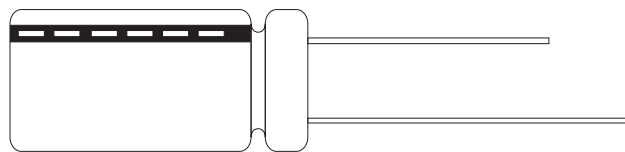


FEATURES

- High Temperature, 105°C.
- For general purpose
- Replaces RG & RHG Series.

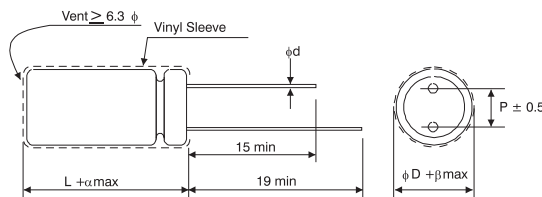


SPECIFICATIONS

Items	Performance															
Life	at 105 °C 2000 Hours															
Operating Temp.	-40 °C ~ +105 °C															
Capacitance Tolerance	+20% (at 120Hz, 20 °C)															
Leakage Current (at 20 °C)	Rated Voltage	< 100V							> 100V							
	Time	after 2 minutes							after 5 minutes							
	Leakage Current	I = 0.01CV or 3 (μA) whichever is greater							CV ≤ 1000 I = 0.03CV+15 (μA)			CV > 1000 I = 0.02CV+25 (μA)				
Where C = rated capacitance in μF. V = rated DC working voltage in V.																
Dissipation Factor (Tan δ at 120Hz, 20°C)	Rated Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	
	Tan δ (max)	0.23	0.20	0.16	0.14	0.12	0.10	0.09	0.08	0.12	0.14	0.17	0.20	0.25	0.25	
When the capacitance exceeds 1,000 μF, 0.02 shall be the added every 1,000 μF increase.																
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.															
	Rated Voltage		6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
	Impedance Ratio	Z (-25°C) / Z (+20°C)	D < 16	4	3	3	2	2	2	2	3	6	8	12	14	16
		D ≥ 16	6	4	4	3	3	3	3	3	4	8	10	16	18	20
Z (-40°C) / Z (+20°C)	D < 16	8	6	6	4	4	3	3	3	4	8	10	16	18	20	
	D ≥ 16	12	10	8	8	8	8	8	6	6	8	10	16	18	20	
Load Life Test	Test Time	2,000 hrs														
	Capacitance Change	Within ± 20% of initial value														
	Dissipation Factor	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 hrs at 105 °C.															
Shelf Life Test	Test Time	1,000 hours														
	Capacitance Change	Within + 20% of initial value														
	Dissipation Factor	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 hrs at 105 °C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements for 160 ~ 450V (Refer to JIS C 5101-4 4.1).															
Ripple Current & Frequency Multipliers	Freq. (Hz)	60	120	500	1k	10k up										
	Cap. (μF)															
	Under 100	0.70	1.00	1.30	1.40	1.50										
	100 < C ≤ 1,000	0.75	1.00	1.20	1.30	1.35										
1,000 up above	0.80	1.00	1.10	1.12	1.15											
Other Standards	JIS C 5101-4															

LEAD SPACING AND DIAMETER

D	5	6.3	8	10	12.5	16	18	22	25
P	2.0	2.5	3.5	5.0	5	7.5	7.5	10	12.5
d	0.5		0.6			0.8		1.0	
	1.0			1.5			2.0		
	0.5								



PART NUMBER EXAMPLE

RGA 221 M 1H BK 100 200

DIMENSIONS AND PERMISSIBLE RIPPLE CURRENT

Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/RMS at 120Hz 105°C

V.DC		6.3V (0J)				10V (1A)				16V (1C)				25V (1E)			
F	Contents	D x L	mA	*D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA
4.7	4R7													5 x 11	26		
10	100											5 x 11	35			5 x 11	43
22	220					5 x 11	49			5 x 11	58			5 x 11	62		
33	330	5 x 11	54			5 x 11	60			5 x 11	71			5 x 11	76		
47	470	5 x 11	65			5 x 11	76			5 x 11	85			5 x 11	97		
100	101	5 x 11	95			5 x 11	105			6.3 x 11	133	5 x 11	110	6.3 x 11	142		
220	221	6.3 x 11	160	5 x 11	140	6.3 x 11	175			8 x 11.5	215	6.3 x 11	190	8 x 11.5	236		
330	331	8 x 11.5	195	6.3 x 11	190	8 x 11.5	245	6.3 x 11	200	8 x 11.5	270			10 x 12.5	335	8 x 11.5	310
470	471	8 x 11.5	270	6.3 x 11	230	8 x 11.5	290			10 x 12.5	370	8 x 11.5	310	10 x 16	440	10 x 12.5	380
1,000	102	10 x 12.5	460	8 x 11.5	380	10 x 16	550	10 x 12.5	460	10 x 20	640	10 x 16	560	12.5 x 20	770	10 x 20	680
2,200	222	10 x 20	810	10 x 16	690	12.5 x 20	860	10 x 20	760	12.5 x 25	1,000	12.5 x 20	920	16 x 25	1,170	12.5 x 25.0	1,110
3,300	332	12.5 x 20	960	10 x 20	840	12.5 x 20	1,100			16 x 25	1,300	12.5 x 25	1,170	16 x 31.5	1,460	16 x 25	1,440
4,700	472	16 x 25	1,330	12.5 x 20	1,090	16 x 25	1,400	12.5 x 25	1,260	16 x 32	1,600	16 x 25	1,480	18 x 35.5	1,780	16 x 31.5	1,710
6,800	682	16 x 25	1,640	12.5 x 25	1,460	16 x 31.5	1,880	16 x 25	1,690	18 x 35.5	2,170	16 x 31.5	1,930	18 x 40	2,280	18 x 35.5	2,160
10,000	103	16 x 31.5	2,200	16 x 25	1,990	16 x 35.5	2,400	16 x 31.5	2,120	18 x 35.5	2,640	18 x 31.5	2,330			22 x 40	2,720
22,000	223	18 x 40	3,270	18 x 35.5	2,930	18 x 40	3,100					22 x 40	3,460				

V.DC		35V (1V)				50V (1H)				63V (1J)				100V (2A)			
F	Contents	D x L	mA	*D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA
0.1	0R1					5 x 11	3			5 x 11	3.5			5 x 11	4		
0.2	R22					5 x 11	5			5 x 11	5.1			5 x 11	6		
0.3	R33					5 x 11	6			5 x 11	7.5			5 x 11	8		
0.5	R47					5 x 11	7			5 x 11	9			5 x 11	9		
1	010					5 x 11	13			5 x 11	15			5 x 11	15		
2.2	2R2					5 x 11	20			5 x 11	30			5 x 11	30		
3.3	3R3			x		5 x 11	30			5 x 11	31			5 x 11	31		
4.7	4R7	5 x 11	30	x		5 x 11	33			5 x 11	36			6.3 x 11	40		
10	100	5 x 11	46	x		5 x 11	50			5 x 11	54			8 x 11.5	66	6.3 x 11	54
22	220	5 x 11	71	x		5 x 11	78			6.3 x 11	86			8.0 x 11.5	99	6.3 x 11	93
33	330	6.3 x 11	90	5 x 11	75	6.3 x 11	96	5 x 11	90	8 x 11.5	114	6.3 x 11	100	10 x 12.5	148	8.0 x 11.5	130
47	470	6.3 x 11	110	5 x 11	90	6.3 x 11	120			8 x 11.5	141	6.3 x 11	130	10 x 16	180	10 x 12.5	165
100	101	8 x 11.5	180	6.3 x 11	150	8 x 11.5	188			10 x 12.5	235			12.5 x 20	320	10 x 20.0	265
220	221	10 x 12.5	300	8 x 11.5	270	10 x 16	300	10 x 12.5	240	10 x 20	450	10 x 16	335	16 x 25	570	12.5 x 25.0	440
330	331	10 x 16	400	10 x 12.5	350	10 x 20	460	10 x 16	410	12.5 x 20	540	10 x 20	510	16 x 31.5	700	16 x 25	540
470	471	10 x 20	520	10 x 16	460	12.5 x 25	610	10 x 20	530	12.5 x 25	720	12.5 x 20	640	18 x 35.5	880	16 x 31.5	715
1,000	102	12.5 x 25	920	12.5 x 20	810	16 x 25	1,080	12.5 x 25	950	16 x 31.5	1,210	16 x 25	930	22 x 40	1,760	18 x 40	985
2,200	222	16 x 31.5	1,340	16 x 25	1,260	18 x 35.5	2,120	16 x 35.5	1,470	18 x 40	2,340						
3,300	332	16 x 35.5	1,610	16 x 31.5	1,420	22 x 40	2,290	18 x 35.5	1,770	22 x 40	2,510						
4,700	472	18 x 40	1,920	18 x 35.5	1,900	25 x 40	2,610	22 x 40	2,340	25 x 40	3,000						

V.DC		160V (2C)				200V (2D)				250V (2E)				350V (2V)			
F	Contents	D x L	mA	*D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA
0.47	R47	6.3 x 11	13	5 x 11	11	6.3 x 11	14	5 x 11	12	8 x 11.5	18	5 x 11	11	8 x 11.5	18	8 x 11	16
1	010	6.3 x 11	20	5 x 11	17	6.3 x 11	21	5 x 11	18	8 x 11.5	27	5 x 11	16	8 x 11.5	27	8 x 11	23
2.2	2R2	6.3 x 11	29	5 x 11	25	8 x 11.5	37	6.3 x 11	30	8 x 11.5	41	6.3 x 11	35	10 x 16	53	10 x 11.5	41
3.3	3R3	8 x 11.5	42	6.3 x 11	36	8 x 11.5	45	6.3 x 11	39	8 x 11.5	50	6.3 x 11	40	10 x 12.5	59	10 x 11.5	47
4.7	4R7	8 x 11.5	50	6.3 x 11	43	8 x 11.5	54	6.3 x 11	43	10 x 16	93	8 x 11.5	60	10 x 16	78	10 x 12.5	65
10	100	10 x 12.5	87	8 x 11.5	73	10 x 20	115	10 x 12.5	94	10 x 16	115	10 x 12.5	92	10 x 20	125	10 x 16	105
22	220	10 x 20	158	10 x 16	135	10 x 20	170	10 x 16	142	12.5 x 20	255	10 x 20	215	12.5 x 25	235	12.5 x 20	210
33	330	12.5 x 20	225	10 x 20	190	12.5 x 25	265	12.5 x 20	240	12.5 x 25	348	12.5 x 20	315	16 x 31.5	365	16 x 25	325
47	470	12.5 x 25	295	12.5 x 20	265	12.5 x 25	315	12.5 x 20	250	16 x 25	468	12.5 x 25	350	16 x 31.5	395	16 x 25	365
100	101	16 x 25	485	12.5 x 25	425	16 x 35.5	565	16 x 25	485	16 x 35.5	610	16 x 31.5	530	18 x 40	575	18 x 35.5	505
220	221	18 x 35.5	750	16 x 31.5	660	18 x 40	885	18 x 35.5	835	22 x 40	945						
330	331	18 x 40	865	18 x 35.5	820												

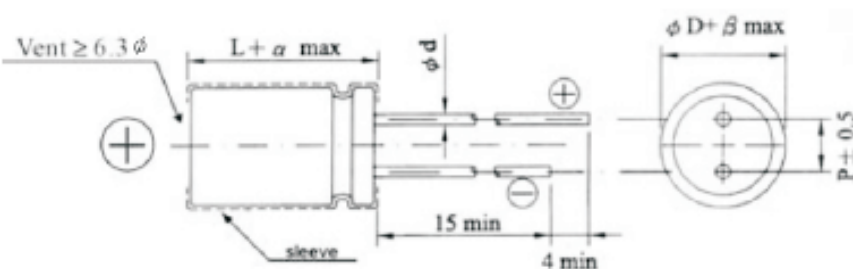
V.DC		400V (2G)				450V (2W)			
F	Contents	D x L	mA	*D x L	mA	D x L	mA	D x L	mA
0.47	R47	8.0 x 11.5	18	6.3 x 11	15	10 x 12.5	22	8 x 11.5	18
1	010	8.0 x 11.5	27	6.3 x 11	21	10 x 12.5	32	8 x 12	27
2.2	2R2	10.0 x 12.5	48	8 x 11.5	39	10 x 12.5	48	8 x 12	39
3.3	3R3	10 x 16	65	8 x 11.5	47	10 x 16	65	10 x 13	55
4.7	4R7	10 x 20	86	10 x 12.5	70	10 x 20	86	10 x 16	75
10	100	12.5 x 20	145	10 x 20	125	12.5 x 25	160	12.5 x 20.0	145
22	220	16 x 25	265	12.5 x 25	235	16 x 25	265	16 x 20	245
33	330	16 x 31.5	360	16 x 25	325	16 x 31.5	360	16 x 25	325
47	470	16 x 35.5	420	16 x 31.5	390	18 x 40	515	16 x 35.5	420
100	101	22 x 40	595	18 x 40	530	22 x 45	625	22 x 40	595

* = Flat (non-vented) rubber bung. Other units are made with raised (vented) rubber bung.

PART NUMBER EXAMPLE RGA 221 M 1H BK 100 200

Low-Profile Size
LEAD SPACING AND DIAMETER

D	12.5	16	18
P	5.0	7.5	7.5
d	0.6	0.8	
		1.5	
		0.5	



DIMENSIONS AND PERMISSIBLE RIPPLE CURRENT

Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/RMS at 120Hz 105°C

V.DC		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)	
F	Contents	D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA	D x L	mA
470	471											12.5 x 16	425
1,000	102							12.5 x 16	590	12.5 x 16	600	16 x 16	535
										16 x 16	720	16 x 20	830
2,200	222			13 x 16	690	16 x 16	830	16 x 20	970	18 x 20	1,110		
3,300	332	12.5 x 16	700	16 x 16	940	16 x 16	950	18 x 20	1,220	18 x 25	1,570		
						16 x 20	1,050						
4,700	472	16 x 16	1,010	16 x 16	1,060	16 x 20	1,185	18 x 25	1,470				
				16 x 20	1,120	18 x 20	1,260						
6,800	682	16 x 20	1,190	16 x 20	1,270	18 x 25	1,560						
				18 x 20	1,330								
10,000	103	16 x 20	1,340	18 x 25	1,700								
		18 x 20	1,440										

V.DC		160V (2C)		200V (2D)		250V (2E)		400V (2G)	
F	Contents	D x L	mA	D x L	mA	D x L	mA	D x L	mA
10	101							12.5 x 16	120
								16 x 16	150
22	220					12.5 x 16	200	16 x 20	220
33	330			12.5 x 16	215	16 x 16	250	18 x 20	270
				16 x 16	250				
47	470	12.5 x 16	230	16 x 16	275	16 x 20	300	18 x 25	350
		16 x 16	275	16 x 20	300				
68	680	16 x 20	330	16 x 20	330	18 x 20	350		
				18 x 20	350				
100	101	16 x 20	395	18 x 25	420				
		18 x 20	420						
150	151	18 x 25	510						

PART NUMBER EXAMPLE RGA 221 M 1H BK 100 200