

### VPM Series 片式导电聚合物固体铝电解电容器耐 135°C 4000 小时产品

Conductive Polymer .135°C 4000 hours . For SMD Type

- 耐高电压 High voltage(to250V)
- 高频低阻抗 Low ESR at high frequency range
- 高纹波 High ripple current capability
- 135°C,4000 小时 135°C,4000 hours assured
- 符合 AEC-Q200 AEC-Q200 Compliant

NEW



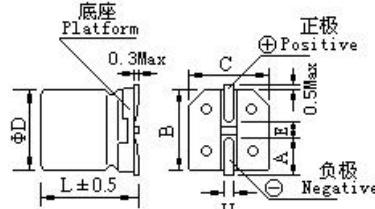
#### ■ 主要技术性能 Specifications

项目 Items	主要特性 Performance Characteristics								
使用温度范围 Operating Temperature Range	-55~+135°C								
额定电压范围 Rated Voltage Range	16~80V. 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≤0.2 CV(μA) After 2 minutes' application of rated voltage, the leakage current is not more than 0.2 CV								
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(135°C,4000hrs)	在 135°C 环境施加额定工作电压 4000 小时后,电容器的特性符合下表要求。 135 °C environment d rated operating voltage4000 hours, capacitor characteristics meet the requirements in the following table. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">电容量变化率 Capacitance Change</td> <td style="padding: 2px;">初始值的±20%以内 Within ±20% of the initial value</td> </tr> <tr> <td style="padding: 2px;">漏电流值 Leakage</td> <td style="padding: 2px;">≤规范值 Less than the specified value</td> </tr> <tr> <td style="padding: 2px;">损耗角正切值 Dissipation Factor</td> <td style="padding: 2px;">≤规范值的 150% Less than 150% of the specified value</td> </tr> <tr> <td style="padding: 2px;">等效串联电阻 Equivalent Series Resistance</td> <td style="padding: 2px;">≤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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高温贮存 Shelf Life (135°C, 1000hrs)	在 135°C 环境放置 1000 小时后,电容器的特性符合下表要求。 After storage 1000 hours' at +135°C and then resumed 16 hours, the characteristics requirements listed . <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">电容量变化率 Capacitance Change</td> <td style="padding: 2px;">初始值的±20%以内 Within ±20% of the initial value</td> </tr> <tr> <td style="padding: 2px;">漏电流值 Leakage</td> <td style="padding: 2px;">≤规范值 Less than the specified value</td> </tr> <tr> <td style="padding: 2px;">损耗角正切值 Dissipation Factor</td> <td style="padding: 2px;">≤规范值的 150% Less than 150% of the specified value</td> </tr> <tr> <td style="padding: 2px;">等效串联电阻 Equivalent Series Resistance</td> <td style="padding: 2px;">≤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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## VPM Series

## ■ 外形图及尺寸 Case size table

JA  
100  
63V  
VPM



Φ D	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	12.0	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 Tan δ (120Hz)	漏电流 (max) (μA)	尺寸 Φ D × L (mm)
16	120	VPM1C121M0606	36	900	0.12	384	6.3×6
	220	VPM1C221M0607	23	1500	0.12	704	6.3×7.7
	220	VPM1C221M0808	30	1100	0.12	704	8×9
	470	VPM1C471M0810	17	2400	0.12	1504	8×10.2
	470	VPM1C471M1010	22	1900	0.12	1504	10×10.2
	560	VPM1C561M0812	16	2700	0.12	1792	8×12
	680	VPM1C681M1010	19	2300	0.12	2716	10×10.2
	1000	VPM1C102M1012	13	2500	0.12	3200	10×12.5
20	100	VPM1D101M0606	41	900	0.12	400	6.3×6
	150	VPM1D151M0607	25	1200	0.12	750	6.3×7.7
	150	VPM1D151M0808	39	800	0.12	750	8×9
	330	VPM1D331M0810	19	2300	0.12	1320	8×10.2
	330	VPM1D331M1010	23	1800	0.12	1320	10×10.2
	470	VPM1D471M0812	18	2500	0.12	1880	8×12
	560	VPM1D561M1010	20	2200	0.12	2240	10×10.2
	680	VPM1D681M1012	14	3000	0.12	2720	10×12.5
25	56	VPM1E560M0606	43	900	0.12	280	6.3×6
	100	VPM1E101M0607	27	1100	0.12	500	6.3×7.7
	100	VPM1E101M0808	41	800	0.12	500	8×9
	220	VPM1E221M0810	20	2300	0.12	1100	8×10.2
	220	VPM1E221M1010	24	1800	0.12	1100	10×10.2
	270	VPM1E271M0812	19	2300	0.12	1350	8×12
	330	VPM1E331M1010	20	2200	0.12	1650	10×10.2
	470	VPM1E471M1012	15	2900	0.12	2350	10×12.5
35	47	VPM1V470M0605	48	800	0.12	329	6.3×6
	68	VPM1V680M0607	31	1100	0.12	476	6.3×7.7
	68	VPM1V680M0808	44	800	0.12	476	8×9
	150	VPM1V151M0810	22	2200	0.12	1050	8×10.2
	150	VPM1V151M1010	25	1800	0.12	1050	10×10.2
	220	VPM1V221M0812	21	2300	0.12	1540	8×12
	270	VPM1V271M1010	20	2200	0.12	2310	10×10.2
	330	VPM1V331M1012	16	2800	0.12	3290	10×12.5



# 鋁電解電容器

## Aluminum Electrolytic Capacitor

### VPM Series

#### ■ 编码和规格 Part number & 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(mΩ 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 $\Phi D \times L$ (mm)
50	22	VPM1H220M0606	50	700	0.12	220	6.3×6
	39	VPM1H390M0607	36	900	0.12	390	6.3×7.7
	39	VPM1H390M0808	45	900	0.12	390	8×9
	82	VPM1H820M0810	26	2100	0.12	820	8×10.2
	82	VPM1H820M1010	34	1600	0.12	820	10×10.2
	120	VPM1H121M0812	25	2100	0.12	1200	8×12
	120	VPM1H121M1010	25	2100	0.12	1200	10×10.2
	180	VPM1H181M1012	19	2500	0.12	1800	10×12.5
63	12	VPM1J120M0606	51	700	0.12	151	6.3×6
	22	VPM1J220M0607	45	800	0.12	277	6.3×7.7
	22	VPM1J220M0808	48	800	0.12	277	8×9
	39	VPM1J390M0810	28	1900	0.12	491	8×10.2
	47	VPM1J470M1010	35	1500	0.12	592	10×10.2
	56	VPM1J560M0812	27	2100	0.12	705	8×12
	68	VPM1J680M1010	28	2000	0.12	857	10×10.2
	100	VPM1J101M1012	24	2100	0.12	1260	10×12.5
80	12	VPM1K120M0607	50	800	0.12	192	6.3×7.7
	27	VPM1K270M0810	38	1000	0.12	432	8×10.2
	39	VPM1K390M0812	35	1100	0.12	624	8×12
	47	VPM1K470M1010	33	1200	0.12	752	10×10.2
	68	VPM1K680M1012	28	1500	0.12	1088	10×12.5

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

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