x25	1500	0.040
	10x16	1000	0.060		13x21	1800	0.035
	10x20	1100	0.045	**2700**	13x26	2100	0.030
2200	10x20	1100	0.045	**3300**	10x30	1800	0.035
	10x25	1600	0.040		13x26	1800	0.030
2700	10x21	1100	0.040	**3900**	13x31	2100	0.030
3300	10x25	1500	0.045	**4700**	13x36	2200	0.030
	10x30	1800	0.035				
	13x31	1800	0.035				
3900	13x26	2100	0.035				
4700	13x30	2400	0.030				

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DIMENSION & PERMISSIBLE RIPPLE CURRENT

VDC / uF	16V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105℃)	Impedance (Ωmax.) 25℃,100KHz
220	8x12	400	0.350
330	8x14	400	0.300
470	8x14	600	0.100
	8x20	750	0.095
	10x13	750	0.095
680	10x16	1000	0.075
820	10x20	1100	0.060
1000	10x20	1250	0.060
	10x25	1500	0.040
1200	10x25	1400	0.040
1500	10x20	1800	0.035
	13x21	1800	0.035
2200	10x25	2000	0.040
	13x26	2000	0.040
2700	13x30	2400	0.030
3300	13x36	2600	0.030

VDC / uF	25V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105℃)	Impedance (Ωmax.) 25℃,100KHz
220	8x14	600	0.085
330	8x14	600	0.090
	8x20	650	0.090
	10x13	720	0.090
470	10x13	700	0.075
	10x16	1000	0.075
680	10x20	1200	0.045
	10x25	1500	0.045
1000	10x25	1800	0.045
	10x30	1800	0.035
	13x21	1800	0.030
1200	13x21	1800	0.030
1500	13x26	2100	0.030
2200	13x36	2600	0.030
2700	13x36	2600	0.030

VDC / uF	35V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105℃)	Impedance (Ωmax.) 25℃,100KHz
100	8x12	450	0.130
220	8x14	600	0.100
	10x13	700	0.090
330	10x16	1000	0.060
470	10x20	1500	0.045
560	10x25	1600	0.040
680	10x30	1800	0.040
1000	13x26	2100	0.035
1200	13x31	2400	0.030
1500	13x36	2600	0.030

VDC / uF	50V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105℃)	Impedance (Ωmax.) 25℃,100KHz
47	8x12	200	0.400
100	8x14	440	0.140
220	10x20	850	0.140
330	10x25	1100	0.055
	10x30	1150	0.055
470	10x30	1500	0.045
	13x21	1500	0.045
560	13x26	1800	0.040
680	13x30	2000	0.040
820	13x36	2200	0.040
1000	16x26	2200	0.040

VDC / uF	63V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105℃)	Impedance (Ωmax.) 25℃,100KHz
47	8x12	200	0.650
100	10x13	350	0.450
120	8x20	350	0.400
	10x16	360	0.350
150	10x16	500	0.210
220	10x20	680	0.200
	10x25	680	0.200
330	13x26	900	0.200
470	13x26	1200	0.070

VDC / uF	100V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105℃)	Impedance (Ωmax.) 25℃,100KHz
22	8x12	180	0.750
33	8x14	210	0.600
47	8x20	300	0.450
	10x16	310	0.350
100	10x25	400	0.300
	13x21	450	0.300
220	13x31	800	0.200
270	13x36	900	0.095