

Standard**Features**

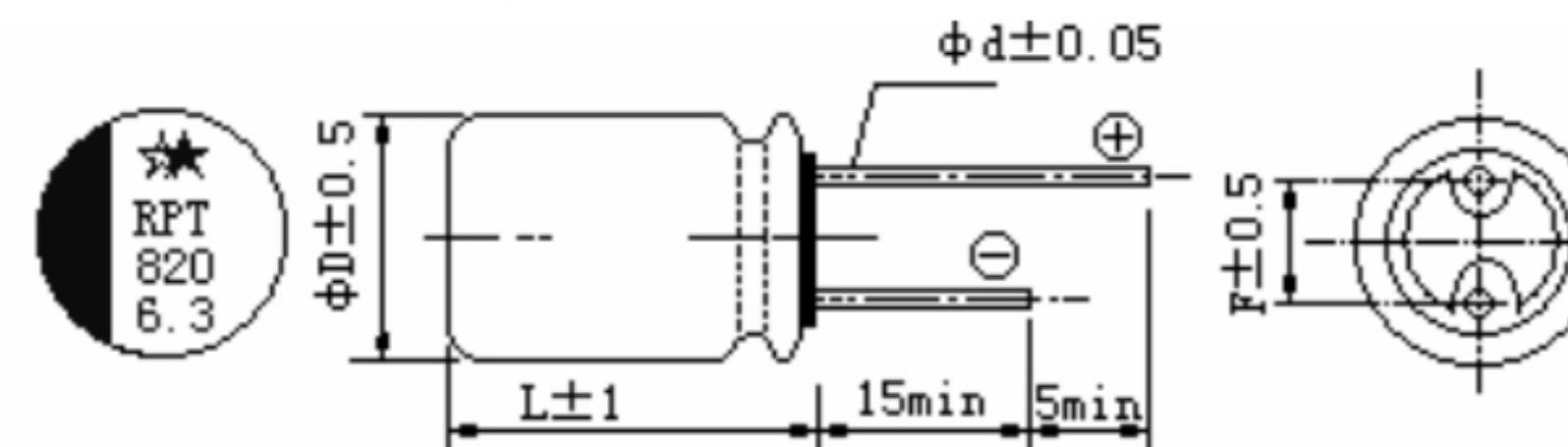
- ◆ 105°C,2000 hours
- ◆ High stability and reliability
- ◆ Low ESR、High ripple current capability

Application:

suitable for DC-CD converters, voltage regulators, decoupling application for computer motherboard,etc.

**Specifications**

Items	Performance Characteristics									
Operating Temperature Range	-55~+105°C									
Rated Voltage Range	4.0~20V.DC									
Nominal Capacitance Range	47~1500 μF									
Capacitance Tolerance	±20% (120Hz, 20°C)									
Leakage Current (20°C)	after 2 minutes' application of rated voltage, the leakage current is not more than 0.2CV(μA)									
Dissipation Factor(120Hz 20°C)	Less than the specified value at 120Hz, 20°C									
Equivalent Series Resistance	Less than the specified value at 100KHz, 20°C									
Ripple Current	Less than the specified value									
Load Life(105°C,2000hrs)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Capacitance Change</td> <td style="padding: 2px;">Within ±20% of initial value</td> </tr> <tr> <td style="padding: 2px;">Leakage Current</td> <td style="padding: 2px;">Less than the specified value</td> </tr> <tr> <td style="padding: 2px;">Dissipation Factor</td> <td style="padding: 2px;">Less than 150% of the specified value</td> </tr> <tr> <td style="padding: 2px;">ESR</td> <td style="padding: 2px;">Less than 150% of the specified value</td> </tr> </table>		Capacitance Change	Within ±20% of initial value	Leakage Current	Less than the specified value	Dissipation Factor	Less than 150% of the specified value	ESR	Less than 150% of the specified value
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Leakage Current	Less than the specified value									
Dissipation Factor	Less than 150% of the specified value									
ESR	Less than 150% of the specified value									
Damp heat(Steady state) (60°C,90~95%RH,1000hrs)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Capacitance Change</td> <td style="padding: 2px;">Within ±20% of Initial value</td> </tr> <tr> <td style="padding: 2px;">Leakage Current</td> <td style="padding: 2px;">Less than the specified value</td> </tr> <tr> <td style="padding: 2px;">Dissipation Factor</td> <td style="padding: 2px;">Less than 150% of the specified value</td> </tr> <tr> <td style="padding: 2px;">Equivalent Series Resistance</td> <td style="padding: 2px;">Less than 150% of the specified value</td> </tr> </table>		Capacitance Change	Within ±20% of Initial value	Leakage Current	Less than the specified value	Dissipation Factor	Less than 150% of the specified value	Equivalent Series Resistance	Less than 150% of the specified value
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Case size table

ØD×L	ØD	L	F	Ød	mm
8×8	8	8	3.5	0.6	
8×12	8	12	3.5	0.6	
10×12	10	12	5.0	0.6	

Part number & Specifications

Rated Voltage (V)	Capacitance (μF)	Part Number	ESR 100KHz to 300KHz (mΩ max)	Ripple Current 100KHz (mA rms) at 105°C	Tan δ (120Hz) (max)	Leakage Current (max) (μA)	Size ØD×L (mm)
2.5	680	RPT0E681M0808	14	4840	0.14	340	8×8
	820	RPT0E821M0808 RPT0E821M0812	14 12	4840 5040	0.14 0.12	410 410	8×8 8×11.5
	1000	RPT0E102M0812	12	4840	0.12	500	8×11.5
	1500	RPT0E152M1012	12	5040	0.12	937	10×12.5
4	560	RPT0G561M0808	14	4080	0.14	448.0	8×8
	680	RPT0G681M0808	13	4840	0.14	544.0	8×8
	820	RPT0G821M0808 RPT0G821M0812	14 12	4840 5040	0.14 0.12	656.0 656.0	8×8 8×11.5
	1000	RPT0G102M1012	12	5040	0.12	800	10×12.5
	1200	RPT0G122M1012	12	5040	0.15	960	10×12.5
6.3	330	RPT0J331M0808	25	3000	0.14	416	8×8
	390	RPT0J391M0808	18	3000	0.14	490	8×8
	470	RPT0J471M0808 RPT0J471M0812	18 16	3200 3810	0.14 0.12	592 592	8×8 8×11.5
	560	RPT0J561M0808 RPT0J561M0812	16 14	4000 4050	0.14 0.12	706 706	8×8 8×11.5
	680	RPT0J681M0808 RPT0J681M0812	15 13	4200 4840	0.14 0.12	856 856	8×8 8×12.5
	820	RPT0J821M1012	12	5040	0.15	1033	10×12.5
	1000	RPT0J102M1012	12	6100	0.15	1260	10×12.5
10	220	RPT1A221M0808	27	3000	0.14	440.0	8×8
	270	RPT1A271M0808	20	4000	0.14	540	8×8
	330	RPT1A331M0812	21	4140	0.12	660	8×11.5
	470	RPT1A471M1012	15	4510	0.12	940	10×12.5
	560	RPT1A561M1012	14	5000	0.12	1120	10×12.5
	820	RPT1A821M1012	14	5600	0.12	1640	10×12.5
16	180	RPT1C181M0908 RPT1C181M0812	24 21	4200 4330	0.14 0.12	576 576	8×8 8×11.5
	270	RPT1C181M0812	18	4800	0.12	864	8×11.5
	330	RPT1C331M1012	15	5050	0.12	1056	10×12.5
	47	RPT1D470M0812	28	3400	0.12	188.0	8×12
20	68	RPT1D680M0812	25	3600	0.12	272	8×12
	100	RPT1D101M1012	15	4500	0.12	400	10×12

Frequency coefficient of allowable ripple current

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