RXY Series

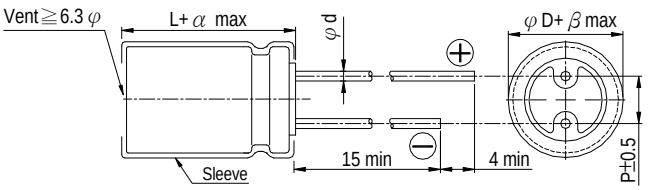
Features
- 105℃, 2,000 ~ 3,000 hours assured
- Low ESR, suitable for switching power supplies
- Smaller size with large permissible ripple current
- RoHS Compliance

Sleeve & Marking Color: Black & White

Specifications

Items	Performance
Category Temperature Range	-40℃ ~ +105℃
Capacitance Tolerance	±20% (at 120Hz, 20℃)
Leakage Current (at 20℃)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF V = rated DC working voltage in V
Dissipation Factor (Tanδ at 120Hz, 20℃)	Rated Voltage: 6.3 / 10 / 16 / 25 / 35 / 50 Tanδ (max): 0.22 / 0.19 / 0.16 / 0.14 / 0.12 / 0.10 When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase.
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. Rated Voltage: 6.3 / 10 / 16 / 25 / 35 / 50 Impedance Ratio Z(-25℃)/Z(+20℃): 4 / 3 / 2 / 2 / 2 / 2 Impedance Ratio Z(-40℃)/Z(+20℃): 8 / 6 / 4 / 3 / 3 / 3
Endurance	Test Time: 2,000 Hrs for φD = 5 ~ 8 mm; 3,000 Hrs for φD ≧ 10 mm Capacitance Change: Within ±20% of initial value Dissipation Factor: Less than 200% of specified value Leakage Current: Within specified value * The above Specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with rated ripple current for 2,000 ~ 3,000 hours at 105℃.
Shelf Life Test	Test Time: 1,000 Hrs Capacitance Change: Within ±20% of initial value Dissipation Factor: Less than 200% of specified value Leakage Current: Within specified value * The above Specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied.
Ripple Current & Frequency Multipliers	Freq.(Hz) / Cap.(μF): 120 / 1k / 10k / 100k up 0.47 ~ 180: 0.40 / 0.75 / 0.9 / 1.0 220 ~ 560: 0.50 / 0.85 / 0.94 / 1.0 680 ~ 1,800: 0.60 / 0.87 / 0.95 / 1.0 2,200 ~ 3,900: 0.75 / 0.90 / 0.95 / 1.0 4,700 up above: 0.85 / 0.95 / 0.98 / 1.0

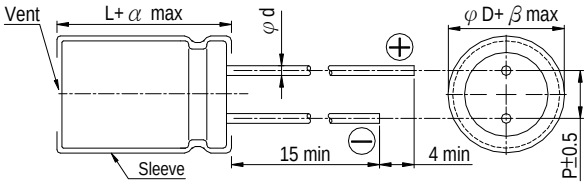
Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

φD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5		0.6			0.8	
α	1.0		L<20: 1.5, L≧20: 2.0				
β	0.5						

The case size of 12.5×16, 16×16, 16×20, 18×16, 18×20 and 18×25 are suitable for below diagram:



Dimension: ϕD × L(mm)

Dimension & Permissible Ripple Current

Ripple Current: mA/rms at 100k Hz, 105°C

V. DC / Contents / μF	6.3V (0J)					10V (1A)					16V (1C)				
	ϕD×L	Impedance (Ω, Max/100k Hz)		Ripple Current (mA/rms, 105℃)		ϕD×L	Impedance (Ω, Max/100k Hz)		Ripple Current (mA/rms, 105℃)		ϕD×L	Impedance (Ω, Max/100k Hz)		Ripple Current (mA/rms, 105℃)	
		20℃	-10℃	120 Hz	100k Hz		20℃	-10℃	120 Hz	100k Hz		20℃	-10℃	120 Hz	100k Hz
56											5×11	0.58	2.3	84	210
100						5×11	0.58	2.3	84	210					
120											6.3×11	0.22	0.87	136	340
150	5×11	0.58	2.3	84	210										
220						6.3×11	0.22	0.87	170	340					
330	6.3×11	0.22	0.87	170	340						8×11.5	0.13	0.52	320	640
470						8×11.5	0.13	0.52	320	640	8×15 10×12.5	0.087 0.080	0.35 0.32	420 432	840 865
680	8×11.5 10×12.5	0.13 0.08	0.52 0.32	384 519	640 865	8×15 10×12.5	0.087 0.080	0.35 0.32	504 519	840 865	8×20 10×16	0.069 0.060	0.27 0.24	630 726	1,050 1,210
1,000	8×15	0.087	0.35	504	840	8×20 10×16	0.069 0.060	0.27 0.24	630 726	1,050 1,210	10×20 12.5×16	0.046 0.049	0.18 0.16	840 870	1,400 1,450
1,200	8×20 10×16	0.069 0.060	0.27 0.24	630 726	1,050 1,210	10×20	0.046	0.18	840	1,400	10×25	0.042	0.17	990	1,650
1,500	10×20	0.046	0.18	840	1,400	10×25 12.5×16	0.042 0.049	0.17 0.16	990 870	1,650 1,450	10×30 12.5×20 16×16	0.031 0.035 0.042	0.12 0.12 0.12	1,146 1,140 1,164	1,910 1,900 1,940
1800	12.5×16	0.049	0.16	870	1,450										
2,200	10×25	0.042	0.17	1,238	1,650	10×30 12.5×20 16×16	0.031 0.035 0.042	0.12 0.12 0.12	1,432 1,425 1,455	1,910 1,900 1,940	12.5×25 18×16	0.027 0.043	0.089 0.11	1,673 1,658	2,230 2,210
2,700	10×30 16×16	0.031 0.042	0.12 0.12	1,432 1,455	1,910 1,940	18×16	0.043	0.11	1,657	2,210	12.5×30 16×20	0.024 0.027	0.078 0.078	1,988 1,898	2,650 2,530
3,300	12.5×20	0.035	0.12	1,425	1,900	12.5×25	0.027	0.089	1,672	2,230	12.5×35	0.020	0.065	2,160	2,880
3,900	12.5×25 18×16	0.027 0.043	0.089 0.11	1,672 1,657	2,230 2,210	12.5×30 16×20	0.024 0.027	0.078 0.078	1,987 1,897	2,650 2,530	12.5×40 16×25 18×20	0.017 0.021 0.026	0.056 0.060 0.067	2,513 2,198 2,145	3,350 2,930 2,860
4,700	12.5×30	0.024	0.078	2,252	2,650	12.5×35	0.020	0.065	2,448	2,880	16×31.5 18×25	0.017 0.019	0.050 0.049	2,933 2,669	3,450 3,140
5,600	12.5×35 16×20	0.020 0.027	0.065 0.078	2,448 2,150	2,880 2,530	12.5×40 16×25 18×20	0.017 0.021 0.026	0.056 0.060 0.067	2,847 2,490 2,431	3,350 2,930 2,860	16×35.5 18×31.5	0.015 0.015	0.044 0.040	3,069 3,545	3,610 4,170
6,800	12.5×40 16×25 18×20	0.017 0.021 0.026	0.056 0.060 0.067	2,847 2,490 2,431	3,350 2,930 2,860	16×31.5 18×25	0.017 0.019	0.050 0.049	2,932 2,669	3,450 3,140	16×40	0.013	0.038	3,468	4,080
8,200	16×31.5	0.017	0.050	2,932	3,450	16×35.5 18×31.5	0.015 0.015	0.044 0.040	3,068 3,544	3,610 4,170	18×35.5	0.014	0.038	3,587	4,220
10,000	16×35.5 18×25	0.015 0.019	0.044 0.049	3,068 2,669	3,610 3,140	16×40 18×35.5	0.013 0.014	0.038 0.038	3,468 3,587	4,080 4,220	18×40	0.012	0.032	3,638	4,280
12,000	16×40 18×31.5	0.013 0.015	0.038 0.040	3,468 3,544	4,080 4,170	18×40	0.012	0.032	3,638	4,280					
15,000	18×35.5	0.014	0.038	3,587	4,220										
18,000	18×40	0.012	0.032	3,638	4,280										

Dimension: ϕD × L(mm)

Dimension & Permissible Ripple Current

Ripple Current: mA/rms at 100k Hz, 105°C

V. DC / Contents / μF	25V (1E)					35V (1V)					50V (1H)				
	ϕD×L	Impedance (Ω, Max/100k Hz)		Ripple Current (mA/rms, 105℃)		ϕD×L	Impedance (Ω, Max/100k Hz)		Ripple Current (mA/rms, 105℃)		ϕD×L	Impedance (Ω, Max/100k Hz)		Ripple Current (mA/rms, 105℃)	
		20℃	-10℃	120 Hz	100k Hz		20℃	-10℃	120 Hz	100k Hz		20℃	-10℃	120 Hz	100k Hz
2.2											5×11	2.50	10.0	17	42
3.3											5×11	2.20	8.8	21	52
4.7											5×11	1.90	7.6	35	87
10											5×11	1.50	6.0	40	100
22											5×11	0.70	2.8	72	180
33						5×11	0.58	2.30	84	210					
47	5×11	0.58	2.30	84	210										
56						6.3×11	0.22	0.87	136	340	6.3×11	0.30	1.2	86	217
100	6.3×11	0.22	0.87	136	340						8×11.5	0.17	0.68	148	371
120											8×15	0.12	0.48	156	392
150						8×11.5	0.13	0.52	256	640	10×12.5	0.12	0.48	235	588
180											8×20	0.091	0.36	210	525
220	8×11.5	0.13	0.52	320	640	8×15 10×12.5	0.087 0.080	0.35 0.32	420 432	840 865	10×16	0.084	0.34	364	728
270						8×20	0.069	0.27	525	1,050	10×20 12.5×16	0.060 0.061	0.24 0.20	305 318	610 637
330	8×15 10×12.5	0.087 0.080	0.35 0.32	420 432.5	840 865	10×16	0.060	0.24	605	1,210	10×25	0.055	0.22	441	882
470	8×20 10×16	0.069 0.060	0.27 0.24	525 605	1,050 1,210	10×20 12.5×16	0.046 0.049	0.18 0.16	700 725	1,400 1,450	10×30 12.5×20 16×16	0.043 0.045 0.055	0.17 0.15 0.17	588 596 596	1,176 1,192 1,192
560						10×25	0.042	0.17	825	1,650	12.5×25 18×16	0.034 0.054	0.11 0.15	652 688	1,304 1,376
680	10×20 12.5×16	0.045 0.049	0.18 0.16	840 870	1,400 1,450	10×30 12.5×20 16×16	0.031 0.035 0.042	0.12 0.12 0.12	1,146 1,140 1,164	1,910 1,900 1,940	12.5×30	0.030	0.10	912	1,520
820	10×25	0.042	0.17	990	1,650						12.5×35 16×20	0.025 0.034	0.083 0.10	993 974	1,656 1,624
1,000	10×30 12.5×20 16×16	0.031 0.035 0.042	0.12 0.12 0.12	1,146 1,140 1,164	1,910 1,900 1,940	12.5×25 18×16	0.027 0.043	0.089 0.11	1,338 1,326	2,230 2,210	12.5×40 16×25 18×20	0.021 0.025 0.036	0.069 0.075 0.097	1,080 998 1,032	1,800 1,664 1,720
1,200	18×16	0.043	0.11	1,326	2,210	12.5×30 16×20	0.024 0.027	0.078 0.078	1,590 1,518	2,650 2,530	16×31.5 18×25	0.022 0.026	0.066 0.070	1,252 1,269	2,088 2,115
1,500	12.5×25	0.027	0.089	1,338	2,230	12.5×35	0.020	0.065	1,728	2,880	16×35.5	0.019	0.057	1,371	2,286
1,800	12.5×30 16×20	0.024 0.027	0.078 0.078	1,590 1,518	2,650 2,530	12.5×40 16×25 18×20	0.017 0.021 0.026	0.056 0.060 0.067	2,010 1,758 1,716	3,350 2,930 2,860	16×40 18×31.5	0.016 0.021	0.048 0.057	1,479 1,479	2,466 2,466
2,200	12.5×35 18×20	0.020 0.026	0.065 0.067	2,160 2,145	2,880 2,860	16×31.5 18×25	0.017 0.019	0.050 0.049	2,587 2,355	3,450 3,140	18×35.5	0.017	0.046	2,070	2,760
2,700	12.5×40 16×25	0.017 0.021	0.056 0.060	2,513 2,198	3,350 2,930	16×35.5 18×31.5	0.015 0.015	0.044 0.040	2,707 3,127	3,610 4,170	18×40	0.014	0.038	2,137	2,850
3,300	16×31.5 18×25	0.017 0.019	0.050 0.049	2,588 2,355	3,450 3,140	16×40 18×35.5	0.013 0.014	0.038 0.038	3,060 3,165	4,080 4,220					
3,900	16×35.5 18×31.5	0.015 0.015	0.044 0.040	2,708 3,128	3,610 4,170	18×40	0.012	0.032	3,210	4,280					
4,700	16×40 18×35.5	0.013 0.014	0.038 0.038	3,468 3,587	4,080 4,220										
5,600	18×40	0.012	0.032	3,638	4,280										