



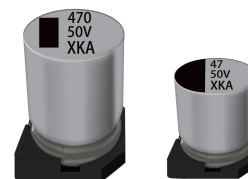
# 鋁電解電容器

## Aluminum Electrolytic Capacitor

### VZX Series 片式铝电解电容器 135°C 耐高温品

#### Higher Temperature 135°C Aluminum Electrolytic Capacitor of V-chip Type

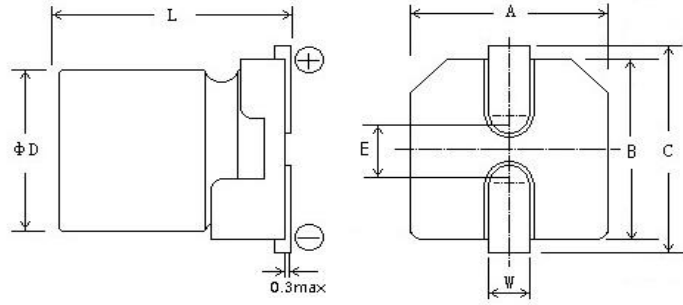
- 寿命: 135°C, 2000 小时
- 适用于回流焊
- 应用于汽车模块及其它高温产品
- 符合 AEC-Q200。
- 符合 RoHS 指令
- Lifetime: 135°C, 2000 hours
- Reflow soldering is available.
- Used in automobile module and other high temperature products.
- Compliance with AEC-Q200.
- RoHS compliance



### ■ 主要技术性能 Specifications

使用温度范围 Operating Temperature Range	-40~+135°C					
额定电压范围 Rated Voltage Range	10~50V DC					
标称电容量允许偏差 Capacitance Tolerance	±20% (120Hz, 20°C)					
漏电流 (20°C) Leakage Current	$I \leq 0.01CV(\mu A)$ 或 $3 \mu A$ 取较大者, (2 分钟) $I \leq 0.01CV(\mu A)$ or $3 \mu A$ Whichever is greater (after 2 minutes)					
	I=Leakage Current(μA), C=Capacitance(μF), V=Rated DC Working Voltage(V)					
损耗角正切值 Dissipation Factor (120Hz 20°C)	WV	10	16	25	35	50
	tg δ	0.30	0.23	0.18	0.16	0.16
	0.02 is added to every 1000μF increase over 1000μF					
温度特性 (120Hz) Temperature Characteristics Impedance Ratio (120Hz)	WV	10	16	25	35	50
	Z <sub>-40°C</sub> /Z <sub>+20°C</sub>	12	8	6	4	4
耐久性 Load Life	+135°C 施加额定电压 2000 小时, 恢复 16 小时后, 电容器应满足要求 After applying rated voltage for 2000 hours at +135°C and then resumed 16 hours. The capacitor shall meet the following limits.					
	电容量变化率 Capacitance Change	≤ ±30% 初始测量值 ≤ ±30% of Initial measured value				
	漏电流值 Leakage	≤ 规定值 ≤ The specified value				
	损耗角正切值 Dissipation Factor	≤ 3 倍规定值 ≤ 300% of the specified value				
高温贮存 Shelf Life (135°C)	试验时间: 1000 小时, 其他项目与耐久性相同。电压应用处理: 根据 JIS C5101-4.1 Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4 4.1					
额定纹波电流的频率系数 Frequency coefficient of rated ripple current	Frequency 频率	50Hz	120Hz	1KHz	≥ 10KHz	
	Correction factor 修正系数	0.35	0.50	0.83	1.0	

## 外形图 Outline Drawing



单位 Unit : mm

Size	8×10.2	10×10.2	12.5×13.5	12.5×16	16×16.5	16×21.5	18×16.5	18×21.5
A/B±0.2	8.3	10.3	13.0	13.0	17.0	17.0	19.0	19.0
D±0.5	8.0	10	12.5	12.5	16.0	16.0	18.0	18.0
E±0.2	3.1	4.5	5.2	5.2	6.5	6.5	6.5	6.5
L±0.5	10.2	10.2	13.5	16.0	16.5	21.5	16.5	21.5
C±0.2	9.0	11.0	13.8	13.8	18	18	20	20
W	0.8~1.1		1.1~1.4					

## 标称电容量、额定电压、额定纹波电流与外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

WV Cap(μF)	10V			16V			25V			35V			50V		
	ΦD×L (mm)	Z max (Ω)	I (mA)	ΦD×L (mm)	Z max (Ω)	I (mA)	ΦD×L (mm)	Z max (Ω)	I (mA)	ΦD×L (mm)	Z max (Ω)	I (mA)	ΦD×L (mm)	Z max (Ω)	I (mA)
47										8×10.2	0.20	270	8×10.2	0.30	270
68										8×10.2	0.20	270			
100				8×10.2	0.20	270	8×10.2	0.20	270	8×10.2	0.20	270	10×10.2	0.25	500
220	8×10.2	0.20	270	8×10.2	0.20	270	10×10.2	0.15	500	10×10.2	0.15	500	12.5×13.5	0.18	750
330	8×10.2 10×10.2	0.20 0.15	270 500	10×10.2	0.15	500	10×10.2	0.15	500				12.5×16	0.15	810
470	10×10.2	0.15	500	10×10.2	0.15	500				12.5×13.5	0.08	750	16×16.5	0.075	1000
560										12.5×13.5	0.08	750	16×16.5	0.075	1000
680							12.5×13.5	0.08	750	16×16.5	0.06	1200	18×16.5	0.075	1200
820							12.5×13.5	0.08	750	16×16.5	0.06	1200	18×16.5	0.075	1200
1000							12.5×13.5 12.5×16	0.08 0.07	750 810	16×16.5	0.06	1200	16×21.5	0.06	1600
1200							16×16.5	0.06	1200	18×16.5	0.05	1400	18×21.5	0.05	1900
1500							16×16.5	0.06	1200	16×21.5 18×16.5	0.04 0.05	1900 1400			
1800							16×16.5	0.06	1200	18×21.5	0.035	2200			
2200							18×16.5	0.05	1400	18×21.5	0.035	2200			
2700							16×21.5	0.04	1900						
3300							18×21.5	0.035	2200						

I~额定纹波电流 Rated ripple current: (mA, 135°C, 100KHz), Z 阻抗值 Impedance: (Ω, 20°C, 100KHz)