

CA51S 175°C Wet Tantalum Electrolytic Capacitor



CA51S高温钽电解电容器

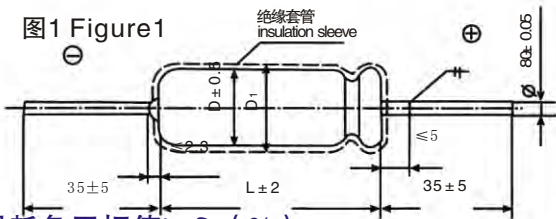
产品简介

该型号产品系轴向引出式耐高温非固体电解质钽电容器，性能稳定可靠，适用于深井钻探仪器等耐高温电子设备。执行标准为Q/NSL007-1991。

主要技术性能

- 使用温度范围：
I类：-55℃ ~ +155℃ (+155℃时降额电压 V_{C1} 使用)
特类：-55℃ ~ +175℃(+175℃时降额电压 V_{C2} 使用)
- 工作电压范围： 6.3V ~ 125V
- 电容量范围： 1.0 μ F ~ 1000 μ F
- 电容量允许偏差： $\pm 10\%$ ， $\pm 20\%$
- 漏电流 (μ A)：
+20℃时 $I_0 \leq 0.001 C_R U_R$ (μ A) 或 0.5 μ A (取大者)
+85℃时 $I \leq 8 I_0 C_R U_R$ (μ A) 或 4 μ A (取大者)
+155℃时 $I \leq 12 I_0 C_R U_R$ (μ A) 或 12.5 μ A (取大者)
+175℃时 $I \leq 15 I_0 C_R U_R$ (μ A) 或 15 μ A (取大者)
- 损耗角正切： 不超过表2规定值。
- 外形尺寸、额定电压、降额电压、标称电容量：见图1、表1。

图1 Figure1



损耗角正切值 $\tan \delta$ (%)

Dissipation Factor $\tan \delta$ (%)

表2 talbe2

额定电压 Rated Voltage(V)	6.3	10	16	25	40	63	100	125
标称电容量 Capacitance(μ F)	损耗角正切值 $\tan \delta$ (%) 最大值 Dissipation Factor $\tan \delta$ (%)Max							
1.0								8
1.5								8
2.2							8	8
3.3						8	8	10
4.7						8	9	10
6.8					10	10	9	10
10				17	15	10	10	15
15			20	17	20	15	18	15
22		25	20	20	20	18	15	20
33	35	30	22	20	20	20	25	23
47	40	30	25	20	25	25	28	23
68	45	35	25	30	30	25	30	
100	50	40	35	30	35	30		
150	55	40	35	30	35			
220	60	45	40	35	60			
330	65	50	45	50				
470	70	55	60					
680	80	60						
1000	90	70						
1500	100							

注：电容量及损耗角正切的测量频率为100Hz
Note:Capacitance and dissipation factor are measured at the frequency of 100Hz.

注：以上所提供的性能参数仅供参考作用，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。
Note:The data contained in this brochure is only for your reference,any change or modification is made without previous notification.IF any question in application, please feel free to contact us prior to purchase so that we provide further technical assistance.

Brief Introduction :

CA_{51S} Series 175°C high temperature wet electrolytic capacitors with axial leads , features stable and excellent electrical performances ,high reliability , suitable for applications where high temperature characteristics are required , such as well drilling . CA_{51S} Series meets the requirements of Q/NSL007-1991

Features:

- Operating Temperature Range :
Class1:-55℃ ~+155℃ (At+155℃ with rated voltage derating V_{C1});Special Class: -55℃ ~+175℃ (At +175℃ with rated Voltage derating V_{C2})
- Working Voltage Range :1.0~1000 μ F
- Capacitance Tolerance : $\pm 10\%$, $\pm 20\%$
- DC leakage At+20℃, $I_0 \leq 0.001 C_R U_R$ (μ A) or 0.5 μ A (Which is greater) ; At+85℃, $I_0 \leq 0.008 C_R U_R$ (μ A) or 4 μ A (Which is greater); At +155℃, $I_0 \leq 0.012 C_R U_R$ (μ A) or 12.5 μ A (Which is greater); at +175℃, $I_0 \leq 0.015 C_R U_R$ (μ A) or 15 μ A (Which is greater)
- Dissipation Factor at 20℃ :within the limits as shown in Table 2.
- Dimensions ,Rated Voltage ,voltage derating and Nominal capacitance :See Table 1 and Table 1.

外形尺寸 标称电容量 额定电压 降额电压

Dimensions, Rated Voltage, derating and Nominal Capacitance

表1 talbe1

壳号 Case Size	额定电压 Rated Voltage(V)		6.3	10	16	25	40	63	100	125
	额定电压 Voltage Derating(V)	U _{el} 155℃	5.0	6.3	10	16	25	40	63	75
		U _{es} 175℃	3	5	8	13	20	32	50	65
	外形尺寸 Dimensions(mm)		标称电容量 CR Capacitance C _n (μ F)							
1	5 × 14	33	22	15	10	6.8	3.3	2.2	1.0	
		47	33	22	15	10	4.7	3.3	1.5	
2	6 × 16	68	47	33	22	22	6.8	4.7	3.3	
		100	68	47	33	33	10	6.8	4.7	
		150	100	68	47	47	15	10	6.8	
3	8 × 16	220	150	68	68	47	15	10	6.8	
		330	220	100	100	68	22	15	10	
4	8 × 22	470	330	150	100	100	33	22	15	
		680	470	330	220	220	47	33	22	
5	10 × 22	680	470	330	220	150	68	33	33	
6	10 × 25	1000	680	470	330	330	100	47	47	
		1500	1000	680	470	470	150	100	68	
7	10 × 30	1500	1000	680	470	470	150	100	68	