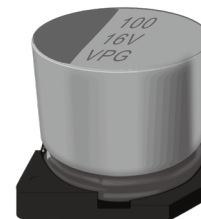


## VPG Series 片式导电聚合物固体铝电解电容器高耐压长寿命品

High Voltage and Long Life . Conductive Polymer . For SMD Type

- 耐高电压 High voltage (to 125V)
- 高品低阻抗 Low ESR at high frequency range
- 高纹波 High ripple current capability
- 105°C、3000 小时 105°C、3000 hours assured
- 符合 AEC-Q200 AEC-Q200 Compliant

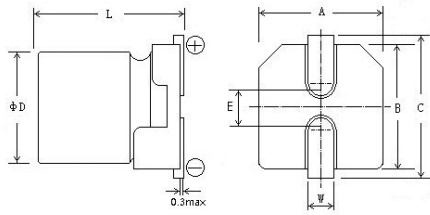
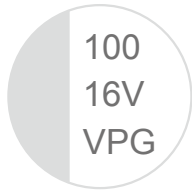


### ◆主要技术性能 Specifications

项目 Items	主要特性 Performance Characteristics	
使用温度范围 Operating Temperature Range	-55°C+105°C	
额定电压范围 Rated Voltage Range	16 ~ 125V. DC	
标称电容量允许偏差 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(105°C, 3000hrs)	在 105°C 环境施加额定工作电压 3000 小时后, 电容器的特性符合下表要求。 After 3000 hours' application of rated voltage at +105°C, capacitors meet the characteristics requirements listed .	
	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
耐湿温特性 Damp heat( Steady state) (60°C,90~95%RH,1000hrs)	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 .	
	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

## ◆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
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 &amp; 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(mΩ max) 100Khz to 300Khz	耐纹波电流 (mA rms/ 105°C, 100Khz)	损耗 Tanδ (120Hz)	漏电流 (max)(μA)	尺寸 ΦD×L (mm)
16	56	VPG1C560M0606	50	1000	0.12	179	6.3x6
	82	VPG1C820M0606	47	1300	0.12	262	6.3x6
	100	VPG1C101M0809	36	1500	0.12	320	8x9
	150	VPG1C151M0809	34	1700	0.12	480	8x9
	220	VPG1C221M0810	27	2000	0.12	704	8x10.2
	270	VPG1C271M0810	21	3800	0.12	864	8x10.2
	270	VPG1C271M0812	26	2300	0.12	864	8x12
	330	VPG1C331M1010	26	2400	0.12	1056	10x10.2
	390	VPG1C391M0812	20	4100	0.12	1248	8x12
	470	VPG1C471M1010	21	3900	0.12	1504	10x10.2
	470	VPG1C471M1012	25	2800	0.12	1504	10x12.5
	680	VPG1C681M1012	19	4400	0.12	2176	10x12.5
20	47	VPG1D470M0606	55	1000	0.12	188	6.3x6
	56	VPG1D560M0606	48	1300	0.12	224	6.3x6
	68	VPG1D680M0809	45	1300	0.12	272	8x9
	100	VPG1D101M0809	42	1400	0.12	400	8x9
	150	VPG1D151M0810	28	2000	0.12	600	8x10.2
	220	VPG1D221M0810	22	3700	0.12	880	8x10.2
	220	VPG1D221M0812	27	2300	0.12	880	8x12
	270	VPG1D271M0812	21	4000	0.12	1080	8x12
	270	VPG1D271M1010	27	2300	0.12	1080	10x10.2
	330	VPG1D331M1010	22	3800	0.12	1320	10x10.2
	330	VPG1D331M1012	26	2700	0.12	1320	10x12.5
	470	VPG1D471M1012	20	4300	0.12	1880	10x12.5
25	33	VPG1E330M0606	60	1000	0.12	165	6.3x6
	47	VPG1E470M0606	49	1300	0.12	235	6.3x6
	56	VPG1E560M0809	50	1300	0.12	280	8x9
	82	VPG1E820M0809	47	1400	0.12	410	8x9
	120	VPG1E121M0810	29	1900	0.12	600	8x10.2
	150	VPG1E151M0810	23	3600	0.12	750	8x10.2
	150	VPG1E151M0812	28	2200	0.12	750	8x12
	180	VPG1E181M1010	28	2300	0.12	900	10x10.2
	220	VPG1E221M0812	22	3800	0.12	1100	8x12
	270	VPG1E271M1010	23	3700	0.12	1350	10x10.2
	270	VPG1E271M1012	27	2700	0.12	1350	10x12.5
	390	VPG1E391M1012	21	4200	0.12	1950	10x12.5

## ◆ 编码和规格 Part number &amp; Specifications

额定电压 Rated Voltage (V)	标称容量 Capacitance ( $\mu$ 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 $\delta$ (120Hz)	漏电流 (max)( $\mu$ A)	尺寸 $\Phi$ D×L (mm)
35	18	VPG1V180M0606	64	900	0.12	126	6.3×6
	22	VPG1V220M0606	50	1300	0.12	154	6.3×6
	27	VPG1V270M0809	55	1200	0.12	189	8×9
	39	VPG1V390M0809	52	1400	0.12	273	8×9
	39	VPG1V390M0812	35	2980	0.12	273	8×12
	47	VPG1V470M0809	40	2600	0.12	329	8×9
	47	VPG1V470M0812	35	2980	0.12	329	8×12
	56	VPG1V560M0810	31	1900	0.12	392	8×10.2
	56	VPG1V560M0812	35	2980	0.12	392	8×12
	68	VPG1V680M0812	35	2980	0.12	476	8×12
	82	VPG1V820M0810	24	3600	0.12	574	8×10.2
	82	VPG1V820M0812	29	2200	0.12	574	8×12
	100	VPG1V101M0812	35	2980	0.12	700	8×12
	100	VPG1V101M1010	29	2200	0.12	700	10×10.2
	120	VPG1V121M0812	23	3800	0.12	840	8×12
	120	VPG1V121M1010	24	3700	0.12	840	10×10.2
	150	VPG1V151M1012	28	2600	0.12	1050	10×12.5
	180	VPG1V181M1012	22	4100	0.12	1260	10×12.5
220	VPG1V221M1012	22	4100	0.12	1540	10×12.5	
330	VPG1V331M1012	22	4100	0.12	2310	10×12.5	
50	8.2	VPG1H8R2M0606	81	800	0.12	82	6.3×6
	12	VPG1H120M0606	55	1200	0.12	120	6.3×6
	15	VPG1H150M0809	63	1100	0.12	150	8×9
	22	VPG1H220M0809	60	1300	0.12	220	8×9
	33	VPG1H330M0810	36	1700	0.12	330	8×10.2
	39	VPG1H390M0812	34	2000	0.12	390	8×12
	39	VPG1H390M1012	29	2900	0.12	390	10×12.5
	47	VPG1H470M0810	29	3300	0.12	470	8×10.2
	47	VPG1H470M1010	30	2200	0.12	470	10×10.2
	56	VPG1H560M0812	28	3400	0.12	560	8×12
	68	VPG1H680M1010	29	3400	0.12	680	10×10.2
	68	VPG1H680M1012	29	2600	0.12	680	10×12.5
	82	VPG1H820M1012	29	2900	0.12	820	10×12.5
	100	VPG1H101M1012	27	3600	0.12	1000	10×12.5
150	VPG1H151M1012	29	2900	0.12	1500	10×12.5	
63	5.6	VPG1J5R6M0606	105	700	0.12	71	6.3×6.0
	8.2	VPG1J8R2M0606	56	1200	0.12	103	6.3×6.0
	10	VPG1J100M0809	75	1000	0.12	126	8×9
	12	VPG1J120M0809	70	1100	0.12	151	8×9
	15	VPG1J150M0809	70	1900	0.12	189	8×9
	22	VPG1J220M0810	37	1700	0.12	277	8×10.2
	27	VPG1J270M0810	30	3200	0.12	340	8×10.2
	27	VPG1J270M0812	35	2000	0.12	340	8×12
	33	VPG1J330M0812	29	2400	0.12	416	8×12
	33	VPG1J330M1010	31	2200	0.12	416	10×10.2
	39	VPG1J390M0812	29	3400	0.12	491	8×12
	47	VPG1J470M1010	30	3300	0.12	592	10×10.2
	47	VPG1J470M1012	30	2500	0.12	592	10×12.5
	56	VPG1J560M1012	28	3400	0.12	706	10×12.5

## ◆ 编码和规格 Part number &amp; Specifications

额定电压 Rated Voltage (V)	标称容量 Capacitance ( $\mu$ 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 $\delta$ (120Hz)	漏电流 (max)( $\mu$ A)	尺寸 $\Phi$ D×L (mm)
80	10	VPG1K100M0810	43	1600	0.12	160	8×10.2
	12	VPG1K120M0812	41	1800	0.12	192	8×12
	15	VPG1K150M1010	39	1900	0.12	240	10×10.2
	22	VPG1K220M1012	38	2200	0.12	352	10×12.5
	33	VPG1K330M1012	38	2300	0.12	528	10×12.5
100	6.8	VPG2A6R8M0810	48	1500	0.12	136	8×10.2
	10	VPG2A100M0812	45	1700	0.12	200	8×12
	12	VPG2A120M1010	42	1900	0.12	240	10×10.2
	18	VPG2A180M1012	41	2100	0.12	360	10×12.5
	22	VPG2A220M1012	41	2200	0.12	440	10×12.5
	33	VPG2A330M1012	41	2200	0.12	660	10×12.5
125	6.8	VPG2B6R8M0810	93	1100	0.12	170	8×10.2
	8.2	VPG2B8R2M0812	94	1300	0.12	205	8×12
	12	VPG2B120M1010	69	1400	0.12	300	10×10.2
	15	VPG2B150M1012	48	2000	0.12	375	10×12.5

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

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

## ◆ 纹波电流温度补偿系数 Temperature coefficient of allowable ripple current

温度 $^{\circ}$ C Temp.	+40	+55	+70	+85	+105
系数 Coefficient	2.5	2.1	1.8	1.5	1.00