

RGE Series, Radial Aluminum Electrolytic Capacitors, low impedance, high ripple current, long life

◎ 105°C, 3000~6000hours, Low impedance.

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

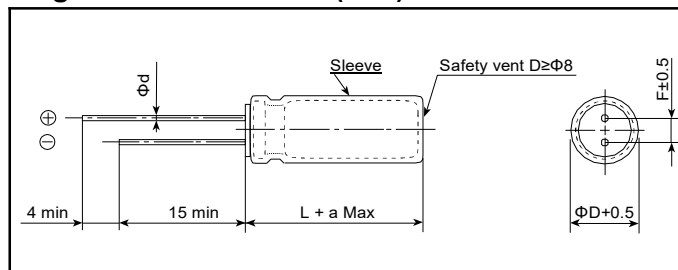
How to order

RGE	338	M	016	01250250	050	B	000	-
Type	Capacitance code	Tolerance	Rated Voltage	Size Code	Pitch	Package	Lead Length	Additional characters maybe added for special requirements
RGE	pF Code: 1st two digits represent significant figures	K: -10%~+10% L: -15%~+15%	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	
RGR		M: -20%~+20%						
RGL	3rd digit represents multiplier (Number of zeros to follow)	P: 0%~+100%						
RB2		Q: -10%~+30%						
RM2		R: 0%~+20%						
	107 = 100uF 108 = 1000uF 338 = 3300uF	T: -10%~+50% U: -10%~+75% V: -10%~+20% H: -5%~+20% Y: 0%~+30%						

Specifications

Items	Characteristics										
Operating temperature range	-40°C~+105°C										
Rated voltage range	6.3V~100V DC										
Nominal capacitance tolerance	10μF~39000μF										
Capacitance tolerance	±20% (120Hz·20°C)										
leakage current (20°C)	I≤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)	6	10	16	25	35	50	63	100		
	tgδ(MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08		
	When capacitance is more than 1000μF, tgδ will add 0.02 per 1000μF addition.										
Low temperature characteristics (Impedance ratio max. at 120Hz)	Rated voltage(v)	6.3	10	16	25	35	50	63	100		
	Z-25°C/Z+20°C	4	3	2	2	2	2	2	2		
	Z-55°C/Z+20°C	8	6	4	3	3	3	3	3		
Load Life	After applying rated for 2000~8000 hours at 105°C then resumed 16 hours:										
	ΦD	5~6.3	8	10	≥12.5						
	Load life	3000h	4000h	5000h	6000h						
	Capacitance change	Within ±20% of the initial measured value									
	tgδ	≤200% of the initial specified value									
	Leakage current	≤initial specified value									
Shelf Life	After storage for 1000 hours at 105°C then resumed 16 hours:										
	Capacitance change	Within ±20% of the initial measured value									
	tgδ	≤200% of the initial specified value									
	Leakage current	≤initial specified value									

Diagram of Dimensions(mm)

	φD	5	6.3	8	10	13	16	18
	F±0.5	2.0	2.5	3.5	5	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	1.0	1.0	1.5	1.5	2.0	2.0

Multiplier for Ripple Current vs. Frequency:

CAP(μF)\Hz	50(60)	120	300K	1K	100K
15-33	0.45	0.55	0.7	0.90	1.00
39-330	0.60	0.70	0.85	0.95	1.00
470-1000	0.65	0.75	0.9	0.98	1.00
1200-3900	0.75	0.8	0.95	1	1

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 (6R3)			10V (010)			16V (016)		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
120	127							6.3 x 11	0.22	340
220	227				6.3 x 11	0.22	340			
330	337	6.3 x 11	0.22	340				8 x 12	0.13	640
470	477							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
680	687	8 x 12	0.13	640	8 x 16	0.087	840	8 x 20	0.069	1050
					10 x 12.5	0.08	865	10 x 12.5	0.08	865
								10 x 16	0.06	1210
820	827	10 x 12.5	0.08	865						
1000	108	8 x 16	0.087	840	8 x 20	0.069	1050	10 x 16	0.06	1210
					10 x 16	0.06	1210	10 x 20	0.046	1400
1200	128	8 x 20	0.069	1050	10 x 20	0.046	1400	10 x 25	0.042	1650
		10 x 16	0.06	1210						
1500	158	10 x 20	0.046	1400	10 x 25	0.042	1650	12.5 x 20	0.035	1900
2200	228	10 x 25	0.042	1650	12.5 x 20	0.035	1900	12.5 x 20	0.035	1900
								12.5 x 25	0.03	2124
3300	338	12.5 x 20	0.035	1900	12.5 x 25	0.03	2124			
3900	398	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
10	106							5 x 11	1.5	100
22	226							5 x 11	0.29	250
33	336							6.3 x 11	0.39	250
56	566				6.3 x 11	0.22	340	6.3 x 11	0.3	295
100	107	6.3 x 11	0.28	300				8 x 12	0.17	555
120	127							8 x 16	0.12	730
150	157				8 x 12	0.13	640	10 x 12.5	0.12	760
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			
330	337	8 x 15	0.15	620						
		8 x 16	0.087	840	10 x 12.5	0.08	865	10 x 25	0.055	1440
		10 x 12.5	0.08	865	10 x 16	0.06	1210			
470	477	8 x 20	0.069	1050	10 x 20	0.046	1400	10 x 20	0.06	1210
		10 x 16	0.06	1210				12.5 x 20	0.045	1660
560	567				10 x 25	0.042	1650	12.5 x 25	0.034	1950
680	687	10 x 16	0.06	1210	12.5 x 20	0.035	1900	10 x 30	0.043	1690
		10 x 20	0.046	1400						
820	827	10 x 25	0.042	1650						
1000	108	12.5 x 20	0.035	1900	12.5 x 20	0.035	1900			
					12.5 x 25	0.03	2124			
1500	158	12.5 x 25	0.03	2124						
2200	228	12.5 x 20	0.025	2348	13 x 25	0.028	2752			

Standard Ratings

Voltage (Code)		63V (063)			100V (100)					
Cap. (μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current			
15	156				6.3 x 11	0.96	115			
27	276				8 x 12	0.504	232			
33	336	6.3 x 11	0.96	115						
39	396				8 x 16	0.36	300			
47	476				10 x 12.5	0.344	314			
56	566	8 x 12	0.504	232	8 x 20	0.264	362			
68	686				10 x 16	0.248	357			
82	826	8 x 16	0.36	300	10 x 20	0.168	466			
		10 x 12.5	0.344	314						
100	107				10 x 20	0.168	466			
					10 x 25	0.16	531			
120	127	8 x 20	0.264	362	12.5 x 20	0.128	690			
		10 x 16	0.248	357						
180	187	10 x 20	0.168	466	12.5 x 25	0.096	922			
220	227	10 x 25	0.16	531	13 x 25	0.047	1250			
270	277	12.5 x 20	0.128	690						
330	337	12.5 x 25	0.096	922						

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

Case Size ΦD x L (mm)

Maximum Impedance (Ω) at 20°C 100kHz

Standard Ratings

Voltage (Code)		160V			200V			250V		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
2.2	225	5 x 11	40	75	5*11	40	75	6.3 x 11	30	104
3.3	335	5 x 11	40	90	6.3*9	30	95	6.3 x 11	30	113
4.7	475	6.3 x 9	25	104	6.3*11	15	115	6.3 x 11	15	125
6.8	685	6.3 x 9	25	122	6.3*11	15	135	8 x 12	15	135
8.2	825	6.3 x 11	22	125	8*12	15	135	8 x 12	15	150
10	106	8 x 9	22	130	8*12	15	150	8 x 12	15	150
15	156	8 x 12	16	135	8*16	8.92	250	8 x 16	8.92	250
		10 x 9	16	140	10*13	8.92	260	10 x 13	8.92	250
22	226	8 x 16	8.92	250	8*20	6.8	315	8 x 20	6.8	315
		10 x 13	8.92	250	10*15	6.8	290	10 x 15	6.8	290
33	336	8 x 20	6.8	315	10*20	6.6	575	10 x 20	6.8	575
		10 x 13	6.8	450	13*15	6.6	670	13 x 15	6.8	650
47	476	10 x 16	6.6	580	13*20	4.65	870	13 x 20	6.6	870
		13 x 15	6.6	650					6	
56	556	10 x 20	6.6	600	13*20	4.65	870	13 x 20	4.65	870
		13 x 15	6.6	670						
68	686	10 x 23	4.65	670	13*25	4.31	1150	13 x 25	4.31	1150
		13 x 16	4.65	770	16*20	4.31	1200	16 x 20	4.31	1200
82	826	10 x 23	4.65	770	13*25	4.31	1150	13 x 25	4.31	1150
		13 x 20	4.65	1040	16*20	4.31	1200	16 x 20	4.31	1200
100	107	13 x 20	4.65	1040	13*25	4.31	1150	13 x 30	3.35	1260
					16*20	4.31	1200	16 x 25	3.05	1350
120	127	13 x 25	4.09	1260	13*30	3.05	1440	16 x 25	3.05	1350
		16 x 20	4.09	1260	16*25	3.05	1670			
150	157	13 x 30	4.09	1600	16*25	3.05	1670	16 x 32	2.71	1780
		16 x 25	3.92	1670				18 x 25	2.71	1780
180	187	13 x 35	3.01	1720	16*36	2.1	2025	16 x 36	2.1	2025
		16 x 25	3.92	16720	18*25	2.71	2025	18 x 32	2.1	2025
220	227	16 x 32	2.71	2160	18*32	2.1	2200	18 x 36	1.04	2365
		18 x 25	2.71	2090						
330	337	18 x 32	1.25	2400						

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

Case Size ΦD x L (mm)

Maximum Impedance (Ω) at 20°C 100kHz

Standard Ratings

Voltage (Code)		350V			400V			450V		
Cap. (μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
2.2	225	6.3*11	33	120	6.3*11	33	90	8*12	45	90
3.3	335	6.3*11	33	120	6.3*12	33	110	8*12	25.5	130
4.7	475	6.3*12	33	120	8*12	27	135	8*12	25.5	130
6.8	685	8*12	21	135	8*16	13.5	180	8*20	9.5	200
					10*13	13.5	180	10*13	13.5	180
8.2	825	8*16	13.5	180	8*16	13.5	180	8*20	9.5	200
					10*13	13.5	180	10*15	12	205
10	106	8*16	13.5	180	8*20	9.5	250	10*16	9.5	205
		10*13	13.5	220	10*14	9.5	250	13*15	9.2	315
15	156	10*16	9.5	280	10*20	8.15	310	10*20	8.15	300
		13*15	8.15	530	13*15	8.15	310	13*16	8.15	410
22	226	13*16	8.15	600	13*20	8.15	500	13*20	8.15	410
33	336	13*20	8.15	865	13*25	5.14	670	13*25	6.5	650
					16*25	4.54	670	16*20	4.14	650
47	476	13*25	4.14	960	16*25	4.14	1035	13*35	3.5	950
		16*20	4.14	1000	18*20	4.14	1035	16*25	3.5	950
56	566	13*25	4.14	960	16*25	4.14	1035	16*32	3.5	1100
		16*20	4.14	1000	18*20	4.14	1280	18*25	3.5	1060
68	686	16*25	4.05	1150	16*32	3.5	1315	16*36	3.05	1240
		18*20	3.5	1330	18*25	3.5	1330	18*32	3.05	1290
82	826	16*32	3.5	1400	16*36	3.05	1720	16*40	2.95	1510
		18*25	3.5	1600	18*32	3.05	1720	18*32	3.05	1290
100	107	16*32	3.5	2010	18*30	3.05	2010	18*36	2.75	1490
		18*25	3.5	2010	18*32	3.05	2010	18*40	0.055	1440
120	127	16*36	3.05	2080	18*36	2.05	2250	18*40	2.05	1740
		18*32	3.05	2010						
150	157	18*36	2.05	2450	18*40	2	2500	18*45	2	1950

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

Case Size ΦD x L (mm)

Maximum Impedance (Ω) at 20°C 100kHz