

RRC Series, Radial Aluminum Electrolytic Capacitors, Low impedance, high ripple current, long life

◎ -40℃~105℃, 5000~10000 hours. Low impedance.

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



How to order

RRC	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
RRC 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	M: -20%~+20%	Code 016: 16VDC For DC Voltage 006: 6.3VDC 016: 16VDC 035: 35VDC 200: 200VDC 450: 450VDC	Code 01250250: Size 12.5*25mm 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℃~+105℃									
Rated voltage range	6.3V~100V DC									
Nominal capacitance toletance	4.7μF~39000μF									
Capacitance toletance	±20% (120Hz·20℃)									
leakage current(20℃)	I≤0.01CV or 3μA(whichever is greater) after 2 minute									
	I: Leakage current C: Nominal capacitance V: Rated voltage									
Dissipation factor (120Hz·20℃)	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 than1000μF, 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℃/Z+20℃	4	3	2	2	2	2	2	2	
	Z—55℃/Z+20℃	8	6	4	3	3	3	3	3	
Load Life	After applying rated for 2000~10000 hours at 105℃ then resumed 16 hours:									
	ΦD	5~6.3		8-10				≥12.5		
	6.3-10V	4000h		6000h				8000h		
	16-100V	5000h		7000h				10000h		
	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℃ 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	~40	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
100	107							6.3 x 11	0.22	340
120	127							6.3 x 11	0.22	340
220	227				6.3 x 11	0.22	340	6.3 x 11	0.22	340
330	337	6.3 x 11	0.22	340				8 x 11	0.19	440
								8 x 12	0.13	640
470	477				6.3 x 11	0.22	340	8 x 12	0.087	840
					8 x 12	0.13	640	8 x 16	0.087	840
								10 x 9	0.08	840
								10 x 12.5	0.08	865
680	687	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	8 x 20	0.069	1050
								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	8 x 20	0.069	1050
		10 x 12.5	0.08	865	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	8 x 20	0.052	1052
								10 x 20	0.046	1400
		10 x 16	0.06	1210				10 x 25	0.042	1650
1500	158							10 x 20	0.035	2100
		10 x 20	0.046	1400	10 x 25	0.042	1650	10 x 30	0.031	1910
								12.5 x 20	0.035	1900
1800	188				10 x 16	0.031	1790	10 x 20	0.035	2100
2200	228	10 x 25	0.042	1650	10 x 30	0.031	1910	13.0 x 25	0.023	2770
					12.5 x 20	0.035	1900			
2700	278	10 x 30	0.031	1910						
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						

Maximum Allowable Ripple Current (mArms) at 105°C

Case Size ΦD x L (mm)

100kHz Maximum Impedance (Ω) at 20°C 100kHz



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
4.7	475							5*11	2.5	100
22	226							6.3 x 11	1.5	110
56	566				6.3 x 11	0.22	340	6.3 x 11	0.3	295
68	686							8 x 12	0.22	302
100	107	6.3 x 11	0.22	340	6.3 x 11	0.22	340	8 x 12	0.17	555
120	127							8 x 16	0.12	730
150	157	6.3 x 11	0.35	428	8 x 12	0.13	640	10 x 12.5	0.12	760
					8 x 16	0.087	840	8 x 16	0.12	730
220	227	8 x 12	0.13	640				10 x 12.5	0.12	760
					10 x 12.5	0.08	865	10 x 16	0.084	1050
330	337	8 x 11.5	0.087	865	10 x 16	0.06	1210	10 x 16	0.084	1050
		8 x 16	0.087	840				10 x 25	0.055	1440
		10 x 12.5	0.08	865						
470	477	8 x 15	0.059	1600						
		8 x 16	0.087	840				10 x 20	0.06	1220
		8 x 20	0.069	1050	10 x 20	0.046	1400	10 x 30	0.043	1690
		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	8 x 20	0.069	1050	10 x 30	0.031	1910	12.5 x 20	0.045	1660
		10 x 20	0.046	1400	13.0x 22	0.035	1900			
820	827	10 x 25	0.042	1650				12.5 x 25	0.034	1950
		10 x 25	0.042	1650						
1000	108	10 x 30	0.031	1910	13.0x 25	0.027	2130	12.5 x 25	0.034	1950
		13.0x 20	0.025	2360						
1500	158	12.5 x 20	0.035	1900	13 x 30	0.03	2500			
		12.5 x 25	0.03	2124						
2200	228				16 x 25	0.019	3140			
2700	278	16 x 25	0.0265	2930						

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)		63V (063)			80V (080)			100V (100)		
Cap. (μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
10	106	5 x 11	0.96	45						
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							8 x 12	0.36	300
		6.3 x 12	0.39	385				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 13	0.24	350
		8 x 12	0.504	232				10 x 16	0.248	357
82	826	8 x 16	0.36	300				10 x 13	0.178	440
		10 x 12.5	0.344	314				10 x 20	0.168	466
100	107				10 x 12	0.019	780	10 x 16	0.13	1040
								10 x 17	0.168	466
								10 x 20	0.168	466
								10 x 25	0.16	531
120	127	8 x 20	0.264	362				10 x 30	0.12	663
		10 x 16	0.248	357				12.5 x 20	0.128	690
180	187	10 x 20	0.168	466	12.5 x 16	0.27	1430	12.5 x 25	0.096	922
220	227	10 x 25	0.16	531						
270	277	10 x 20	0.168	466						
		10 x 30	0.12	663						
		12.5 x 20	0.128	690						
330	337	12.5 x 20	0.128	690				13 x 25	0.1	1100
		12.5 x 25	0.096	922						
470	477	12.5 x 25	0.096	922				16 x 25	0.07	1300
								16 x 30	0.07	1300
		13 x 20	0.096	922				16 x 32	0.07	1300
680	687	16 x 25	0.098	940						
820	827	16 x 20	0.048	1870						
		16 x 25	0.048	2050						
1000	108	16 x 25	0.12	930	18 x 31.5	0.31	2550			
3300	338	18 x 40	0.034	3000						

Maximum Allowable Ripple Current (mA_{rms}) at 105°C
100kHz Maximum Impedance (Ω) at 20°C 100kHz

Case Size ΦD x L (mm)