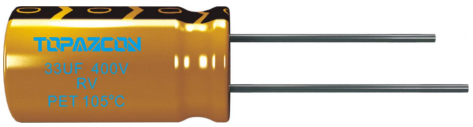
RV Series

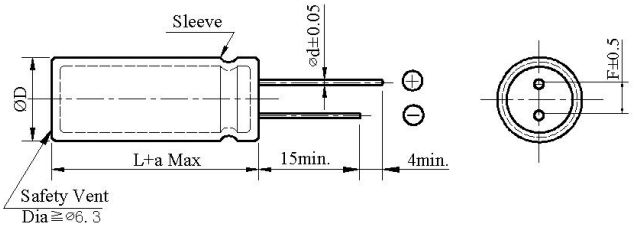
- **Extremely miniaturized and high ripple current**
- **Load life 12,000~20,000 hours at 105℃;**
- **Suitable for output circuit and input circuit of LED driving power**
- **RoHS Compliant**



◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-40 ~ +105℃
Working Voltage Range	160 ~ 450Vdc
Capacitance Range	1 ~ 68μF
Capacitance Tolerance	±20% (at 20℃ and 120Hz)
Dissipation Factor (tanδ) (at 20℃, 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: I≤0.03CV+ 15μA (2minutes) 450Vdc: 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℃)/Z(+20℃): 3 / 3 / 3 / 5 / 5 / 8 Z(-40℃)/Z(+20℃): 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 Dissipation factor(tanδ): ≦ 300% of the specified value Leakage current: ≦ specified value Size / Life time (hours): 6.3×9 6.3×12 8×9 10×9: 12,000; 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℃ after the rated voltage applied for 1,000 hours at 105℃ 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)

E	R	V	2	G	3	3	0	M	1	6	2	0	0	0	Y

- Sleeve code(Yellow)
- Lead length code
- Lead forming Type code
- Size code(1620 : 16×20)
- Capacitance tolerance code(M:±20%)
- Capacitance code (33μF)
- Voltage code(400V)
- Series code(RV)
- Category code(E)

RV Series

◆ **Case size & Permissible rated ripple current: (mA rms) at 105℃ / 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