

VB 型片式铝电解电容

VB Series Chip Type Aluminum Electrolytic Capacitors



■ 特点 Features

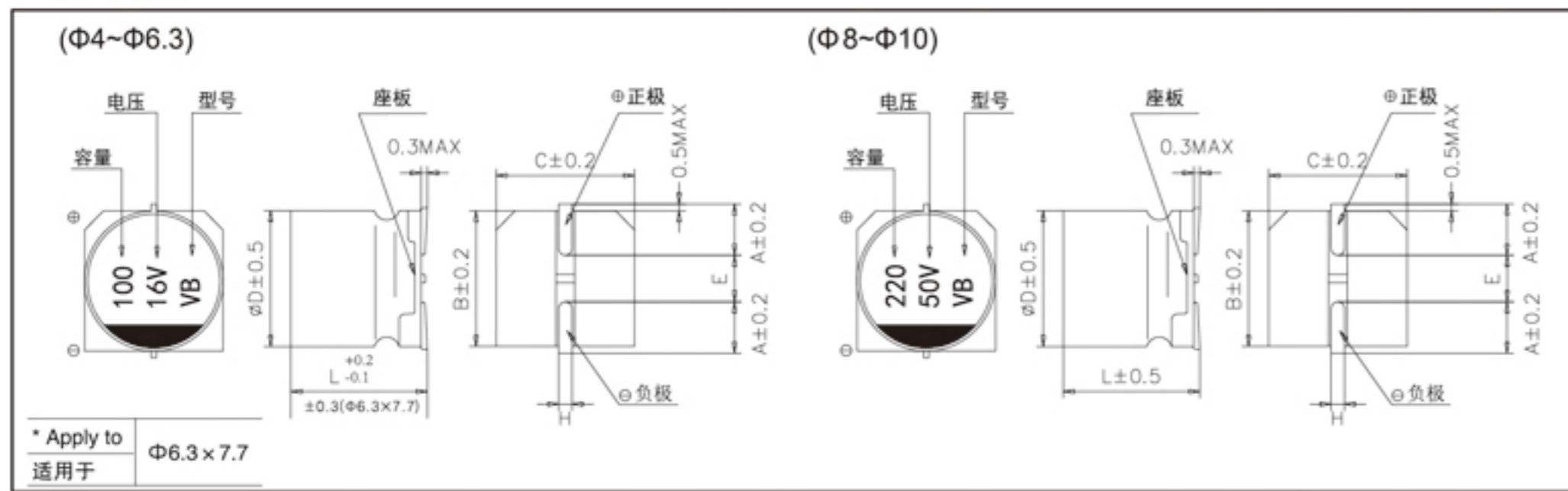
- ◎ 低阻抗。 Low impedance.
- ◎ 适用于再流焊。 Reflow soldering is available.
- ◎ 适用于高密度表面组装。 available for high density surface mounting.
- ◎ 工作温度范围宽 (-55℃~+105℃)。 Operating over wide temperature range.
- ◎ ROHS指令 (2002/95/EC) 已对应完毕。 Adapted to the ROHS directive(2002/95/EC).

■ 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 ~ 1500 μ F						
标称电容量允许偏差 Nominal Capacitance Tolerance	± 20% (20℃, 120Hz)						
漏电流 Leakage Current	$I \leq 0.01C_R V_R$ 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) $I \leq 0.01C_R V_R$ 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) Disspation Factor (Max)20℃, 120Hz	U_R (V)	6.3	10	16	25	35	50
	tgδ	0.26	0.20	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 Disspation 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1000小时后, 电容器应满足以上耐久性要求: After storage for 1000 hours at +105℃, the capacitors shall meet the requirement of load life above:						
	U_R (V)	6.3	10	16	25	35	50
低温特性 Low Temperature Stability	$Z(-25℃)/Z(+20℃)$	2	2	2	2	2	2
	阻抗比 Impedance Ratio (120Hz)	$Z(-40℃)/Z(+20℃)$	5	4	4	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) Disspation 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



	4X5.4	5X5.4	6.3X5.4	6.3X7.7	8x10.5	10x10.5	(mm)
A	1.8	2.1	2.4	2.4	2.9	3.2	
B	4.3	5.3	6.6	6.6	8.3	10.3	
C	4.3	5.3	6.6	6.6	8.3	10.3	
E	1.0	1.3	2.2	2.2	3.1	4.5	
L	5.4	5.4	5.4	7.7	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		
	D x L mm	mpedance Ω	I~ mA	D x L mm	mpedance Ω	I~ mA	D x L mm	mpedance Ω	I~ mA	D x L mm	mpedance Ω	I~ mA	D x L mm	mpedance Ω	I~ mA	D x L mm	mpedance Ω	I~ mA
1.0																4 x 5.4	5.00	30
2.2																4 x 5.4	5.00	30
3.3																4 x 5.4	5.00	30
4.7													4 x 5.4	1.8	80	5 x 5.4	1.52	85
10										4 x 5.4	1.80	80	5 x 5.4	0.76	150	6.3 x 5.4	0.88	165
22				4 x 5.4	1.80	80	5 x 5.4	0.76	150	5 x 5.4	0.76	150	5 x 5.4	0.76	150	6.3 x 5.4	0.88	165
33	5 x 5.4	0.76	150	5 x 5.4	0.76	150	6.3 x 5.4	0.44	230	6.3 x 5.4	0.44	230	6.3 x 5.4	0.44	230	6.3 x 7.7	0.68	185
47	5 x 5.4	0.76	150	6.3 x 5.4	0.44	230	6.3 x 5.4	0.44	230	6.3 x 5.4	0.44	230	6.3 x 7.7	0.34	280	6.3 x 7.7	0.68	185
100	6.3 x 5.4	0.44	230	6.3 x 5.4	0.44	230	6.3 x 5.4	0.44	230	6.3 x 7.7	0.34	280	8x10.5	0.17	600	8x10.5	0.34	300
220	6.3 x 5.4	0.44	230	6.3 x 7.7	0.34	280	6.3 x 7.7	0.34	280	8x10.5	0.17	600	8x10.5	0.17	600	10x10.5	0.18	670
330	6.3 x 7.7	0.34	280	8x10.5	0.17	600	8x10.5	0.17	600	8x10.5	0.17	600	10x10.5	0.09	850			
470	8x10.5	0.17	600	8x10.5	0.17	600	8x10.5	0.17	600	10x10.5	0.09	850						
1000	8x10.5	0.17	600	10x10.5	0.09	850												
1500	10x10.5	0.09	850															

I~ = Rated ripple current (mA) (105°C, 100kHz) I~ = 额定纹波电流 (mA) (105°C, 100kHz)
 — 20°C 100KHz时的电阻 (Ω) MAX

◇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	0.35	0.50	0.64	0.83	1.00