

RPL Series 引线式导电聚合物固体铝电解电容器高容量长寿命品

Higher Capacitance and Long Life Conductive Polymer Aluminum Solid Electrolytic Capacitor of Radial Lead Type

- 高容量、105℃、5000 小时 Higher Capacitance 、105℃、5000 hours
- 性能稳定，可靠性高 High stability and reliability
- 低 ESR、耐大纹波电流 Low ESR 、 High ripple current capability



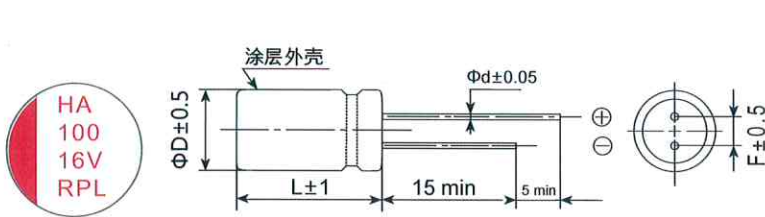
主要技术性能 Specifications

项目 Items	主要特性 Performance Characteristics								
使用温度范围 Operating Temperature Range	-55~+105℃								
额定电压范围 Rated Voltage Range	2.5~25V. DC								
标称电容量允许偏差 Capacitance Tolerance	±20% (120Hz, 20℃)								
漏电流(20℃) Leakage Current	施加额定工作电压 2 分钟, $I \leq 0.2 C_R U_R$ (μA) After 2 minutes' application of rated voltage, the leakage current is not more than $0.2 C_R U_R$								
损耗角正切值(120Hz 20℃) Dissipation Factor	测试频率 120Hz/温度 20℃, 损耗小于规范值 Less than the specified value at 120Hz, 20℃								
等效串联电阻 Equivalent Series Resistance	测试频率 100KHz/温度 20℃, 等效串联电阻小于规范值 Less than the specified value at 100KHz, 20℃								
耐久性 Load Life(105℃, 5000hrs)	在 105℃ 环境施加额定工作电压 5000 小时后, 电容器的特性符合下表要求。 After 5000 hours' application of rated voltage at +105℃, capacitors meet the characteristics requirements listed . <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>电容量变化率 Capacitance Change</td> <td>初始值的±20%以内 Within ±20% of the initial value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤规范值 Less than the specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤规范值的 150% Less than 150% of the specified value</td> </tr> <tr> <td>等效串联电阻 Equivalent Series Resistance</td> <td>≤规范值的 150% Less than 150% of the specified value</td> </tr> </tbody> </table>	电容量变化率 Capacitance Change	初始值的±20%以内 Within ±20% of the initial value	漏电流值 Leakage	≤规范值 Less than the specified value	损耗角正切值 Dissipation Factor	≤规范值的 150% Less than 150% of the specified value	等效串联电阻 Equivalent Series Resistance	≤规范值的 150% Less than 150% of the specified value
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耐湿温特性 Damp heat(Steady state) (60℃, 90~95%RH, 1000hrs)	在温度为 60℃、湿度为 90~95%RH 的环境中, 1000 小时后, 电容器的特性符合下表要求。 60℃, 90 to 95%RH, 1000h, No applied voltage capacitors meet the characteristics requirements listed . <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>电容量变化率 Capacitance Change</td> <td>初始值的±20%以内 Within ±20% of the initial value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤规范值 Less than the specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤规范值的 150% Less than 150% of the specified value</td> </tr> <tr> <td>等效串联电阻 Equivalent Series Resistance</td> <td>≤规范值的 150% Less than 150% of the specified value</td> </tr> </tbody> </table>	电容量变化率 Capacitance Change	初始值的±20%以内 Within ±20% of the initial value	漏电流值 Leakage	≤规范值 Less than the specified value	损耗角正切值 Dissipation Factor	≤规范值的 150% Less than 150% of the specified value	等效串联电阻 Equivalent Series Resistance	≤规范值的 150% Less than 150% of the specified value
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RPL Series

外形图及尺寸 Case size table

mm



$\Phi D \times L$	ΦD	L	F	Φd
6.3×8	6.3	8	2.5	0.5/0.6
8×8	8	8	3.5	0.6
8×12	8	12	3.5	0.6
10×12	10	12	5.0	0.6
10×16	10	16	5.0	0.6
12.5×13	10	12	5.0	0.6

编码和规格 Part number & Specifications

额定电压 Rated Voltage (V)	标称容量 Capacitance (μF)	产品编码 Part Number	等效串联电阻 ESR($m\Omega$ max) 100Khz to 300Khz	耐纹波电流 (mA rms/ 105℃, 100Khz)	损耗 Tan δ (120Hz)	漏电流 (max) (μA)	尺寸 $\Phi D \times L$ (mm)
2.5	470	RPL0E471M0608	18	3200	0.12	235	6.3×8
	560	RPL0E561M0608	18	3200	0.12	280	6.3×8
	680	RPL0E681M0808	16	3900	0.12	340	8×8
	820	RPL0E821M0808	16	3900	0.12	410	8×8
	1000	RPL0E102M0812	15	4520	0.12	500	8×12
	1500	RPL0E152M0812	15	4820	0.12	750	8×12
	1500	RPL0E152M1012	14	5440	0.12	750	10×12
6.3	2200	RPL0E222M1012	14	5440	0.12	1100	10×12
	330	RPL0E331M0608	18	3200	0.12	416	6.3×8
	470	RPL0E471M0608	18	3200	0.12	592	6.3×8
	470	RPL0J471M0808	16	3900	0.12	592	8×8
	560	RPL0E561M0608	18	3200	0.12	706	6.3×8
	560	RPL0J561M0808	16	3900	0.12	706	8×8
	680	RPL0J681M0808	16	3900	0.12	857	8×8
	820	RPL0J821M0812	15	4520	0.12	1033	8×12
	1000	RPL0J102M0812	15	4520	0.12	1260	8×12
	1000	RPL0J102M1012	14	5440	0.12	1260	10×12
	1500	RPL0J152M1012	14	5400	0.12	1890	10×12
	1800	RPL0J182M1012	14	5440	0.12	2268	10×12
	2200	RPL0J222M1012	14	5440	0.12	2772	10×12
	2700	RPL0J272M1016	13	5800	0.12	3402	10×16
	2700	RPL0J272M1213	13	5800	0.12	3402	12.5×13
10	3300	RPL0J332M1016	13	5800	0.12	4158	10×16
	3300	RPL0J332M1213	13	5800	0.12	4158	12.5×13
	220	RPL1A221M0608	18	3200	0.12	440	6.3×8
	220	RPL1A221M0808	16	3900	0.12	440	8×8
	330	RPL1A331M0608	18	3200	0.12	660	6.3×8
	330	RPL1A331M0808	16	3900	0.12	660	8×8
	470	RPL1A471M0808	16	3900	0.12	940	8×8
	470	RPL1A471M0812	15	4520	0.12	940	8×12
	560	RPL1A561M0808	16	3900	0.12	1120	8×8
	560	RPL1A561M0812	15	4520	0.12	1120	8×12
	680	RPL1A681M0812	15	4520	0.12	1360	8×12
	820	RPL1A821M0812	15	4520	0.12	1640	8×12
820	RPL1A821M1012	14	5100	0.12	1640	10×12	
1000	RPL1A102M0812	15	4520	0.12	2000	8×12	

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额定电压 Rated Voltage (V)	标称容量 Capacitance (μ F)	产品编码 Part Number	等效串联电阻 ESR($m\Omega$ max) 100Khz to 300Khz	耐纹波电流 (mA rms/ 105°C, 100Khz)	损耗 Tan δ (120Hz)	漏电流 (max) (μ A)	尺寸 Φ D×L (mm)
10	1000	RPL1A102M1012	14	5100	0.12	2000	10×12
	1200	RPL1A122M1012	14	5100	0.12	2400	10×12
	1500	RPL1A152M1012	14	5100	0.12	3000	10×12
	1800	RPL1A182M1016	13	5440	0.12	3600	10×16
	1800	RPL1A182M1213	13	5440	0.12	3600	12.5×13
	2200	RPL1A222M1016	13	5440	0.12	4400	10×16
	2200	RPL1A222M1213	13	5440	0.12	4400	12.5×13
16	100	RPL1C101M0608	18	3200	0.12	320	6.3×8
	180	RPL1C181M0808	16	3500	0.12	576	8×8
	220	RPL1C221M0808	16	3500	0.12	704	8×8
	220	RPL1C221M0812	15	4520	0.12	704	8×12
	270	RPL1C271M0812	15	4520	0.12	864	8×12
	330	RPL1C331M0812	15	4520	0.12	1056	8×12
	330	RPL1C331M1012	14	4720	0.12	1056	10×12
	470	RPL1C471M0812	15	4520	0.12	1504	8×12
	470	RPL1C471M1012	14	4720	0.12	1504	10×12
	560	RPL1C561M1012	14	4720	0.12	1792	10×12
	680	RPL1C681M1012	14	5100	0.12	2176	10×12
	820	RPL1C821M1012	14	5100	0.12	2624	10×12
	1000	RPL1C102M1016	13	5440	0.12	3200	10×16
	1000	RPL1C102M1213	13	5440	0.12	3200	12.5×13
	1500	RPL1C152M1016	13	5440	0.12	4800	10×16
1500	RPL1C152M1213	13	5440	0.12	4800	12.5×13	
25	68	RPL1E680M0608	45	1200	0.12	340	6.3×8
	68	RPL1E680M0808	35	1500	0.12	340	8×8
	82	RPL1E820M0808	35	1500	0.12	410	8×8
	100	RPL1E101M0608	45	1200	0.12	500	6.3×8
	100	RPL1E101M0812	28	1600	0.12	500	8×12
	150	RPL1E151M0812	28	1600	0.12	750	8×12
	180	RPL1E181M0812	28	1600	0.12	900	8×12
	220	RPL1E221M1012	25	2800	0.12	1100	10×12
	270	RPL1E271M1012	25	2800	0.12	1350	10×12
	330	RPL1E331M1012	25	2800	0.12	1650	10×12
	470	RPL1E471M1012	25	2800	0.12	2350	10×12

■ 纹波电流频率补偿系数 Frequency coefficient of allowable ripple current

Frequency 频率	120Hz≤f<1KHz	1KHz≤f<10KHz	10KHz≤f<100KHz	100kHz≤f<500KHz
Coefficient 系数	0.05	0.30	0.70	1.00

■ 纹波电流温度补偿系数

温度°C	+40	+55	+70	+85	+105
系数	2.5	2.1	1.8	1.5	1.00