

# RV Series

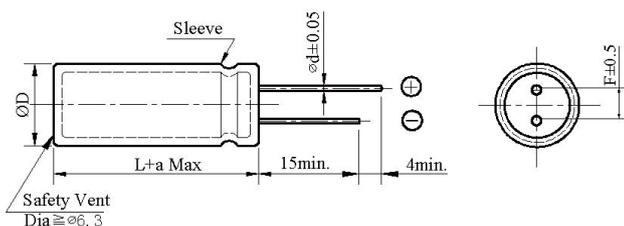
- Extremely miniaturized and high ripple current
- Load life 12,000~20,000 hours at 105°C;
- Suitable for output circuit and input circuit of LED driving power
- RoHS Compliant



## ◆ SPECIFICATIONS

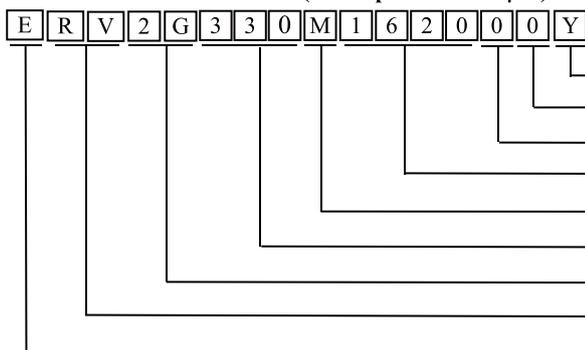
Item	Performance Characteristics							
Category Temperature Range	-40 ~ +105°C							
Working Voltage Range	160 ~ 450Vdc							
Capacitance Range	1 ~ 68μF							
Capacitance Tolerance	±20% (at 20°C and 120Hz)							
Dissipation Factor (tanδ) (at 20°C, 120Hz)	Rated Voltage (V)	160	200	250	350	400	450	
	tanδ(Max)	0.24	0.24	0.24	0.24	0.24	0.24	
Leakage Current	160~400Vdc			450Vdc				
	I ≤ 0.03CV + 15μA (2minutes)			I ≤ 0.03CV + 25μA (2minutes)				
I: Leakage current (μA) C: Rated capacitance (μF) V: Rated voltage (V)								
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V)	160	200	250	350	400	450	
	Z(-25°C)/Z(+20°C)	3	3	3	5	5	8	
	Z(-40°C)/Z(+20°C)	8	8	8	8	8	12	
(at 120Hz)								
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 12,000 to 20,000 hours at 105°C.							
	Capacitance change	≡ ±30% of the initial value					Size	Life time (hours)
	Dissipation factor(tanδ)	≡ 300% of the specified value					6.3×9 6.3×12 8×9 10×9	12,000
	Leakage current	≡ specified value					8×12 8×16 8×20 10×12	15,000
≥10×16 20,000								
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 1,000 hours at 105°C without voltage applied.							
	Capacitance change	≡ ±30% of the initial value						
	Dissipation factor(tanδ)	≡ 300% of the specified value						
	Leakage current	≡ 300% of the specified value						

## ◆ DIMENSIONS (mm)



ΦD	5	6.3	8	10	12.5	16	18
ΦD	ΦD +0.5 Max						
Φd	0.5	0.5	0.5/0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
a	L+2.0 Max						

## ◆ PART NUMBER SYSTEM( Example : 400V 33μF )



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◆ Case size & Permissible rated ripple current: (mA rms) at 105°C / 100KHz

Vdc μF	160		200		250	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
1.0	6.3×9	50	6.3×9	52	6.3×9	52
1.5	6.3×9	60	6.3×9	62	6.3×9	62
1.8	6.3×9	65	6.3×9	68	6.3×12	70
2.2	6.3×9	72	6.3×12	75	6.3×12	80
2.8	6.3×12	80	6.3×12	84	6.3×12	88
3.3	6.3×12	88	6.3×12	90	6.3×12	92
4.7	6.3×12	102	6.3×12	105	6.3×12	120
5.6	6.3×12	110	8×9	116	8×9	132
6.8	6.3×12	124	8×9	128	8×9	160
8.2	8×9	135	8×9	144	8×9	172
10	8×9	150	8×12	160	8×12	200
15	8×12	190	8×16	240	10×12	270
22	10×12	250	10×16	340	10×16	380
33	10×16	412	10×20	550	10×20	562
47	10×20	525	12.5×20	750	12.5×20	788
56	12.5×20	750	12.5×25	860	16×20	950
68	12.5×25	890	16×20	980	16×25	1100

Vdc μF	350		400		450	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
1.0	6.3×9	52	6.3×12	54	6.3×12	56
1.5	6.3×12	65	8×9	68	8×12	70
1.8	6.3×12	72	8×9	76	8×12	80
2.2	8×9	80	8×12	82	8×12	88
2.8	8×12	88	8×12	92	8×16	100
3.3	8×12	96	8×12	100	8×16	110
4.7	8×12	128	10×12	134	10×12	140
5.6	8×16	136	10×12	158	10×16	180
6.8	10×12	168	10×16	180	10×16	200
8.2	10×16	180	10×16	190	10×20	280
10	10×16	210	10×16	224	10×20	284
15	10×20	290	12.5×20	300	12.5×25	400
22	12.5×20	380	12.5×25	480	16×20	520
33	12.5×25	660	16×20	720	16×25	860
47	16×20	820	16×25	900	18×20	950

### ◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)				
	50	120	1K	10K	100K
160 ~ 450	0.45	0.50	0.80	0.90	1.00