

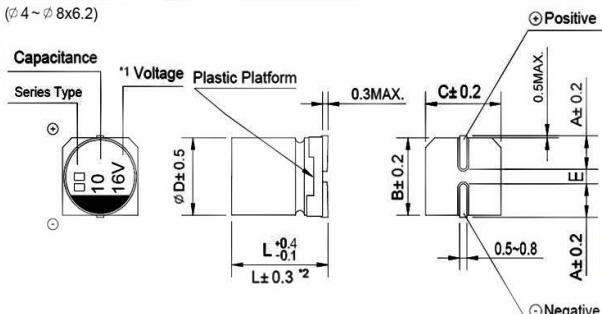
LOW LEAKAGE CURRENT

低漏电品

- Low leakage current (0.5 ~ 3.3μA max.)
低漏电流 (0.5 ~ 3.3μA 最大值)
- Low cost for replacement of some tantalum applications
可替换价格较高的钽电容器
- Comply with the RoHS directive
符合 RoHS 指令

 SPECIFICATIONS 特性表

Items 项目	Characteristics 主要特性					
Operation Temperature Range 使用温度范围	-40 ~ +85°C					
Voltage Range 额定工作电压范围	6.3 ~ 50V					
Capacitance Range 静电容量范围	0.1 ~ 220μF					
Capacitance Tolerance 静电容量允许偏差	±20% at 120Hz, 20°C					
Leakage Current 漏电流	Leakage current ≤ 0.002CV or 0.5μA, whichever is greater (after 2 minutes application of rated voltage) 漏电流 ≤ 0.002CV 或 0.5μA, 取较大值 (施加额定工作电压 2 分钟后)					
Surge Voltage & Dissipation Factor (tan δ)	Measurement frequency 测试频率: 120Hz, Temperature 温度: 20°C					
浪涌电压和损耗角正切	Rated Voltage (V) 额定工作电压	6.3	10	16	25	35
	Surge voltage 浪涌电压	8.0	13	20	32	44
	tan δ (max.) 最大损耗角正切	0.24	0.20	0.16	0.14	0.12
Stability at Low Temperature 低温特性	Measurement frequency 测试频率: 120Hz					
低温特性	Rated Voltage (V) 额定工作电压	6.3	10	16, 25	35, 50	
	Impedance Ratio 阻抗比 $Z(-25^\circ\text{C}) / Z(20^\circ\text{C})$	4	3	2	2	
	$ZT/Z20 (\text{max.})$	8	6	4	3	
Load Life 高温负荷特性	After 2000 hours application of the rated voltage at 85°C, they meet the characteristics listed below. 在 85°C 环境中施加额定工作电压 2000 小时后, 电容器的特性符合下表的要求。					
	Capacitance Change 静电容量变化率	Within ±25% of initial value 初始值的±25%以内				
	Dissipation Factor 损耗角正切	200% or less of initial specified value 不大于规范值的 200%				
	Leakage Current 漏电流	initial specified value or less 不大于规范值				
Resistance to Soldering Heat 耐焊接热特性	After reflow soldering and restored at room temperature, they meet the characteristics listed below. 经过回流焊并冷却至室温后, 电容器的特性符合下表的要求。					
	Capacitance Change 静电容量变化率	Within ±10% of initial value 初始值的±10%以内				
	Dissipation Factor 损耗角正切	initial specified value or less 不大于规范值				
Marking 标示	Black print on the case top. 铝壳顶部黑字印刷。					

 DRAWING (Unit: mm) 外形图

*1. Voltage mark for 6.3V is [6V] 6.3V 的产品标识为 [6V]
*2. Applicable to Φ6.3x7.7 适用于Φ6.3x7.7

 DIMENSIONS (Unit: mm) 尺寸表

ØD x L	4 x 5.4	5 x 5.4	6.3 x 5.4	6.3 x 7.7
A	2.0	2.2	2.6	2.6
B	4.3	5.3	6.6	6.6
C	4.3	5.3	6.6	6.6
E ± 0.2	1.0	1.5	2.1	2.1
L	5.4	5.4	5.4	7.7

NOTE: All designs and specifications are for reference only and are subject to change without prior notice. If any doubt about safety for your application, please contact us immediately for technical assistance before purchase.

注: 以上所提供的设计及特性参数仅供参考, 任何修改不作预先通知。如果在使用上有疑问, 请在采购前与我们联系, 以便提供技术上的协助。



DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT & ESR 规格尺寸及最大允许纹波电流及 ESR 值

WV Parameter 参数 μF	6.3 (0J)			10 (1A)			16 (1C)		
	Case size $\varnothing\text{D} \times \text{L}$ (mm) 尺寸	E.S.R. (Ω) 20°C 120Hz E.S.R.值	Ripple current (mA rms) at 85°C 120Hz 纹波电流	Case size $\varnothing\text{D} \times \text{L}$ (mm) 尺寸	E.S.R. (Ω) 20°C 120Hz E.S.R.值	Ripple current (mA rms) at 85°C 120Hz 纹波电流	Case size $\varnothing\text{D} \times \text{L}$ (mm) 尺寸	E.S.R. (Ω) 20°C 120Hz E.S.R.值	Ripple current (mA rms) at 85°C 120Hz 纹波电流
10 100							4 x 5.4	34.5	25
22 220	4 x 5.4	23.5	31	5 x 5.4	19.6	35	5 x 5.4	15.7	39
33 330	5 x 5.4	15.7	39	5 x 5.4	13.1	43	6.3 x 5.4	10.5	57
47 470	5 x 5.4	11.0	47	6.3 x 5.4	9.2	59	6.3 x 5.4	7.3	68
100 101	6.3 x 5.4	5.2	75	6.3 x 5.4	4.3	76	6.3 x 7.7	3.5	96
220 221	6.3 x 7.7	2.4	85						

WV Parameter 参数 μF	25 (1E)			35 (1V)			50 (1H)		
	Case size $\varnothing\text{D} \times \text{L}$ (mm) 尺寸	E.S.R. (Ω) 20°C 120Hz E.S.R.值	Ripple current (mA rms) at 85°C 120Hz 纹波电流	Case size $\varnothing\text{D} \times \text{L}$ (mm) 尺寸	E.S.R. (Ω) 20°C 120Hz E.S.R.值	Ripple current (mA rms) at 85°C 120Hz 纹波电流	Case size $\varnothing\text{D} \times \text{L}$ (mm) 尺寸	E.S.R. (Ω) 20°C 120Hz E.S.R.值	Ripple current (mA rms) at 85°C 120Hz 纹波电流
0.1 0R1							4 x 5.4	2156	1.0
0.22 R22							4 x 5.4	980	2.3
0.33 R33							4 x 5.4	653	3.5
0.47 R47							4 x 5.4	459	5
1 010							4 x 5.4	216	10
2.2 2R2							4 x 5.4	98	15
3.3 3R3							4 x 5.4	65	18
4.7 4R7	4 x 5.4	64.2	19	4 x 5.4	55.1	20	5 x 5.4	46	23
10 100	5 x 5.4	30.2	28	5 x 5.4	25.9	30	6.3 x 5.4	22	34
22 220	6.3 x 5.4	13.7	52	6.3 x 5.4	11.8	54	6.3 x 7.7	9.8	85
33 330	6.3 x 5.4	9.1	63	6.3 x 7.7	7.8	105			
47 470	6.3 x 7.7	6.4	100	6.3 x 7.7	5.5	110			

FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT 纹波电流频率补偿系数

Frequency 频率	-50Hz	120Hz	300Hz	1KHz	10KHz~
Coefficient 系数	0.70	1.00	1.17	1.36	1.50

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