



VM

铝电解电容器-贴片型

Aluminum electrolytic capacitor- SMD type

特点 Features

- 125°C 2000~3000小时保证品。Load life of 2000-3000 hours at +125°C.
- 产品尺寸：Product size : Φ6.3~Φ12.5.
- 适用于车载电装品的高温用途。
Available for high-temperature application of vehicle-mounted electrical appliances.
- 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 Performance Characteristics						
工作温度范围 Operating Temperature Range	-40~+125°C						
额定电压范围 Rated Voltage Range	10~50V						
标称电容量范围 Nominal Capacitance Range	10~1000μF						
标称电容量允许偏差 Nominal Capacitance Tolerance	±20% (20°C, 120Hz)						
漏电流 Leakage Current	$I \leq 0.01CRVR$ or $3(\mu A)$, 取较大者 (2分钟) CR: 标称电容量 (μF) UR: 额定电压 (V) $I \leq 0.01CRVR$ or $3(\mu A)$ Whichever is greater (at 20°C, after 2 minutes) CR: Nominal Capacitance (μF) UR: Rated voltages (V)						
损耗角正切 (tgδ) Dissipation Factor (Max) 20°C, 120Hz	U_R (V)	10	16	25	35	50	
	$tg\delta$	0.24	0.20	0.16	0.14	0.14	
耐久性 Load Life	+125°C连续加载规定时间的额定电压后待温度恢复到20°C进行测量时, 应满足以下要求: + 125 °C continuous loading at a predetermined time after the rated voltage until the temperature returns to 20 °C measured						
	规定时间 Specified time		Φ6.3&50V的Φ8、Φ10: :2000小时 其他Φ8~Φ12.5:3000小时				
	电容量变化率 Capacitance Change		±30%初始值 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				
	漏电流 Leakage Current		≤ 初始规定值 Not more than the initial specified value				
高温贮存 Shelf Life	+125°C贮存1000小时后, 加额定工作电压30分钟, 电容器应满足以上耐久性要求 After storage for 1000 hours at +125°C, UR to be applied for 30 minutes, the capacitors shall meet the requirement of load life above						
低温特性 Low Temperature Stability 阻抗比 Impedance Ratio (120Hz)	U_R (V)	10	16	25	35	50	
	$Z(-25^\circ C)/Z(+20^\circ C)$	6	5	4	3	3	
	$Z(-40^\circ C)/Z(+20^\circ C)$	12	8	6	4	4	
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.						
	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 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				

外形图及尺寸表 Case Size Table

单位 Unit: mm

	6.3×5.8	6.3×7.7	8×10.5	10×10.5	12.5×13.5
A	2.4	2.4	2.9	3.2	4.7
B	6.6	6.6	8.3	10.3	13
C	6.6	6.6	8.3	10.3	13
E	2.2	2.2	3.1	4.5	4.5
L	5.8	7.7	10.5	10.5	13.5
H	0.5~0.8		0.8~1.1		

注: L值Φ6.3壳号公差±0.3, Φ8及以上壳号公差±0.5

标称电容量、额定电压、额定纹波电流与尺寸对应表
Nominal Capacitance, Rated Voltage, Rated Ripple Current and Case Size Table

电压 WV (Vdc)	容量 Cap (μF)	产品 尺寸 Size	纹波电流 mArms 120Hz/125°C	等价串联 电阻(Ω max/100k Hz)	电压 WV (Vdc)	容量 Cap (μF)	产品尺寸 Size	纹波电流 mArms 120Hz/125°C max/100k Hz)	等价串联 电阻(Ω max/100k Hz)
10	68	6.3×5.8	110	0.7	35	10	6.3×5.8	110	0.7
	100	6.3×7.7	220	0.45		33	6.3×7.7	220	0.45
	220	8×10.5	296	0.20		47	6.3×7.7	220	0.45
	330	8×10.5	296	0.20		100	8×10.5	296	0.20
	470	10×10.5	440	0.16		220	10×10.5	440	0.16
	1000	12.5×13.5	850	0.092		470	12.5×13.5	850	0.092
16	33	6.3×5.8	110	0.7	50	10	6.3×5.8	51	0.8
	100	6.3×7.7	220	0.45		22	6.3×7.7	83	0.7
	220	8×10.5	296	0.20		33	8×10.5	160	0.36
	330	10×10.5	440	0.16		47	8×10.5	160	0.36
	560	12.5×13.5	850	0.092		100	10×10.5	247	0.23
	22	6.3×5.8	110	0.7		220	12.5×13.5	600	0.15
25	47	6.3×7.7	220	0.45					
	100	6.3×7.7	220	0.45					
	100	8×10.5	296	0.20					
	330	10×10.5	440	0.16					
	470	12.5×13.5	850	0.092					
	22	6.3×5.8	110	0.7					

额定纹波电流频率修正系数
Frequency correction factor for ripple current

频率 (Hz) 静电容量 (μF)	120	1K	10K	100K
10	0.66	0.86	0.93	1.00
22~470	0.93	0.97	1.00	1.00