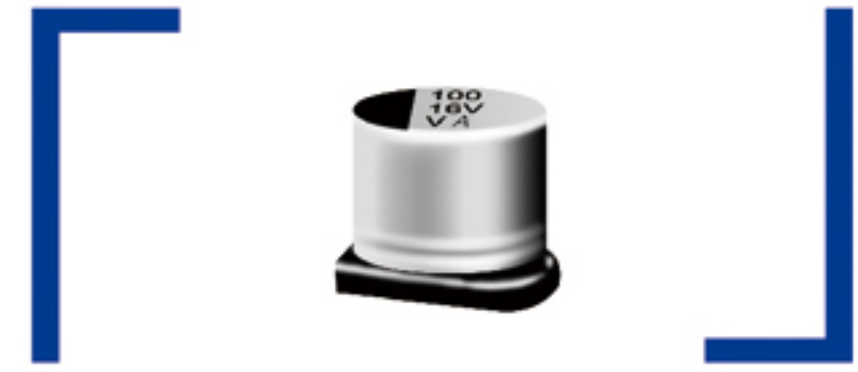


VA 型片式铝电解电容

VA Series Chip Type Aluminum Electrolytic Capacitors



■ 特点 Features

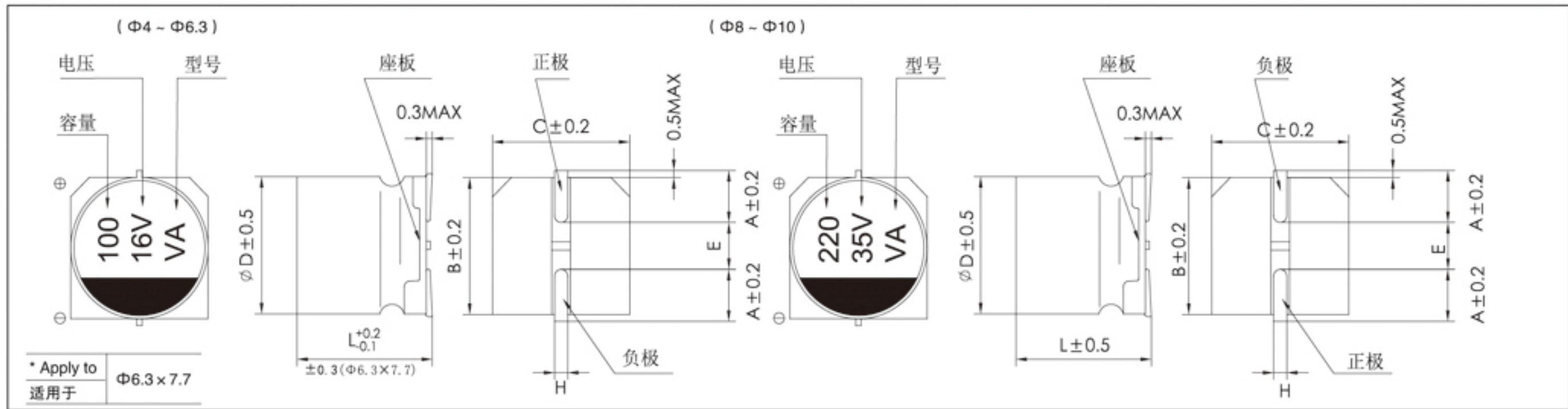
- ◎ 低阻抗。Low impedance.
- ◎ 适用于再流焊。Reflow soldering is available.
- ◎ 适用于高密度表面组装。available for high density surface mounting.
- ◎ 工作温度范围宽 (-55℃~+105℃)。Operating over wide temperature range.
- ◎ ROHS指令 (2002/95/EC) 已对应完毕。Adapted to the ROHS directive(2002/95/EC).

■ 主要技术性能 Specifications

项目 Items	特性 Characteristics						
工作温度范围 Operating Temperature Range	-55℃~+105℃						
额定电压范围 Rated Voltage Range	6.3V ~ 50V						
标称电容量范围 Nominal Capacitance Range	1 ~ 1000 μF						
标称电容量允许偏差 Nominal Capacitance Tolerance	±20%(20℃, 120Hz)						
漏电流 Leakage Current	I ≤ 0.01C _R V _R or 3(μA), 取较大者(2分钟) C _R : 标称电容量(μF) U _R : 额定电压(V) I ≤ 0.01C _R V _R or 3(μA) Whichever is greater (at 20℃, after 2minutes) C _R : Nominal Capacitance(μF) U _R : Rated voltages(V)						
损耗角正切 (tg δ) Dissipation Factor (Max) 20℃, 120Hz	U _R (V)	6.3	10	16	25	35	50
	tgδ	0.22	0.19	0.16	0.14	0.12	0.12
耐久性 Load Life	+105℃施加额定电压2000小时后, 电容器应满足以下要求: After 2000 hours' application of rated voltage at 105℃, the capacitor shall meet the following requirement:						
	电容量变化率 Capacitance Change	± 30% 初始值以内 Within ±30% of the initial value					
	损耗角正切 Dissipation Factor	≤ 300% 初始规定值 Not more than 300% of the initial specified value					
高温贮存 Shelf Life	+105℃ 贮存2000小时后, 电容器应满足以上耐久性要求: After storage for 2000 hours at +105℃, the capacitors shall meet the requirement of load life above:						
	漏电流 Leakage Current	≤ 初始规定值 Not more than the initial specified value					
低温特性 Low Temperature Stability 阻抗比 Impedance Ratio (120Hz)	U _R (V)	6.3	10	16	25	35	50
	Z(-25℃)/Z(+20℃)	2	2	2	2	2	2
	Z(-40℃)/Z(+20℃)	4	4	3	3	3	3
耐焊接热 Resistance to Soldering Heat	在250℃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℃ for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement:						
	电容量变化率 Capacitance Change	± 10% 初始值以内 Within ± 10% of the initial value					
	损耗角正切 (tg δ) Dissipation Factor	≤ 初始规定值 Not more than the initial specified value					
	漏电流 Leakage Current	≤ 初始规定值 Not more than the initial specified value					

Chip

■尺寸图 Dimensions



(mm)

	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 7.7	8 × 6.5	8 × 10.5	10 × 10.5
A	3.0	2.1	2.4	2.4	2.9	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3
E	1.0	1.3	2.2	2.2	2.3	3.1	4.5
L	5.4	5.4	5.4	7.7	6.5	10.5	10.5
H	0.5~0.8				0.8~1.1		

◇标称容量、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

V μF	6.3			10			16			25			35			50		
	DxL mm	Impedance Ω	I~ mA	DxL mm	Impedance Ω	I~ mA	DxL mm	Impedance Ω	I~ mA	DxL mm	Impedance Ω	I~ mA	DxL mm	Impedance Ω	I~ mA	DxL mm	Impedance Ω	I~ mA
1.0																4 × 5.4	5.00	30
2.2																4 × 5.4	5.00	30
3.3																4 × 5.4	5.00	30
4.7													4 × 5.4	3.0	60	5 × 5.4	3.0	50
10										4 × 5.4	3.00	60	5 × 5.4	1.8	95	6.3 × 5.4	2.0	70
22				4 × 5.4	3.00	60	5 × 5.4	1.8	95	5 × 5.4	1.8	95	5 × 5.4	1.8	95	6.3 × 5.4	2.0	70
33	5 × 5.4	1.8	95	5 × 5.4	1.8	95	6.3 × 5.4	1.0	140	6.3 × 5.4	1.0	140	6.3 × 5.4	1.0	140	6.3 × 7.7	1.4	120
47	5 × 5.4	1.8	95	6.3 × 5.4	1.0	140	6.3 × 5.4	1.0	140	6.3 × 5.4	1.0	140	6.3 × 5.4	1.0	140	6.3 × 7.7	1.4	120
100	6.3 × 5.4	1.0	140	6.3 × 5.4	1.0	140	6.3 × 5.4	1.0	140	6.3 × 7.7	0.7	220	8 × 10.5	0.3	300	8 × 10.5	0.6	300
220	6.3 × 5.4	1.0	140	6.3 × 7.7	0.7	220	6.3 × 7.7	0.7	220	8 × 10.5	0.3	450	8 × 10.5	0.3	450	10 × 10.5	0.3	500
330	6.3 × 7.7	0.7	220	8 × 10.5	0.3	450	8 × 10.5	0.3	450	8 × 10.5	0.3	450	10 × 10.5	0.15	650			
470	8 × 10.5	0.3	450	8 × 10.5	0.3	450	8 × 10.5	0.3	450	10 × 10.5	0.15	650						
1000	8 × 10.5	0.3	450	10 × 10.5	0.15	650												

I~ = Rated ripple current (mA) (105°C, 100KHz) I~ = 额定纹波电流 (mA) (105°C, 100KHz)
 Low impedance (20°C 100KHZ)

◇额定纹波电流的频率系数

Frequency coefficient of ripple current

Frequency 频率	50Hz	120Hz	300Hz	1KHz	≥ 10KHz
Coefficient 系数	0.64	0.50	0.64	0.83	1.00