

VXK

特点 Features

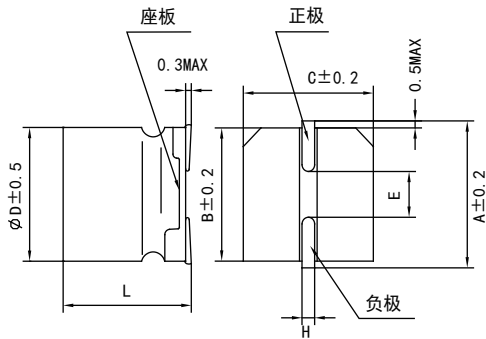
- 保证105°C 2000~5000小时。Endurance 2000~5000h at 105°C.
- 额定电压范围: 6.3~50V。Rated Voltage Range:6.3~50V.
- 小型化、长寿命品。Miniaturized ,Long life Type.
- 满足RoHS。RoHS Compliant.
- 满足AEC-Q200认证。AEC-Q200 Compliant.



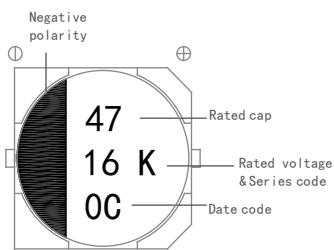
主要技术性能 Specifications

项目 Items	特性 Performance Characteristics	
类别温度范围 Category Temperature Range	-55~+105°C	
额定电压范围 Rated Voltage(U _R)	6.3 ~ 50V	
标称容量范围 Nominal Capacitance Range(C _R)	4.7 ~ 1500μF	120Hz, +20°C
标称容量允许偏差 Allowed Capacitance Tolerance(C _T)	±20%(M)	120Hz, +20°C
漏电流 Leakage Current(I _L)	≤0.01C _R U _R 或者3μA取较大值 (Whichever is greater)	
损耗角正切值 Tangent of loss angle(Tanδ)	U _R (V)	6.3 10 16 25 35 50
	Tanδ	0.26 0.20 0.16 0.14 0.12 0.12
低温特性 Characteristics at Low Temperature	U _R (V)	6.3 10 16 25 35 50
	Z _{-25°C} / Z _{+20°C}	4 3 2 2 2 2
	Z _{-55°C} / Z _{+20°C}	8 5 4 3 3 3
耐久性 Load Life	+105°C, 连续施加额定电压5000小时 (ΦD=4, 5和6.3为2000小时), 恢复16小时后: After applying rated voltage for 5000 hours (2000 hours for ΦD = 4, 5 and 6.3 at 105°C and then recovery 16 hours:	
	容量变化率 Capacitance Change	±30%初始值以内 Within ±30% of the initial value
	损耗角正切值 Tanδ	≤ 300%初始规定值 Not more than 300% of specified value
	漏电流 Leakage Current	≤ 初始规定值 Not more than specified value
高温贮存 Shelf Life	+105°C, 1000小时贮存后,恢复16小时后: After storage for 1000 hours at +105°C and then recovery 16 hours:	
	容量变化率 Capacitance Change	±30%初始值以内 Within ±30% of the initial value
	损耗角正切值 Tanδ	≤ 300%初始规定值 Not more than 200% of specified value
	漏电流 Leakage Current	≤ 初始规定值 Not more than specified value
耐焊接热 Resistance to Soldering Heat	在250°C的条件下, 电容器在热板上保持30秒, 然后从热板上取出电容器, 让其在室温下恢复, 电容器应满足以下要求: The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement.	
	容量变化率 Capacitance Change	±10%初始值以内 Within ±10% of the initial value
	损耗角正切值 Tanδ	≤初始规定值 Not more than specified value
	漏电流 Leakage Current	≤ 初始规定值 Not more than specified value

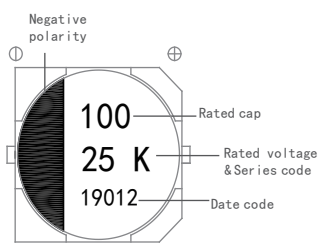
尺寸图 Dimensional drawings



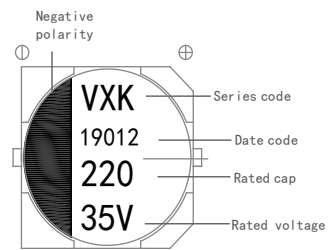
Marking
 $\phi D=4 \sim 5\text{mm}$



$\phi D=6.3\text{mm}$



$\phi D=8 \sim 10.2\text{mm}$



尺寸表 size table

单位 Unit: mm

ϕD	L	A	B	C	$E \pm 0.2$	H
4	5.8 ± 0.3	5.0	4.3	4.3	1.0	0.5 ~ 0.8
5	5.8 ± 0.3	6.0	5.3	5.3	1.3	
6.3	5.8 ± 0.3	7.3	6.6	6.6	2.2	
6.3	7.7 ± 0.3	7.3	6.3	6.3	2.2	
8	6.5 ± 0.5	8.9	8.3	8.3	2.3	
8	10.5 ± 0.5	9.0	8.3	8.3	3.1	
8	12.5 ± 0.5	9.0	8.3	8.3	3.1	0.8 ~ 1.1
10	10.5 ± 0.5	11.0	10.3	10.3	4.5	
10	12.5 ± 0.5	11.0	10.3	10.3	4.5	

规格特性表
Table of specifications and characteristics

U _R (V) C _R (μF)	6.3V			10V			16V			25V			35V		
	ΦDxL mm*mm	I _{AC,R} 100KHz 105°C mA	ESR _{max} 100KHz 25°C Ω	ΦDxL mm*mm	I _{AC,R} 100KHz 105°C mA	ESR _{max} 100KHz 25°C Ω	ΦDxL mm*mm	I _{AC,R} 100KHz 105°C mA	ESR _{max} 100KHz 25°C Ω	ΦDxL mm*mm	I _{AC,R} 100KHz 105°C mA	ESR _{max} 100KHz 25°C Ω	ΦDxL mm*mm	I _{AC,R} 100KHz 105°C mA	ESR _{max} 100KHz 25°C Ω
4.7															
10										4*5.8	140	1.0	4*5.8	140	1.0
22							4*5.8	140	1.0	5*5.8	230	0.38	5*5.8	230	0.38
47	4*5.8	140	1.0	4*5.8	140	1.0	5*5.8	230	0.38	6.3*5.8	280	0.3	6.3*5.8	280	0.3
100	5*5.8	230	0.38	5*5.8	230	0.38	6.3*5.8	280	0.3	6.3*7.7	560	0.18	6.3*7.7	560	0.18
220	6.3*5.8	280	0.3	6.3*7.7	560	0.18	6.3*7.7	560	0.18	8*10.5	850	0.085	8*10.5	850	0.085
330	6.3*7.7	560	0.18										10*10.5	1190	0.065
470	8*10.5	850	0.085	8*10.5	850	0.085	8*10.5	850	0.085	8.2*10.5	850	0.085			
1000	10*10.5	1190	0.065	10*10.5	1190	0.065	10*10.5	1190	0.065						
1500	10.2*10.5	1190	0.065												

U _R (V) C _R (μF)	50V		
	ΦDxL mm*mm	I _{AC,R} 100KHz 105°C mA	ESR _{max} 100KHz 25°C Ω
4.7	4*5.8	85	2.3
10	5*5.8	165	0.88
22	6.3*5.8	195	0.68
47	6.3*7.7	350	0.34
100	8*10.5	670	0.18
220	10*10.5	900	0.12
330	10.2*10.5	900	0.12

额定纹波电流的频率系数
Frequency coefficient of ripple current

C _R (μF)	Frequency(Hz)			
	120	1K	10K	100K
4.7-150	0.40	0.75	0.90	1.0
220-560	0.50	0.85	0.94	1.0
680-1500	0.60	0.87	0.95	1.0