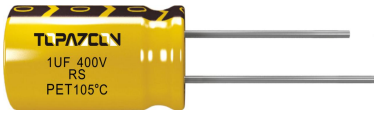
RS Series

- **Miniaturized, Low profile with 7mm height**
- **Suitable for LED driving power**
- **Load life 5,000～6,000 hours at 105℃**
- **RoHS Compliant**



◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-40 ~ +105℃
Working Voltage Range	6.3 ~ 400Vdc
Capacitance Range	1 ~ 680μF
Capacitance Tolerance	±20% (at 20℃ and 120Hz)

Dissipation Factor (tanδ) (at 20℃, 120Hz)

Rated Voltage (V)	6.3	10	16	25	35	50	63	80	100	160~250	350~400
tanδ(Max)	0.32	0.28	00.24	0.20	0.16	0.14	0.14	0.12	0.12	0.15	0.20

Leakage Current

6.3~100Vdc	160~400Vdc
I≤0.01CV or 3μA,Which is greater(2minutes)	I≤0.02CV+ 10μA (2minutes)

I: Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V)

Low Temperature Characteristics Impedance Ratio(MAX)

Rated Voltage (V)	6.3	10	16	25	35	50	63	80	100	160~250	350~400
Z(-40°C)/Z(+20°C)	12	10	8	6	4	4	4	4	4	7	9

(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 5,000 to 6,000 hours at 105°C.

Capacitance change	≦ ±30% of the initial value
Dissipation factor(tanδ)	≦ 300% of the specified value
Leakage current	≦ specified value

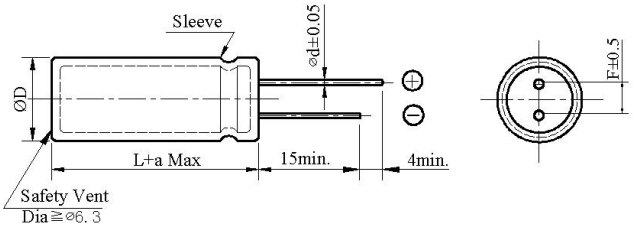
Size	Life time (hours)
≦6.3Φ	5,000
8Φ~10Φ	6,000

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	≦ 200% of the specified value

◆ DIMENSIONS (mm)



ΦD	5	6.3	8	10
ΦD	ΦD +0.5 Max			
Φd	0.45	0.50	0.50	0.6
F	2.0	2.5	3.5	5.0
a	L+2.0 Max			

◆ PART NUMBER SYSTEM(Example : 400V 1μF)

E R S 2 G 1 R 0 M 0 6 0 7 0 0 Y

- Sleeve code(Yellow)
- Lead length code
- Lead forming Type code
- Size code(0607 : 6.3×7)
- Capacitance tolerance code(M:±20%)
- Capacitance code (1μF)
- Voltage code(400V)
- Series code(RS)
- Category code(E)

RS Series

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

Vdc / μF	6.3V		10V		16V		25V		35V	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
4.7							5×7	50	5×7	50
5.6							5×7	52	5×7	52
6.8							5×7	55	5×7	50
8.2							5×7	55	5×7	50
10	5×7	52	5×7	55	5×7	55	5×7	60	5×7	50
12	5×7	55	5×7	55	5×7	58	5×7	60	5×7	60
15	5×7	55	5×7	58	5×7	60	5×7	60	5×7	60
18	5×7	58	5×7	60	5×7	60	5×7	60	5×7	60
22	5×7	62	5×7	70	5×7	70	5×7	70	5×7	70
27	5×7	70	5×7	70	5×7	70	5×7	70	6.3×7	80
33	5×7	80	5×7	80	5×7	80	5×7	85	6.3×7	90
39	5×7	80	5×7	80	5×7	80	5×7	85	6.3×7	98
47	5×7	90	5×7	90	5×7	90	5×7	90	6.3×7	105
56	5×7	85	5×7	90	5×7	95	6.3×7	98	8×7	115
68	5×7	90	5×7	95	5×7	100	6.3×7	110	8×7	125
82	5×7	95	5×7	98	6.3×7	105	6.3×7	115	8×7	140
100	5×7	105	6.3×7	115	6.3×7	115	8×7	125	8×7	170
120	5×7	110	6.3×7	115	6.3×7	128	8×7	140	10×7	180
150	6.3×7	115	6.3×7	135	6.3×7	140	8×7	170	10×7	210
180	6.3×7	135	8×7	160	6.3×7	170	10×7	190		
220	6.3×7	160	8×7	170	6.3×7	190	10×7	220		
270	8×7	170	8×7	190	10×7	220				
330	8×7	180	10×7	220	10×7	240				
390	8×7	190	10×7	240	10×7	260				
470	8×7	200	10×7	280						
560	10×7	460								
680	10×7	680								

Vdc / μF	50V		63V		80V		100V		160V	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
2.2	5×7	30	5×7	30	5×7	30	5×7	31	5×7	32
2.7	5×7	30	5×7	30	5×7	30	5×7	31	5×7	32
3.3	5×7	30	5×7	30	5×7	30	5×7	31	6.3×7	32
3.9	5×7	30	5×7	30	5×7	30	5×7	31	6.3×7	33
4.7	5×7	30	5×7	30	5×7	30	5×7	31	6.3×7	35
5.6	5×7	30	5×7	30	5×7	30	5×7	31	8×7	50
6.8	5×7	30	5×7	30	5×7	30	6.3×7	30	8×7	55
8.2	5×7	30	5×7	30	5×7	30	6.3×7	40	8×7	60
10	5×7	30	5×7	30	6.3×7	50	6.3×7	50	8×7	65
12	5×7	37	6.3×7	50	6.3×7	55	8×7	75	10×7	95
15	5×7	44	6.3×7	56	6.3×7	70	8×7	85	10×7	115
18	6.3×7	55	6.3×7	70	6.3×7	75	8×7	100		
22	6.3×7	65	8×7	75	8×7	85	8×7	120		
27	6.3×7	78	8×7	85	8×7	100	10×7	130		
33	8×7	85	8×7	100	8×7	120	10×7	150		
39	8×7	100	8×7	120	10×7	130				
47	8×7	120	10×7	130	10×7	150				
56	8×7	125	10×7	150	10×7	160				
68	10×7	140	10×7	160						
82	10×7	160								
100	10×7	180								

RS Series

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

Vdc / μF	200V		250V		350V		400V	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
1.0	5×7	20	5×7	20	6.3×7	25	6.3×7	25
1.2	5×7	20	5×7	20	6.3×7	30	6.3×7	30
1.5	5×7	22	5×7	22	6.3×7	35	6.3×7	35
1.8	5×7	22	5×7	22	6.3×7	40	6.3×7	40
2.2	6.3×7	25	6.3×7	25	8×7	50	8×7	50
2.7	6.3×7	35	6.3×7	35	8×7	55	8×7	55
3.3	6.3×7	40	6.3×7	40	8×7	70	8×7	70
3.9	8×7	50	8×7	50	10×7	80	10×7	80
4.7	8×7	55	8×7	55	10×7	95	10×7	95
5.6	8×7	65	8×7	65	10×7	108		
6.8	8×7	72	10×7	80				
8.2	10×7	95	10×7	95				
10	10×7	108	10×7	108				

◆ **RIPPLE CURRENT MULTIPLIERS**

Frequency Multipliers

Vdc	Cap(uF)	Frequency (Hz)				
		50	120	1K	10K	100K
6.3 ~ 400	1~8.2	0.26	0.40	0.70	0.90	1.00
	10~82	0.41	0.55	0.83	0.94	1.00
	100~680	0.54	0.67	0.87	0.96	1.00