

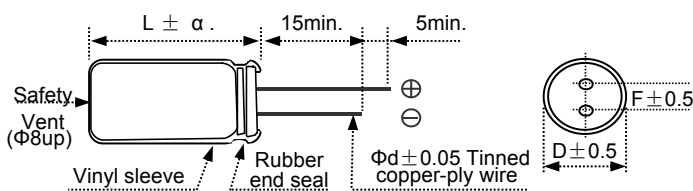
RG Series

- Low impedance, downsized
- Power Supply Output, 105°C 6000~10000hours
- RoHS2.0 Compliant

◆ 规格表 Specifications

项目 Items	特性参数 Characteristics											
使用温度范围 Category Temperature Range	-40 ~ +105°C											
额定工作电压范围 Rated Voltage Range	6.3 ~ 100V.DC											
静电容量允许偏差 Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)											
漏电流 Leakage Current	I ≤ 0.01CV or 3μA, 二者取最大值 (施加额定工作电压2分钟后) Whichever is greater (After 2 minutes application of rated voltage) Note: I=Max.leakage current (μA), C=Nominal capacitance(μF), V=Rated voltage(V) (at 20°C)											
损耗角正切值 tanδ Dissipation Factor	Rated voltage(V)	6.3	10	16	25	35	50	63	80	100		
	tanδ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.09	0.08		
标称容量超过1000uF,则每增加1000uF,损耗角正切值增加0.02 When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase. (at 20°C, 120Hz)												
低温特性 Low Temperature Characteristics (Max.Impedance Ratio)	阻抗比值不得超过下表中列出的值 The impedance ratio shall not exceed the values listed in the below table.											
	Rated voltage(V)	6.3	10	16	25	35	50	63	80	100		
	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	2	2	2		
Z(-40°C)/Z(+20°C) 8 6 4 3 3 3 3 3 3 3 (at 120Hz)												
耐久性 Endurance	在105°C环境中, 不超过额定电压的范围内叠加最大允许纹波电流, 连续加载右表时间, 经恢复到20°C后, 电容器满足以下各项要求。 The following specifications shall be satisfied when the capacitors are restored to 20°C after applied within maximum allowable ripple current and not over rated voltage range for the time in the table at 105°C.											
	额定电压 (Vdc)	6.3~10V					16~100V					时间 (hrs)
	Capacitance change	≅ ±30% of the initial value					≅ ±25% of the initial value					Φ5 ~ Φ6.3: 6000
	D.F.(tanδ)	≅ 200% of the initial specified value					≅ 200% of the initial specified value					Φ8 ~ Φ10: 8000
	Leakage current	≅ The initial specified value					≅ The initial specified value					≥ Φ13: 10000
高温储存特性 Shelf Life	在105°C环境中, 不施加电压条件下储存1000小时, 经恢复到20°C后, 电容器满足以下各项要求。 The following specifications shall be satisfied when the capacitors are restored at 20°C after exposing them for 1000 hours at 105°C without voltage applied.											
	Capacitance change	≅ ±25% of the initial value										
	D.F.(tanδ)	≅ 200% of the initial specified value										
	Leakage current	≅ 200% of the initial specified value										

◆ 尺寸图 (单位: mm) DIMENSIONS (Unit:mm)



ΦD	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.5/0.6	0.6	0.6	0.8	0.8

α	(L < 20) 1.5
	(L ≥ 20) 2.0

◆ 纹波电流补正系数 Rated Ripple Current Coefficient

● 频率系数 Frequency Coefficient

Capacitance(μF)	Frequency(Hz)			
	120	1k	10k	100k
22 ~ 180	0.40	0.75	0.90	1.00
220 ~ 560	0.50	0.85	0.94	1.00
680 ~ 1,800	0.60	0.87	0.95	1.00
2,200 ~ 3,900	0.75	0.90	0.95	1.00
4,700 ~	0.85	0.95	0.98	1.00

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◆ 标准品一览表 Standard Ratings

WV(V)	Cap. (μF)	Case size ΦD×L (mm)	Impedance (Ω) max. 20°C/100kHz	Maximum allowable ripple current at 105°C /100kHz
6.3	180	5X11	0.29	340
	390	6.3X11	0.15	540
	820	8X12	0.087	840
	1,200	8X16	0.069	1,050
	1,200	10X13	0.064	1,050
	1,500	8X20	0.060	1,210
	1,800	10X16	0.049	1,400
	2,200	10X20	0.037	1,650
	2,700	10X25	0.037	1,910
	3,300	10X30	0.027	2,230
	3,900	13X20	0.027	2,230
	4,700	13X25	0.024	2,530
	6,800	13X30	0.021	2,860
	6,800	16X21	0.025	2,610
	8,200	13X35	0.018	3,140
	8200	18X21	0.021	3000
	10000	13X40	0.017	3640
	10,000	16X26	0.020	3,140
	12,000	16X32	0.016	3,610
	12,000	18X26	0.017	3,530
15,000	16X35	0.014	4,080	
15,000	18X32	0.014	4,220	
18,000	16X40	0.013	4,220	
18,000	18X35	0.012	4,280	
22,000	18X40	0.011	4,700	
10	120	5X11	0.29	350
	330	6.3X11	0.15	540
	560	8X12	0.087	840
	820	8X16	0.069	1,050
	1,000	8X20	0.060	1,210
	1000	10X13	0.064	1050
	1200	10X16	0.049	1400
	1,800	10X20	0.037	1,650
	2,200	10X25	0.031	1,910
	2,700	10X30	0.027	2,230
	2,700	13X20	0.027	2,230
	3,900	13X25	0.024	2,530
	4,700	13X30	0.021	2,860
	4,700	16X21	0.025	2,610
	5,600	13X35	0.018	3,140
	6,800	12X40	0.017	3,640
	6,800	16X26	0.020	3,140
	6,800	18X21	0.021	3,000
	8,200	16X32	0.016	3,610
	8,200	18X26	0.017	3,530
10000	16X35	0.014	4080	
10000	18X32	0.014	4220	
12,000	16X40	0.013	4,220	
12,000	18X35	0.012	4,280	
15,000	18X40	0.011	4,700	
16	120	5X11	0.29	340
	270	6.3X11	0.15	540
	470	8X12	0.087	840
	680	8X16	0.069	1,050
	680	10X13	0.064	1,050
	820	8X20	0.060	1,210
	1,000	10X16	0.049	1,400
	1,500	10X20	0.037	1,650
	1,800	10X25	0.031	1,910
	2,200	10X30	0.027	2,230
	2,200	13X20	0.027	2,230
	3,300	13X25	0.024	2,530
	3,900	13X30	0.021	2,860
	3,900	16X21	0.025	2,610

WV(V)	Cap. (μF)	Case size ΦD×L (mm)	Impedance (Ω) max. 20°C/100kHz	Maximum allowable ripple current at 105°C /100kHz	
16	4700	13X35	0.018	3140	
	4,700	18X21	0.021	3000	
	5,600	13X40	0.017	3,640	
	5,600	16X26	0.020	3,140	
	6,800	16X32	0.016	3,610	
	6,800	18X26	0.017	3,530	
	8,200	16X35	0.014	4,080	
	8,200	18X32	0.014	4,220	
	10,000	16X40	0.013	4,220	
	10,000	18X35	0.012	4,280	
	12,000	18X40	0.011	4,700	
	25	82	5X11	0.29	340
		150	6.3X11	0.15	540
		330	8X12	0.087	840
390		8X16	0.039	1,050	
470		10X13	0.064	1050	
560		8X20	0.060	1210	
680		10X16	0.049	1,400	
1,000		10X20	0.037	1,650	
1,200		10X25	0.031	1,910	
1,500		10X30	0.027	2,230	
1,500		13X20	0.027	2,230	
2,200		13X25	0.024	2,530	
2,700		13X30	0.021	2,860	
2,700		16X21	0.025	2,610	
3,300		13X35	0.018	3,140	
3,300		18X21	0.021	3,000	
3,900		13X40	0.017	3,640	
3,900		16X26	0.020	3,140	
4,700		16X32	0.016	3,610	
4700		18X26	0.017	3530	
5600	16X35	0.016	4080		
6,800	16X40	0.013	4,220		
6,800	18X32	0.014	4,220		
8,200	18X35	0.012	4,280		
35	47	5X11	0.29	340	
	100	6.3X11	0.15	540	
	180	8X12	0.087	840	
	270	8X16	0.069	1,050	
	330	8X20	0.060	1,210	
	330	10X13	0.064	1,050	
	470	10X16	0.049	1,400	
	680	10X20	0.037	1,650	
	820	10X25	0.031	1,910	
	1,000	10X30	0.027	2,230	
	1000	13X20	0.027	2230	
	1500	13X25	0.024	2530	
	1,800	13X30	0.021	2,860	
	1,800	16X21	0.025	2,610	
	2,200	13X35	0.018	3,140	
	2,200	18X21	0.021	3,000	
	2,700	13X40	0.017	3,640	
	2,700	16X26	0.020	3,140	
	3,300	16X32	0.016	3,610	
	3,300	18X26	0.017	3,530	
3,900	16X35	0.014	4,080		
4,700	16X40	0.013	4,220		
4,700	18X32	0.014	4,220		
5,600	18X35	0.012	4,280		
50	27	5X11	0.48	238	
	56	6.3X11	0.20	385	
	100	8X12	0.12	620	
	150	8X16	0.093	810	
	150	10X13	0.10	810	

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WV(V)	Cap. (μF)	Case size ΦD×L (mm)	Impedance (Ω) max. 20°C/100kHz	Maximum allowable ripple current at 105°C /100kHz
50	180	8X20	0.075	980
	220	10X16	0.069	1100
	270	10X20	0.050	1,300
	390	10X25	0.043	1,600
	470	10X30	0.038	1,820
	470	13X20	0.034	1,820
	680	13X25	0.030	2,100
	820	13X30	0.025	2,450
	820	16X21	0.028	2,350
	1,000	13X35	0.021	2,800
	1,000	18X21	0.025	2,600
	1,200	13X40	0.019	3,100
	1,200	16X26	0.024	2,750
	1,500	16X32	0.019	3,150
	1,500	18X26	0.021	2,890
	1800	16X35	0.016	3550
	2,200	16X40	0.014	3900
	2,200	18X32	0.014	3,800
2,700	18X35	0.013	4,100	
63	18	5X11	0.50	220
	33	6.3X11	0.25	350
	56	8X12	0.16	530
	82	8X16	0.12	700
	120	8X20	0.085	880
	120	10X13	0.11	725
	180	10X16	0.073	1,050
	220	10X20	0.055	1,300
	330	10X25	0.045	1,550
	390	10X30	0.040	1,780
	390	13X20	0.036	1,780
	560	13X25	0.030	2100
	680	13X30	0.026	2415
	680	16X21	0.028	2,250
	820	13X35	0.022	2,700
	820	18X21	0.028	2,500
	1,000	13X40	0.020	3,000
	1,000	16X26	0.025	2,730
	1,200	16X32	0.020	3,000
	1,200	18X26	0.022	2,800
	1,500	16X35	0.018	3,200
1,500	18X32	0.018	3,300	
1,800	16X40	0.016	3,590	
1,800	18X35	0.017	3,570	
2,200	18X40	0.016	3,670	
80	12	5X11	0.80	163
	22	6.3X11	0.43	260
	39	8X12	0.18	462

WV(V)	Cap. (μF)	Case size ΦD×L (mm)	Impedance (Ω) max. 20°C/100kHz	Maximum allowable ripple current at 105°C /100kHz
80	56	8X16	0.14	585
	82	8X20	0.11	735
	82	10X13	0.14	624
	120	10X16	0.10	780
	180	10X20	0.075	1,040
	220	10X25	0.060	1,170
	270	10X30	0.053	1,350
	270	13X20	0.048	1,430
	390	13X25	0.039	1,620
	470	13X30	0.033	1,950
	470	16X21	0.036	1,750
	560	13X35	0.026	2,250
	560	18X21	0.032	2,100
	680	13X40	0.024	2,450
	680	16X26	0.028	2,250
	820	16X32	0.022	2400
	820	18X26	0.027	2270
	1,000	16X35	0.020	2,600
	1,200	16X40	0.018	2,900
	1,200	18X32	0.020	2,550
	1,500	18X35	0.018	3,050
100	6.8	5X11	0.80	163
	15	6.3X11	0.43	276
	27	8X12	0.18	462
	39	8X16	0.14	585
	56	8X20	0.11	735
	56	10X13	0.14	625
	82	10X16	0.10	780
	100	10X20	0.075	1,040
	120	10X25	0.060	1,170
	150	10X30	0.053	1350
	180	13X20	0.048	1430
	220	13X25	0.039	1,620
	270	13X30	0.033	1,950
	270	16X21	0.036	1,750
	330	16X26	0.028	2,250
	390	13X35	0.026	2,250
	390	18X21	0.032	2,100
	470	13X40	0.024	2,450
	470	16X32	0.022	2,400
	560	16X35	0.020	2,600
	560	18X26	0.027	2,270
680	16X40	0.018	2,900	
680	18X32	0.020	2,550	
820	18X35	0.018	3,050	
1000	18X40	0.017	3,510	

※铝电解电容器由于在纹波电流叠加时自我发热、温度上升而老化，中心温度每升温5°C寿命减少一半。要想保持长寿命请在使用过程中降低纹波电流
 The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.