

## RG series

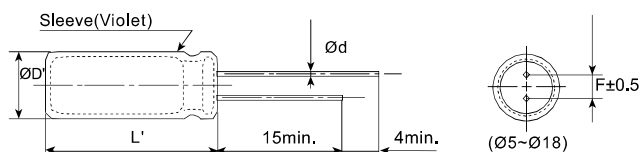
- “GBL” system, high reliability
- Low impedance and high ripple current
- Endurance: 2,000 ~ 8,000 hours at 105°C
- Compliant to AEC-Q200
- RoHS Compliant



### SPECIFICATIONS

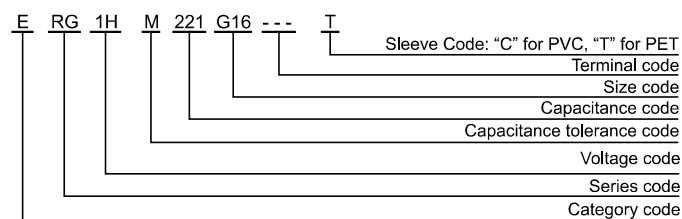
Items	Characteristics																				
Category Temperature Range	-55~+105°C																				
Rated Voltage Range	6.3~100 V <sub>dc</sub>																				
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)																				
Leakage Current	I ≤ 0.01CV or 3μA, whichever is greater. Where, I: Max.leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage (V) (at 20°C after 2 minutes)																				
Dissipation Factor (tanδ)	<table border="1"> <tr> <td>Rated Voltage(V<sub>dc</sub>)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Dissipation Factor (Max.)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> </tr> </table>	Rated Voltage(V <sub>dc</sub> )	6.3	10	16	25	35	50	63	100	Dissipation Factor (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.08		
	Rated Voltage(V <sub>dc</sub> )	6.3	10	16	25	35	50	63	100												
Dissipation Factor (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.08													
When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)																					
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V <sub>dc</sub> )	6.3	10	16	25	35	50	63	100												
	Z(-25°C)/Z(+20°C)	4	3			2															
	Z(-55°C)/Z(+20°C)	8	6	4		3															
		(at 120Hz)																			
Endurance	The specifications listed below shall be satisfied when the capacitors are restored to 20°C after DC voltage plus rated ripple current is applied for a specified period of time at 105°C.																				
	Capacitance Change	≤±25% of the initial value						<table border="1"> <tr> <td>Dia.</td> <td>Load life (hours)</td> </tr> <tr> <td>ØD ≤ 6.3</td> <td>2,000</td> </tr> <tr> <td>ØD = 8</td> <td>3,000</td> </tr> <tr> <td>ØD = 10</td> <td>5,000</td> </tr> <tr> <td>ØD = 12.5</td> <td>7,000</td> </tr> <tr> <td>ØD ≥ 16</td> <td>8,000</td> </tr> </table>		Dia.	Load life (hours)	ØD ≤ 6.3	2,000	ØD = 8	3,000	ØD = 10	5,000	ØD = 12.5	7,000	ØD ≥ 16	8,000
	Dia.	Load life (hours)																			
	ØD ≤ 6.3	2,000																			
	ØD = 8	3,000																			
ØD = 10	5,000																				
ØD = 12.5	7,000																				
ØD ≥ 16	8,000																				
Dissipation Factor	≤200% of the initial specified value																				
Leakage Current	≤The initial specified value																				
									(at 120Hz)												
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20 °C after leaving them under no load at 105°C for 1,000 hours.																				
	Capacitance Change	≤±25% of the initial value																			
	Dissipation Factor	≤200% of the initial specified value																			
	Leakage Current	≤200% of the initial specified value																			

### DIMENSIONS[mm]



ØD	5	6.3	8	10	12.5	16	18
Ød	0.5	0.5	0.5	0.6	0.6	0.6	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ØD'	ØD+0.5max.						
L'	L+2max.						

### PART NUMBERING SYSTEM



### RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Freq.(Hz)	120	1k	10k	100k
Cap.<220	0.40	0.75	0.90	1.00
220≤Cap.<680	0.50	0.85	0.94	1.00
680≤Cap.<2200	0.60	0.87	0.95	1.00
2200≤Cap.<4700	0.75	0.90	0.95	1.00
Cap.≥4700	0.85	0.95	0.98	1.00

**RG series**

■ STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Size ΦDxL (mm)	Impedance (Ω <sub>max</sub> /20°C, 100kHz)	Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part Number
6.3	100	5×11	0.650	155	ERG0JM101D11---T
	330	6.3×11	0.420	290	ERG0JM331E11---T
	470	8×11	0.180	400	ERG0JM471F11---T
	560	8×11	0.170	460	ERG0JM561F11---T
	680	8×12	0.170	550	ERG0JM681F12---T
	820	8×16	0.095	730	ERG0JM821F16---T
	1000	8×16	0.090	730	ERG0JM102F16---T
	1200	8×20	0.080	810	ERG0JM122F20---T
	1500	10×20	0.052	1220	ERG0JM152G20---T
	2200	10×20	0.045	1440	ERG0JM222G20---T
	2700	10×30	0.037	1690	ERG0JM272G30---T
	3300	12.5×20	0.038	1660	ERG0JM332W20---T
	3900	12.5×25	0.030	1950	ERG0JM392W25---T
	4700	12.5×30	0.025	2310	ERG0JM472W30---T
	5600	12.5×35	0.022	2510	ERG0JM562W35---T
	6800	12.5×40	0.017	2870	ERG0JM682W40---T
	8200	16×30	0.019	3010	ERG0JM822L30---T
10000	16×35	0.017	3150	ERG0JM103L35---T	
10	100	5×11	0.580	175	ERG1AM101D11---T
	220	6.3×11	0.280	290	ERG1AM221E11---T
	330	8×11	0.280	410	ERG1AM331F11---T
	470	8×12	0.130	555	ERG1AM471F12---T
	560	8×16	0.120	675	ERG1AM561F16---T
	680	8×16	0.120	750	ERG1AM681F16---T
	820	8×20	0.085	875	ERG1AM821F20---T
	1000	10×16	0.100	1050	ERG1AM102G16---T
	1500	10×20	0.080	1440	ERG1AM152G20---T
	2200	12.5×20	0.038	1660	ERG1AM222W20---T
	3300	12.5×25	0.038	1950	ERG1AM332W25---T
	3900	12.5×30	0.034	2310	ERG1AM392W30---T
	4700	12.5×35	0.022	2510	ERG1AM472W35---T
	5600	12.5×40	0.017	2870	ERG1AM562W40---T
	6800	16×30	0.019	3010	ERG1AM682L30---T
	8200	16×35	0.017	3150	ERG1AM822L35---T
	10000	16×40	0.015	3710	ERG1AM103L40---T
16	47	5×11	0.950	120	ERG1CM470D11---T
	68	6.3×11	0.560	220	ERG1CM680E11---T
	100	6.3×11	0.520	255	ERG1CM101E11---T
	150	8×11	0.350	350	ERG1CM151F11---T
	220	8×11	0.280	405	ERG1CM221F11---T
	330	8×12	0.180	555	ERG1CM331F12---T
	470	8×16	0.120	730	ERG1CM471F16---T
	560	8×20	0.085	810	ERG1CM561F20---T
	680	8×20	0.080	1050	ERG1CM681F20---T
	1000	10×16	0.069	1220	ERG1CM102G16---T
	2200	12.5×25	0.055	1950	ERG1CM222W25---T
	3300	12.5×35	0.028	2510	ERG1CM332W35---T
	3900	12.5×40	0.017	2870	ERG1CM392W40---T
	4700	16×30	0.019	3010	ERG1CM472L30---T
	5600	16×35	0.017	3150	ERG1CM562L35---T
	6800	16×40	0.015	3710	ERG1CM682L40---T
	25	47	5×11	0.950	175
68		6.3×11	0.650	230	ERG1EM680E11---T
100		6.3×11	0.370	290	ERG1EM101E11---T
150		6.3×11	0.370	290	ERG1EM151E11---T
220		8×12	0.240	640	ERG1EM221F12---T
330		8×16	0.120	730	ERG1EM331F16---T
470		10×16	0.080	1050	ERG1EM471G16---T
560		10×20	0.065	1220	ERG1EM561G20---T
680		10×20	0.064	1220	ERG1EM681G20---T
820		10×25	0.060	1440	ERG1EM821G25---T
1000		12.5×20	0.058	1660	ERG1EM102W20---T
1500		12.5×25	0.048	1950	ERG1EM152W25---T
2200		12.5×35	0.030	2510	ERG1EM222W35---T
3300		16×30	0.036	3010	ERG1EM332L30---T
4700		16×40	0.018	3710	ERG1EM472L40---T

RG series

STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Size ΦDxL (mm)	Impedance (Ω <sub>max</sub> /20°C, 100kHz)	Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part Number
35	10	5×11	1.500	100	ERG1VM100D11---T
	22	5×11	1.300	160	ERG1VM220D11---T
	33	5×11	1.000	210	ERG1VM330D11---T
	47	6.3×11	0.580	215	ERG1VM470E11---T
	100	6.3×12	0.400	280	ERG1VM101E12---T
	150	8×12	0.240	640	ERG1VM151F12---T
	220	8×16	0.120	730	ERG1VM221F16---T
	330	10×16	0.100	1050	ERG1VM331G16---T
	470	10×20	0.065	1220	ERG1VM471G20---T
	560	10×25	0.060	1440	ERG1VM561G25---T
	680	10×30	0.058	1690	ERG1VM681G30---T
	820	12.5×25	0.035	1938	ERG1VM821W25---T
	1000	12.5×25	0.030	1950	ERG1VM102W25---T
	1200	12.5×30	0.028	2310	ERG1VM122W30---T
	1500	12.5×35	0.022	2510	ERG1VM152W35---T
	2200	16×30	0.028	3010	ERG1VM222L30---T
3300	16×40	0.024	3710	ERG1VM332L40---T	
3900	18×40	0.023	3800	ERG1VM392M40---T	
50	10	5×11	2.000	105	ERG1HM100D11---T
	22	5×11	1.600	155	ERG1HM220D11---T
	33	6.3×11	0.720	215	ERG1HM330E11---T
	47	6.3×11	0.570	220	ERG1HM470E11---T
	68	8×11	0.350	355	ERG1HM680F11---T
	100	8×12	0.350	485	ERG1HM101F12---T
	150	8×16	0.160	635	ERG1HM151F16---T
	220	10×16	0.130	1050	ERG1HM221G16---T
	330	10×25	0.110	1250	ERG1HM331G25---T
	470	12.5×20	0.090	1480	ERG1HM471W20---T
	560	12.5×25	0.080	1840	ERG1HM561W25---T
	680	12.5×30	0.039	2220	ERG1HM681W30---T
	820	12.5×35	0.033	2290	ERG1HM821W35---T
	1000	16×25	0.034	2240	ERG1HM102L25---T
	1200	16×30	0.028	2700	ERG1HM122L30---T
	1500	16×35	0.025	2800	ERG1HM152L35---T
2200	18×35	0.023	3100	ERG1HM222M35---T	
2700	18×40	0.020	3400	ERG1HM272M40---T	
63	10	5×11	2.500	110	ERG1JM100D11---T
	22	6.3×11	1.250	240	ERG1JM220E11---T
	47	8×12	0.490	375	ERG1JM470F12---T
	68	8×12	0.480	405	ERG1JM680F12---T
	100	8×16	0.550	535	ERG1JM101F16---T
	100	10×13	0.550	540	ERG1JM101G13---T
	150	8×20	0.550	690	ERG1JM151F20---T
	180	10×20	0.180	890	ERG1JM181G20---T
	220	10×25	0.130	1050	ERG1JM221G25---T
	330	12.5×20	0.110	1290	ERG1JM331W20---T
	390	12.5×25	0.100	1720	ERG1JM391W25---T
	470	12.5×30	0.055	2090	ERG1JM471W30---T
	470	16×20	0.059	1770	ERG1JM471L20---T
	680	12.5×35	0.053	2350	ERG1JM681W35---T
	680	16×25	0.060	2290	ERG1JM681L25---T
	680	18×20	0.060	2290	ERG1JM681M20---T
820	12.5×40	0.056	2560	ERG1JM821W40---T	
1000	16×30	0.050	2680	ERG1JM102L30---T	
1200	16×40	0.046	2850	ERG1JM122L40---T	
100	10	6.3×11	3.680	110	ERG1KM100E11---T
	22	6.3×12	3.500	180	ERG1KM220E12---T
	47	10×13	1.500	395	ERG1KM470G13---T
	100	10×16	1.250	550	ERG1KM101G16---T
	220	12.5×25	0.650	900	ERG1KM221W25---T
	330	16×25	0.400	1360	ERG1KM331L25---T
	470	16×30	0.290	1650	ERG1KM471L30---T
680	18×35	0.280	2350	ERG1KM681M35---T	

Radial Type

※ Specifications subject to change without notice.