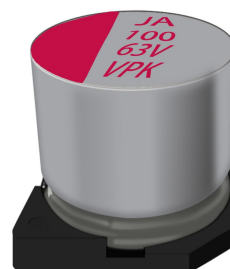


VPK Series 片式导电聚合物固体铝电解电容耐高温品 Higher Temperature . Conductive Polymer . For SMD Type

- 高频低阻抗 Low ESR at high frequency range
- 高纹波 High ripple current capability
- 125°C, 2000--5000 小时 125°C, 2000--5000hours assured
- 符合 AEC-Q200 AEC-Q200 Compliant



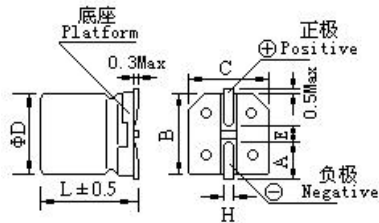
■ 主要技术性能 Specifications

项目 Items	主要特性 Performance Characteristics								
使用温度范围 Operating Temperature Range	-55~+125°C								
额定电压范围 Rated Voltage Range	2.5~80V. DC								
标称容量允许偏差 Capacitance Tolerance	±20% (120Hz, 20°C)								
漏电流(20°C) 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°C) Dissipation Factor	测试频率 120Hz/温度 20°C, 损耗小于规范值 Less than the specified value at 120Hz, 20°C								
等效串联电阻 Equivalent Series Resistance	测试频率 100KHz/温度 20°C, 等效串联电阻小于规范值 Less than the specified value at 100KHz, 20°C								
耐久性 Load Life(125°C, 2000--5000hrs)	<p>在 125°C 环境施加额定工作电压 2000--5000 小时后 (ΦD6.3:2000 小时), 电容器符合下表要求。 After 2000--5000 hours' (ΦD6.3:2000 hours') application of rated voltage at +125°C, capacitors meet the characteristics requirements listed .</p> <table border="1"> <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 200% Less than 200% of the specified value</td> </tr> </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 200% Less than 200% of the specified value
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耐湿温特性 Damp heat(Steady state) (60°C, 90~95%RH, 1000hrs)	<p>在温度为 60°C、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°C, 90 to 95%RH, 1000h, No applied voltage capacitors meet the characteristics requirements listed .</p> <table border="1"> <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 200% Less than 200% of the specified value</td> </tr> </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 200% Less than 200% of the specified value
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VPK Series

外形图及尺寸 Case size table

mm



ϕD	L	A	B	C	H	E ± 0.2
6.3	6.0	2.4	6.6	6.6	0.5~0.8	2.2
6.3	7.7	2.4	6.6	6.6	0.5~0.8	2.2
8	9.0	2.9	8.3	8.3	0.8~1.1	3.1
8	10.2	2.9	8.3	8.3	0.8~1.1	3.1
8	12	2.9	8.3	8.3	0.8~1.1	3.1
10	10.2	3.2	10.3	10.3	0.8~1.1	4.5
10	12.5	3.2	10.3	10.3	0.8~1.1	4.5

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 Ω max) 100Khz to 300Khz	耐纹波电流 (mA rms/ 105 $^{\circ}C$, 100Khz)	损耗 Tan δ (120Hz)	漏电流 (max) (μA)	尺寸 $\phi D \times L$ (mm)
4	560	VPK0G561M0809	18	4080	0.10	448	8 \times 9
	680	VPK0G681M0809	18	4080	0.10	544	8 \times 9
	820	VPK0G821M0809	18	4080	0.10	656	8 \times 9
	1000	VPK0G102M0812	16	4520	0.10	800	8 \times 12
	1500	VPK0G152M0812	16	4520	0.10	1200	8 \times 12
	1500	VPK0G152M1012	14	5440	0.10	1200	10 \times 12.5
	2200	VPK0G222M1012	14	5440	0.10	1760	10 \times 12.5
6.3	2700	VPK0G272M1012	14	5440	0.10	2160	10 \times 12.5
	470	VPK0J471M0809	18	4080	0.10	592	8 \times 9
	560	VPK0J561M0809	18	4080	0.10	706	8 \times 9
	680	VPK0J681M0809	18	4080	0.10	857	8 \times 9
	820	VPK0J821M0812	16	4520	0.10	1033	8 \times 12
	820	VPK0J821M1012	14	5100	0.10	1033	10 \times 12.5
	1000	VPK0J102M1012	14	4520	0.10	1260	10 \times 12.5
	1200	VPK0J122M1012	14	5440	0.10	1512	10 \times 12.5
	1500	VPK0J152M1012	14	5440	0.10	1890	10 \times 12.5
10	2200	VPK0J202M1012	14	5440	0.10	2772	10 \times 12.5
	220	VPK1A221M0809	18	4080	0.10	440	8 \times 9
	270	VPK1A271M0809	18	4080	0.10	540	8 \times 9
	330	VPK1A331M0809	18	4080	0.10	660	8 \times 9
	330	VPK1A331M0812	16	4080	0.10	660	8 \times 12
	470	VPK1A471M0812	16	4080	0.10	940	8 \times 12

VPK Series

■ 编码和规格 Part number & Specifications

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 Ω max) 100Khz to 300Khz	耐纹波电流 (mA rms/ 105 $^{\circ}$ C, 100Khz)	损耗 Tan δ (120Hz)	漏电流 (max) (μ A)	尺寸 Φ D \times L (mm)
10	560	VPK1A561M0812	16	4080	0.10	1120	8 \times 12
	680	VPK1A681M0812	16	4520	0.10	1360	8 \times 12
	820	VPK1A821M0812	16	4520	0.10	1640	8 \times 12
	1000	VPK1A102M0812	16	4520	0.10	2000	8 \times 12
	1000	VPK1A102M1012	14	5100	0.10	2000	10 \times 12.5
	1500	VPK1A152M1012	14	5100	0.10	3000	10 \times 12.5
16	100	VPK1C101M0606	24	2690	0.10	320	6.3 \times 6
	120	VPK1C121M0606	24	2690	0.10	348	6.3 \times 6
	150	VPK1C151M0606	24	2690	0.10	480	6.3 \times 6
	220	VPK1C221M0607	24	2690	0.10	704	6.3 \times 7.7
	220	VPK1C221M0808	18	3500	0.10	704	8 \times 9
	270	VPK1C271M0809	18	3500	0.10	864	8 \times 9
	270	VPK1C271M0812	16	2700	0.10	864	8 \times 12
	330	VPK1C331M0812	16	2700	0.10	1056	8 \times 12
	330	VPK1C331M1012	14	4720	0.10	1056	10 \times 12.5
	470	VPK1C471M0810	17	2400	0.10	1504	8 \times 10.2
	560	VPK1C561M0812	16	2700	0.10	1792	8 \times 12
	680	VPK1C681M1010	19	2300	0.10	2176	10 \times 10.2
	820	VPK1C821M1012	14	2800	0.10	2624	10 \times 12.5
1000	VPK1C102M1012	13	2800	0.10	3200	10 \times 12.5	
20	100	VPK1D101M0606	41	1200	0.10	500	6.3 \times 6
	150	VPK1D151M0607	25	1700	0.10	750	6.3 \times 7.7
	150	VPK1D151M0808	39	1700	0.10	750	8 \times 9
	330	VPK1D331M0810	19	2400	0.10	1650	8 \times 10.2
	470	VPK1D471M0812	18	2800	0.10	2350	8 \times 12
	560	VPK1D561M1010	16	3200	0.10	1650	10 \times 10.2
	680	VPK1D681M1012	14	3500	0.10	2350	10 \times 12.5
25	47	VPK1E470M0606	43	1200	0.10	235	6.3 \times 6
	56	VPK1E560M0606	43	1200	0.10	280	6.3 \times 6
	100	VPK1E101M0607	27	1700	0.10	500	6.3 \times 7.7
	100	VPK1E101M0808	41	1700	0.10	500	8 \times 9
	220	VPK1E221M0810	20	2400	0.10	1100	8 \times 10.2
	270	VPK1E271M0812	19	2800	0.10	1350	8 \times 12
	330	VPK1E331M1010	20	2500	0.10	1650	10 \times 10.2
	470	VPK1E471M1012	15	3500	0.10	2350	10 \times 12.5

VPK Series

■ 编码和规格 Part number & Specifications

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 Ω max) 100Khz to 300Khz	耐纹波电流 (mA rms/ 105 $^{\circ}$ C, 100Khz)	损耗 Tan δ (120Hz)	漏电流 (max) (μ A)	尺寸 Φ D \times L (mm)
35	47	VPK1V470M0606	48	1200	0.10	329	6.3 \times 6
	68	VPK1V680M0607	31	1700	0.10	476	6.3 \times 7.7
	68	VPK1V680M0808	44	1700	0.10	476	8 \times 9
	150	VPK1V151M0810	22	2400	0.10	1050	8 \times 10.2
	220	VPK1V221M0812	21	2800	0.10	1540	8 \times 12
	270	VPK1V271M1010	20	2500	0.10	1890	10 \times 10.2
	330	VPK1V331M1012	16	3500	0.10	2310	10 \times 12.5
50	22	VPK1H220M0606	50	1000	0.10	220	6.3 \times 6
	39	VPK1H390M0607	36	1200	0.10	390	6.3 \times 7.7
	39	VPK1H390M0808	45	1600	0.10	390	8 \times 9
	82	VPK1H820M0810	26	2100	0.10	820	8 \times 10.2
	120	VPK1H121M0812	25	2500	0.10	1200	8 \times 12
	120	VPK1H121M1010	25	2500	0.10	1200	10 \times 10.2
	180	VPK1H181M1012	19	3200	0.10	1800	10 \times 12.5
63	12	VPK1H220M0606	51	1000	0.10	151	6.3 \times 6
	22	VPK1H390M0607	45	1200	0.10	277	6.3 \times 7.7
	22	VPK1H390M0808	48	1600	0.10	277	8 \times 9
	39	VPK1H820M0810	28	2100	0.10	491	8 \times 10.2
	56	VPK1H121M0812	27	2500	0.10	705	8 \times 12
	68	VPK1H121M1010	28	2500	0.10	856	10 \times 10.2
	100	VPK1H181M1012	24	3200	0.10	1260	10 \times 12.5
80	12	VPK1K120M0607	50	1000	0.10	192	6.3 \times 7.7
	27	VPK1K270M0810	38	1400	0.10	432	8 \times 10.2
	39	VPK1K390M0812	35	1800	0.10	624	8 \times 12
	47	VPK1K470M1010	33	1800	0.10	752	10 \times 10.2
	68	VPK1K680M1012	28	2200	0.10	1088	10 \times 12.5

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

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