

Features

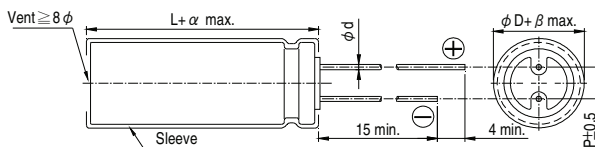
- 105°C, for general purposes
- 8φ ~ 18φ with large permissible ripple current
- Slim type included
- RoHS compliance



Specifications

Items	Performance					
Category Temperature Range	400V		420 ~ 450V			
	-40°C ~ +105°C		-25°C ~ +105°C			
Capacitance Tolerance	±20% (at 120 Hz, 20°C)					
Leakage Current (at 20°C)	Time		after 5 minutes			
	Leakage Current		CV ≤ 1,000 I = 0.03CV + 15(μA)	CV > 1,000 I = 0.02CV + 25(μA)		
Where, C = rated capacitance in μF, V = rated DC working voltage in V						
Tanδ (at 120 Hz, 20°C)	Rated Voltage	400	420	450		
	Tanδ (max)	0.24	0.24	0.24		
Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below.					
	Rated Voltage	400	420	450		
Impedance Ratio	Z(-25°C)/Z(+20°C)	5	6	6		
	Z(-40°C)/Z(+20°C)	6	-	-		
Endurance	Test Time	2,000 Hrs				
	Capacitance Change	Within ±20% of initial value				
	Tanδ	Less than 200% of specified value				
	Leakage Current	Within specified value				
* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 2,000 hours at 105°C.						
Shelf Life Test	Test Time	1,000 Hrs				
	Capacitance Change	Within ±20% of initial value				
	Tanδ	Less than 200% of specified value				
	Leakage Current	Within specified value				
* The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).						
Ripple Current and Frequency Multipliers	Frequency (Hz)	60	120	500	1k	10k up
	Multipliers	0.8	1.00	1.25	1.45	1.50

Diagram of Dimensions



Lead Spacing and Diameter

	Unit: mm				
φ D	8	10	12.5	16	18
P	3.5	5.0	5.0	7.5	7.5
φ d	0.6			0.8	
α	2.0				
β	0.5				

Dimension and Permissible Ripple Current

Dimension: $\phi D \times L$ (mm)
Ripple Current: mA/rms at 105°C

Rated Voltage (Vdc)	Cap. (μF)	8 φ		10 φ		12.5 φ		16 φ		18 φ						
		φ D×L	Ripple Current 120 Hz	Ripple Current 100k Hz	φ D×L	Ripple Current 120 Hz	Ripple Current 100k Hz	φ D×L	Ripple Current 120 Hz	Ripple Current 100k Hz	φ D×L	Ripple Current 120 Hz	Ripple Current 100k Hz			
400V (2G)	15	8×30	190	285												
	22	8×35	250	375												
	27	8×40	300	450	10×30	245	370									
	33	8×45	350	525	10×35	295	445									
	39	8×50	390	585	10×40	345	515									
	47				10×45	400	600									
	56				10×50	450	675	12.5×30	470	705						
	68							12.5×35	540	810						
	82							12.5×40	620	930						
	100															
	120									16×35.5 16×40	800 840	1,200 1,260				
	150									16×45	940	1,410	18×35.5	920	1,380	
180									16×50	1,050	1,575	18×40	1,060	1,590		
220												18×45	1,200	1,800		
420V (2P)	15	8×30	195	293												
	22	8×35	255	383												
	27	8×45	320	480	10×30	245	370									
	33	8×50	370	555	10×35	295	445									
	39				10×40	345	515									
	47				10×45	400	600									
	56				10×50	450	675	12.5×30	470	705						
	68							12.5×35	540	810						
	82							12.5×45	630	945						
	100							12.5×50	730	1,095	16×35.5	730	1,095			
	120										16×40 16×45	840 885	1,260 1,330	18×35.5	850	1,275
	150										16×50	1030	1,545	18×35.5 18×40	920 960	1,380 1,440
180												18×45	1,100	1,650		
220												18×50	1,220	1,830		
450V (2W)	15	8×30	195	293												
	22	8×40	270	405	10×30	225	330									
	27	8×45	320	480	10×35	265	400									
	33	8×50	370	555	10×40	315	475									
	39				10×45	360	545	12.5×30	400	600						
	47				10×50	420	625	12.5×35	460	690						
	56							12.5×40	520	780						
	68							12.5×45	580	870						
	82							12.5×50	660	990	16×35.5	660	990			
	100										16×40	750	1,125			
	120										16×45	840	1,260	18×35.5	820	1,230
	150										16×50	980	1,470	18×45	995	1,490
180													18×50	1,140	1,710	

Remark: Other sizes and specification are available, please contact us for detail.

Part Numbering System

RGL Series 22μF ±20% 450V Bulk Package Gas Type 10 φ ×30L

RGL **220** **M** **2W** **BK** - **1030**

Series Name Capacitance Capacitance Tolerance Rated Voltage Lead Configuration and Package Rubber Type Case Size

XX
S = Standard
KS = AEC-Q200 Qualified, Safety Critical Application
LS = AEC-Q200 Qualified, Non-Safety Critical Application