

RGF Series, Radial Aluminum Electrolytic Capacitors, low impedance, High ripple current

◎ 105°C, 2000~4000hours, Low impedance.

◎ Used in electronic equipment whose long life would be required.

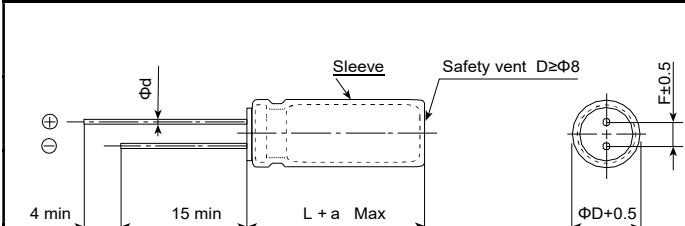
How to order

RGF	338	M	016	01250250	050	B	000	-	Additional characters may be added for special requirements
Type	Capacitance code	Tolerance	Rated Voltage	Size Code	Pitch	Package	Lead Length		
RGF RRL RGR RGL RB2 RM2	pF Code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) 107 = 100uF 108 = 1000uF 338 = 3300uF	K: -10%~+10% L: -15%~+15% M: -20%~+20% P: 0%~+100% Q: -10%~+30% R: 0%~+20% T: -10%~+50% U: -10%~+75% V: -10%~+20% H: -5%~+20% Y: 0%~+30%	Code 016: 16VDC For DC Voltage 006: 6.3VDC 016: 16VDC 035: 35VDC 200: 200VDC 450: 450VDC	Code 01250250: Size 12.5*25mm 00500110: Size 5*11mm 00630110: Size 6.3*11mm 01250250: Size 12.5*25mm 01600250: Size 16*25mm	Axial: 000 2.0: 020 2.5: 025 3.5: 035 5.0: 050 7.5: 075	B: BULK T: AMMO TAPED	Standard: 000 Cut Lead Length: 3.0mm: 030 3.5mm: 035 4.0mm: 040 4.5mm: 045 5.0mm: 050		

Specifications

Items	Characteristics
Operating temperature range	- 40°C~+105°C
Rated voltage range	6.3V~100V DC
Nominal capacitance tolerance	15μF~4700μF
Capacitance tolerance	±20% (120Hz: 20°C)
leakage current (20°C)	$I \leq 0.01CV$ or 3μA (whichever is greater) after 2 minute
	I: Leakage current C: Nominal capacitance V: Rated voltage
Dissipation factor (120Hz: 20°C)	Rated voltage(V)
	tgδ(MAX)
Low temperature characteristics (Impedance ratio max. at 120Hz)	Rated voltage(v)
	Z-25°C/Z+20°C
	Z-40°C/Z+20°C
	After applying rated for 2000~4000 ho at 105°C then resumed 16 hours:
Load Life	ΦD
	Load life
	Capacitance change
	tgδ
Shelf Life	Leakage current
	After storage for 1000 hours at 105°C then resumed 16 hours:
	Capacitance change
	tgδ
	Leakage current

Multiplier for Ripple Current vs. Temperature:



φD	5	6	8	10	13	16	18
F±0.5	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd±0.05	0.5	0.5	0.5	0.6	0.6	0.8	0.8
α	1.0			1.5		2.0	

Multiplier for Ripple Current vs. Frequency:

CAP (uF)\Hz	120	1K	10K	100K
CAP < 180	0.4	0.75	0.9	1.00
180 ≤ CAP < 1000	0.50	0.85	0.94	1.00
CAP ≥ 1000	0.75	0.87	0.95	1.00

Multiplier for Ripple Current vs. Temperature:

Temperature °C	~55	60	70	85	105
Factor	2.23	2.17	2.00	1.75	1.00

Standard Ratings

Voltage (Code)		6.3V (006)			10V (010)			16V (016)		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
10	106							4 x 5	5	50
15	156							4 x 7	3.3	70
								5 x 5	2.6	80
22	226	4 x 5	5	50	4 x 7	3.3	70	5 x 7	1.7	110
					5 x 5	2.6	80	5 x 5	2.6	80
33	336	5 x 5	2.6	80	5 x 5	2.6	80	6.3 x 5	1.3	115
		5 x 7	1.7	110	5 x 7	1.7	110	6.3 x 7	0.8	160
47	476	5 x 5	2.6	80	6.3 x 5	1.3	115	6.3 x 5	1.3	115
		5 x 7	1.7	110	6.3 x 7	0.8	160	6.3 x 7	0.8	160
68	686	6.3 x 5	1.3	115	6.3 x 7	0.8	160	8 x 7	0.5	200
		6.3 x 7	0.8	160						
100	107	6.3 x 5	1.3	115	8 x 7	0.5	200	6.3 x 11	0.22	340
		6.3 x 7	0.8	160				8 x 7	0.5	200
120	127							6.3 x 11	0.22	340
150	157	8 x 7	0.5	200	6.3 x 11	0.22	340	6.3 x 11	0.22	340
					8 x 7	0.5	200	8 x 12	0.13	640
180	187	6.3 x 11	0.22	340	6.3 x 11	0.22	340	6.3 x 11	0.22	340
								8 x 12	0.13	640
220	227	8 x 7	0.5	200	6.3 x 11	0.22	340	6.3 x 11	0.22	340
		6.3 x 11	0.22	340				8 x 12	0.13	640
270	277	6.3 x 11	0.22	340	6.3 x 11	0.22	340	8 x 12	0.13	640
					8 x 12	0.13	640			
330	337	6.3 x 11	0.22	340	6.3 x 11	0.22	340	6.3 x 11	0.22	340
		8 x 12	0.13	640	8 x 12	0.13	640	8 x 12	0.13	640
390	397	8 x 12	0.13	640	8 x 12	0.13	640	8 x 12	0.13	640
470	477	8 x 12	0.13	640	6.3 x 11	0.22	340	8 x 12	0.13	640
					8 x 12	0.13	640	10 x 12.5	0.08	865
560	567	8 x 12	0.13	640	8 x 12	0.13	640	10 x 12.5	0.08	865
680	687	8 x 12	0.13	640	8 x 12	0.13	640	8 x 16	0.087	840
								10 x 12.5	0.08	865
820	827	8 x 12	0.13	640	10 x 12.5	0.08	865	10 x 16	0.06	1210
		10 x 12.5	0.08	865						
1000	108	8 x 12	0.13	640	8 x 16	0.087	840	8 x 16	0.087	840
		10 x 12.5	0.08	865	10 x 16	0.06	1210	10 x 16	0.06	1210
1200	128	8 x 16	0.087	840	10 x 20	0.046	1400	10 x 20	0.046	1400
		10 x 12.5	0.08	865						
1500	158	8 x 20	0.069	1050	10 x 20	0.046	1400	10 x 20	0.046	1400
		10 x 16	0.06	1210						
1800	188	10 x 20	0.046	1400	10 x 20	0.046	1400	10 x 25	0.042	1650
								12.5 x 20	0.035	1900

 Maximum Allowable Ripple Current (mA_{rms}) at 105 °C 100kHz

Case Size ΦD x L (mm)

Maximum Impedance (Ω) at 20 °C 100kHz

Standard Ratings

Voltage (Code)		6.3V (006)			10V (010)			16V (016)		
Cap. (μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
2200	228	10 x 20	0.046	1400	10 x 20	0.046	1400	10 x 25	0.042	1650
								12.5 x 20	0.035	1900
2700	278	10 x 25	0.042	1650	10 x 25	0.042	1650	12.5 x 25	0.03	2124
		12.5 x 20	0.035	1900	12.5 x 20	0.035	1900			
3300	338	10 x 25	0.042	1650	12.5 x 25	0.03	2124	12.5 x 25	0.03	2124
		12.5 x 20	0.035	1900						
3900	398	12.5 x 20	0.035	1900						
4700	478	12.5 x 25	0.03	2124						

Voltage (Code)		25V (025)			35V (035)			50V (050)		
Cap. (μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
3.3	335				4 x 5	5	50			
4.7	445	4 x 5	5	50	4 x 5	5	50			
6.8	555	4 x 5	5	50	4 x 7	3.3	70			
					5 x 5	2.6	80			
10	106	4 x 7	3.3	70	5 x 5	2.6	80	5 x 11	1.7	105
		5 x 5	2.6	80	5 x 7	1.7	110			
15	156	5 x 7	1.7	110	6.3 x 5	1.3	115			
		6.3 x 5	1.3	115	6.3 x 7	0.8	160			
22	226	5 x 7	1.7	110	6.3 x 5	1.3	115			
		6.3 x 5	1.3	115	6.3 x 7	0.8	160			
33	336	6.3 x 5	1.3	115	8 x 7	0.5	200	6.3 x 11	0.3	295
		6.3 x 7	0.8	160						
39	396							6.3 x 11	0.3	295
47	476	8 x 7	0.5	200	6.3 x 11	0.22	340	6.3 x 11	0.3	295
56	586				6.3 x 11	0.22	340	8 x 12	0.17	555
68	686	8 x 7	0.5	200	6.3 x 11	0.22	340	8 x 12	0.17	555
82	826	6.3 x 11	0.22	340	8 x 12	0.13	640	8 x 12	0.17	555
100	107	6.3 x 11	0.22	340	6.3 x 11	0.22	340	8 x 12.5	0.25	599
					8 x 12	0.13	640	10 x 12.5	0.12	760
120	127	8 x 12	0.13	640	8 x 12	0.13	640	8 x 16	0.12	730
								10 x 12.5	0.12	760
150	157	8 x 12	0.13	640	8 x 12	0.13	640	10 x 16	0.084	1050
180	187	8 x 12	0.13	640	10 x 12.5	0.08	865	8 x 20	0.091	910
					8 x 12	0.13	640	10 x 16	0.084	1050
								8 x 20	0.091	910
220	227	8 x 12	0.13	640	8 x 16	0.087	840	10 x 16	0.084	1050
					10 x 12.5	0.08	865			
270	277	8 x 12	0.13	640	10 x 16	0.06	1210	10 x 25	0.055	1440
		10 x 12.5	0.08	865						
330	337	8 x 12	0.13	640	8 x 16	0.087	840	12.5 x 20	0.045	1660
		10 x 12.5	0.08	865	8 x 20	0.069	1050			
					10 x 12.5	0.08	865			
					10 x 16	0.06	1210			

 Maximum Allowable Ripple Current (mArms) at 105 °C 100kHz
 Maximum Impedance (Ω) at 20 °C 100kHz

Case Size ΦD x L (mm)

Standard Ratings

Voltage (Code)		25V (025)			35V (035)			50V (050)		
Cap. (μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
390	397	10 x 12.5	0.08	865	10 x 16	0.06	1210	12.5 x 20	0.045	1660
470	477	8 x 16	0.087	840	10 x 16	0.06	1210	12.5 x 25	0.034	1950
		10 x 12.5	0.08	865	10 x 20	0.046	1400			
		10 x 16	0.06	1210						
560	567	10 x 16	0.06	1210	10 x 20	0.046	1400	12.5 x 25	0.034	1950
680	687	10 x 16	0.06	1210	10 x 20	0.046	1400			
		10 x 20	0.046	1400	12.5 x 20	0.035	1900			
820	827	10 x 20	0.046	1400	10 x 25	0.042	1650			
					12.5 x 20	0.035	1900			
1000	108	10 x 20	0.046	1400	12.5 x 20	0.035	1900			
					12.5 x 25	0.03	2124			
1200	128	10 x 20	0.046	1400						
1500	158	10 x 25	0.042	1650						
		12.5 x 20	0.035	1900						
1800	188	12.5 x 25	0.03	2124						
2200	228	12.5 x 25	0.03	2124						

Voltage (Code)		63V (063)			100V (100)			160V		
Cap. (μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
1	105							6.3*11	18.8	38
2.2	225							6.3*11	12.5	60
3.3	335							6.3*11	10.3	70
4.7	475							6.3*11	8.84	90
5.6	565							8*12	6.96	95
6.8	685							8*12	7.5	120
10	106							8*12	8.04	140
15	156				6.3 x 11	0.96	115			
22	226	6.3 x 11	0.96	115				10*16	2.28	260
27	276	6.3 x 11	0.96	115	8 x 12	0.504	232			
33	336	6.3 x 11	0.96	115				10*16	1.68	320
39	396	8 x 12	0.504	232	8 x 16	0.36	300			
47	476	8 x 12	0.504	232	10 x 12.5	0.344	314	10*20	1.18	425
56	566	8 x 12	0.504	232	8 x 20	0.264	362	13*20	1.02	500
68	686	8 x 12	0.504	232	10 x 16	0.248	357	13*25	0.84	610
82	826	10 x 12.5	0.344	314	10 x 20	0.168	466			
100	107	8 x 16	0.36	300	10 x 20	0.168	466	16*25	0.66	850
		10 x 12.5	0.344	314	12.5 x 20	0.128	690			
120	127	8 x 16	0.36	300	12.5 x 20	0.128	690	16*20	0.6	870
		10 x 16	0.248	357						
150	157	8 x 20	0.264	362				16*25	0.48	1050
180	187	10 x 20	0.168	466	12.5 x 25	0.096	922	16*30	0.39	1200
220	227	10 x 16	0.248	357	12.5 x 25	0.096	922	16*35	0.34	1450
		10 x 20	0.168	466						
270	277	12.5 x 20	0.128	690						
330	337	12.5 x 20	0.128	690				18*35	0.22	1900
390	397	12.5 x 25	0.096	922						

Standard Ratings

Voltage (Code)		200V			250V			400V		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
1	105	6.3*11	18.2	38	6.3*11	18.7	40	6.3*11	19.8	38
2.2	225	6.3*11	12.4	60	6.3*11	12.6	62	6.3*11	17.6	65
3.3	335	6.3*11	10.2	75	6.3*11	10.2	75	8*12	13.2	82
4.7	475	8*12	8.28	92	8*12	8.28	95	8*12	8.8	105
5.6	565	8*12	7.8	100	8*12	7.8	100	8*16	8.25	110
6.8	685	8*16	7.2	130	8*16	7.2	135	10*16	7.7	145
10	106	8*16	5.1	165	8*16	5.16	165	10*16	5.5	175
22	226	10*16	2.34	260	10*20	2.4	290	13*20	2.59	300
33	336	10*20	1.8	360	13*20	1.8	370	13*25	1.87	410
47	476	13*20	1.2	460	13*25	1.2	500	16*25	1.38	570
56	566	13*20	1.08	500	13*25	1.08	540	16*30	1.1	680
68	686	13*25	0.9	630	16*25	0.86	680	16*30	0.94	750
100	107	16*25	0.72	850	16*30	0.72	900	18*35	0.74	1000
120	127	16*25	0.65	930	16*30	0.65	980	18*40	0.61	1150
150	157	16*30	0.54	1120	16*35	0.58	1180	18*45	0.55	1380
		18*25	0.45	448						
180	187	16*35	0.42	1300	16*35	0.42	1350			
220	227	18*35	0.36	1500	18*40	0.36	1600			
330	337									

Voltage (Code)		420V			450V		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
1	105	6.3*11	19	38	6.3*11	19	38
2.2	225	8*12	16.5	62	8*12	16.5	65
3.3	335	8*12	12.5	85	8*16	12.8	87
4.7	475	8*16	8.5	105	10*16	8.5	105
5.6	565	10*16	7.5	110	10*16	7.5	110
6.8	685	10*16	6.5	160	10*20	6.5	160
10	106	10*20	5.3	175	10*20	5.3	175
22	226	13*25	2.5	310	13*25	2.8	310
33	336	16*25	1.8	430	16*25	1.8	430
47	476	16*30	1.25	580	16*30	1.25	580
56	566	16*35	1.05	680	16*35	1.05	680
68	686	18*30	0.9	720	18*35	0.9	770
100	107	18*40	0.7	1000	18*40	0.74	1000
120	107	18*45	0.6	1150	18*45	0.6	1150

Maximum Allowable Ripple Current (mArms) at 105°C 100kHz

Case Size ΦD x L (mm)

Maximum Impedance (Ω) at 20°C 100kHz