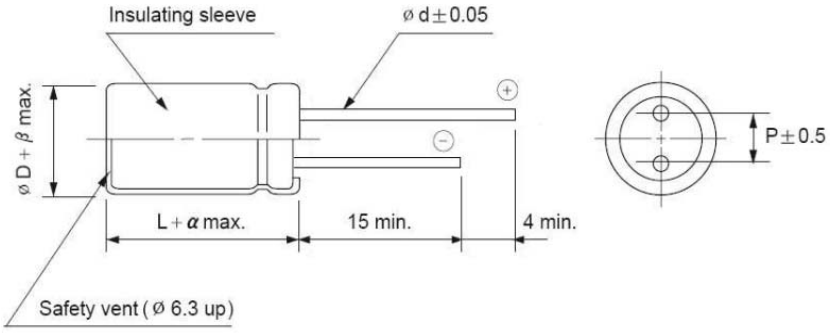
RR Low Impedance
高频低阻抗品

- 105℃, 2000 hours assured.
  105℃, 2000 小时寿命品。
- Low Impedance, High ripple current.
  高频低阻抗，高纹波
- Suitable for high-frequency filter circuit.
  适用于高频滤波电路

■Specifications 特性表

Items 项目	Characteristics 主要特性
Rated Voltage Range 额定工作电压范围	6.3 ~ 100V_{dc}
Category Temperature Range 使用温度范围	-40 ~ +105℃
Capacitance Tolerance 静电容量允许偏差	±20% (M), at 20℃, 120Hz
Leakage Current 漏电流, 20℃环境下施加工作电压 2 分钟后. (at 20℃,After 2 minutes)	I≤0.01CV or 3uA， whichever is greater 漏电流≤0.01CV or 3uA，取较大值 Where, I : Max. leakage current (漏电流, μA), C : Nominal capacitance (静电容量, μF), V : Rated voltage (额定电压 V)
Dissipation Factor (Tanδ, at 20℃ ,120Hz) 损耗角正切值 (测试条件为 20℃,120Hz)	Rated voltage (V) 额定工作电压: 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Tanδ (Max.) 最大损耗角正切: 0.20 / 0.18 / 0.16 / 0.14 / 0.12 / 0.10 / 0.08 / 0.08 When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. 静电容量大于1000uF，每增加1000uF，损耗角正切增加0.02
Low Temperature Characteristics (Max. Impedance Ratio, 120Hz) 低温特性最大阻抗比	Rated voltage (V) 额定工作电压: 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Z(-25℃)/Z(20℃): 8 / 6 / 4 / 4 / 3 / 3 / 3 / 3 Z(-40℃)/Z(20℃): 18 / 16 / 12 / 10 / 8 / 8 / 6 / 6
Endurance 耐久性	The following specification shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the ripple current is applied for the specified period of time at 105℃. 在 105℃环境中,不超过额定电压的范围下叠加额定纹波电流，连续加载规定时间的额定电压后，待温度恢复到 20℃进行测量时，应满足以下要求。 Test Time 测试时间: 2,000Hrs (Φ5~Φ6.3: 1000Hrs) Capacitance Change 静电容量变化率: Within ±20% initial value 初始值的±20%以内 Dissipation Factor 损耗角正切: ≤200% of specified value 不大于规范值的 200% Leakage Current 漏电流: ≤The initial specified value 不大于规范值
Shelf Life 高温贮存	The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of IEC 60384-4. 在 105℃环境中，无负荷放置 1,000 小时后待温度恢复到 20℃，进行试验前处理(IEC 60384-4 4.1 项)后进行测量时，应满足以下要求. Capacitance Change 静电容量变化率: Within ±20% initial value 初始值的±20%以内 Dissipation Factor 损耗角正切值: ≤200% of specified value 不大于规范值的 200% Leakage Current 漏电流: ≤The initial specified value 不大于规范值

■Drawing(Unit: mm) 外形图



ΦD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5			0.6		0.8	
α	1.0			1.5			
β	0.5						

■Rated ripple current multipliers(Unit: mm) 额定纹波修正系数

Frequency 频率 (Hz)		60Hz	120Hz	300Hz	1KHz	10KHz	100KHz
Coefficient 系数	Under 33μF	0.40	0.55	0.72	0.80	0.90	1.00
	39＜C≤390	0.60	0.70	0.75	0.90	0.95	1.00
	470 up above	0.65	0.80	0.82	0.98	1.00	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5℃ rise.
铝电解电容器由于在纹波电流叠加时自我发热、温度上升而老化，每升温 5℃寿命减少一半。
When long life performance is required in actual use, the rms ripple current has to be reduced.
要想保持长寿命请在使用过程中降低纹波电流。

RR Series

■Standard ratings 标准品一览表

WV / μF	6.3			10			16			25		
	ΦD x L	Impedance	R.C.	ΦD x L	Impedance	R.C.	ΦD x L	Impedance	R.C.	ΦD x L	Impedance	R.C.
10							5x11	1.8	105	5x11	1.6	110
22	5x11	2.0	102	5x11	2.0	102	5x11	1.6	114	5x11	1.4	120
33	5x11	1.6	115	5x11	1.6	115	5x11	1.1	135	5x11	1.1	135
47	5x11	1.0	145	5x11	1.0	145	5x11	1.0	145	5x11	0.58	190
56	5x11	0.80	160	5x11	0.80	160	5x11	0.58	190	5x11	0.52	200
68	5x11	0.70	170	5x11	0.70	170	5x11	0.52	200	5x11	0.48	205
100	5x11	0.58	190	5x11	0.58	190	5x11	0.48	205	6.3x11	0.22	340
120	5x11	0.55	195	5x11	0.52	200	6.3x11	0.36	270	6.3x11	0.20	360
150	5x11	0.51	200	6.3x11	0.36	270	6.3x11	0.32	285	6.3x11	0.17	395
180	6.3x11	0.38	265	6.3x11	0.31	290	6.3x11	0.27	315	8x11.5	0.15	480
220	6.3x11	0.34	280	6.3x11	0.22	345	6.3x11	0.21	360	8x11.5	0.13	510
270	6.3x11	0.31	290	6.3x11	0.20	365	8x11.5	0.17	450	8x11.5	0.12	540
330	6.3x11	0.22	340	6.3x11	0.18	385	8x11.5	0.13	510	8x14	0.09	680
470	8x11.5	0.13	510	8x11.5	0.12	540	8x11.5	0.11	560	10x12.5	0.06	850
560	8x11.5	0.11	560	8x11.5	0.11	560	10x12.5	0.083	720	10x16	0.055	1010
680	8x11.5	0.10	585	10x12.5	0.083	720	10x12.5	0.070	790	10x16	0.048	1080
820	8x11.5	0.095	600	10x12.5	0.072	780	10x12.5	0.064	820	10x20	0.042	1270
1000	8x11.5	0.085	650	10x12.5	0.065	820	10x16	0.052	1040	10x20	0.035	1390
1200	10x12.5	0.068	800	10x16	0.058	980	10x16	0.048	1080	13x20	0.032	1670
1500	10x12.5	0.059	860	10x16	0.055	1030	10x20	0.042	1270	13x20	0.030	1720
1800	10x16	0.048	1080	10x20	0.046	1220	10x20	0.04	1330	13x20	0.026	1850
2200	10x16	0.044	1125	10x20	0.042	1275	13x20	0.03	1720	13x25	0.024	2110
2700	10x20	0.040	1320	13x20	0.038	1530	13x20	0.029	1750	13x25	0.023	2170
3300	10x20	0.037	1430	13x20	0.035	1590	13x25	0.027	2000	16x25	0.023	2290
3900	13x20	0.035	1550	13x25	0.031	1870	16x25	0.026	2170	16x31.5	0.022	2570
4700	13x25	0.032	1630	13x25	0.029	1930	16x25	0.024	2245	16x31.5	0.021	2630
5600	13x30	0.030	1720	16x25	0.028	2070	16x31.5	0.022	2600	16x35.5	0.020	2850
6800	16x25	0.028	2020	16x25	0.026	2150	16x31.5	0.020	2720	18x35.5	0.018	3170

WV / μF	35			50			63			100		
	ΦD x L	Impedance	R.C.	ΦD x L	Impedance	R.C.	ΦD x L	Impedance	R.C.	ΦD x L	Impedance	R.C.
1				5x11	2.5	90				5x11	2.8	85
2.2				5x11	1.8	107				5x11	2.5	90
3.3				5x11	1.4	120				5x11	2.2	95
4.7	5x11	2.2	95	5x11	1.3	125				5x11	2.0	100
5.6	5x11	2.0	102	5x11	1.2	130				5x11	1.7	110
6.8	5x11	1.8	105	5x11	1.1	135				6.3x11	1.5	130
10	5x11	1.3	125	5x11	1.0	140	5x11	1.2	140	6.3x11	1.3	145
22	5x11	0.58	190	5x11	0.75	165	6.3x11	0.70	195	8x11.5	0.62	235
33	5x11	0.47	210	6.3x11	0.30	295	6.3x11	0.58	215	8x11.5	0.56	250
47	6.3x11	0.22	340	6.3x11	0.27	315	8x11.5	0.35	315	10x12.5	0.42	330
56	6.3x11	0.20	365	6.3x11	0.21	355	8x11.5	0.32	330	10x12.5	0.38	355
68	6.3x11	0.17	390	8x11.5	0.19	375	8x11.5	0.31	340	10x16	0.31	420
100	6.3x11	0.15	420	8x11.5	0.11	560	10x12.5	0.15	540	10x20	0.22	550
120	8x11.5	0.12	530	10x12.5	0.085	710	10x12.5	0.13	580	10x20	0.20	580
150	8x11.5	0.11	560	10x12.5	0.082	732	10x16	0.11	710	13x20	0.18	690
180	8x11.5	0.09	620	10x12.5	0.080	740	10x16	0.100	750	13x20	0.15	770
220	10x12.5	0.083	720	10x16	0.072	880	10x20	0.075	950	13x20	0.12	860
270	10x12.5	0.072	780	10x16	0.069	900	10x20	0.069	1000	13x25	0.11	990
330	10x12.5	0.065	820	10x20	0.063	1050	13x20	0.058	1240	16x25	0.080	1230
470	10x16	0.050	1050	13x20	0.045	1410	13x20	0.049	1350	16x31.5	0.050	1700
560	10x20	0.042	1270	13x20	0.040	1490	13x25	0.043	1590	16x35.5	0.045	1900
680	10x20	0.040	1300	13x20	0.037	1550	13x30	0.041	1760	18x35.5	0.040	2100
820	13x20	0.036	1570	13x25	0.035	1760	16x25	0.039	1780	18x35.5	0.360	2240
1000	13x20	0.034	1620	13x30	0.034	1940	16x25	0.037	1800	18x40	0.033	2490
1200	13x25	0.028	1970	16x25	0.031	1970	16x31.5	0.034	2070			
1500	13x25	0.026	2045	16x31.5	0.028	2070	18x31.5	0.032	2258			
1800	13x30	0.023	2350	16x31.5	0.024	2460	18x35.5	0.031	2340			
2200	16x25	0.022	2340	16x31.5	0.023	2510						

Note1: Case size ΦD x L(mm), ripple current (mA, rms) at 105℃, 100KHz. 尺寸 ΦD x L(mm), 纹波电流於 105℃, 100KHz
Note2: Produce custom product too, which are not found in these tables. 客户定制品不在标准品一览表内