

产品参数

2CL69~82 型高压二极管采用高可靠性的台面结构及扩散工艺，环氧树脂真空灌注成密闭的封装外形。

High voltage rectifier diodes 2CL69~82 Series adopts high reliable mesa structure and diffusion craftwork, epoxy resin molded in a compact structure.

■ 特点 Feature

- 雪崩特性 Avalanche characteristic
- 更多的外形尺寸可选 More sizes to choose
- 采用环氧树脂真空封装，表面具有抗腐蚀性 epoxy resin molded in vacuum, have anticorrosion in the surface
- 工作结温 $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$ Tj: $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$

■ 应用 Application

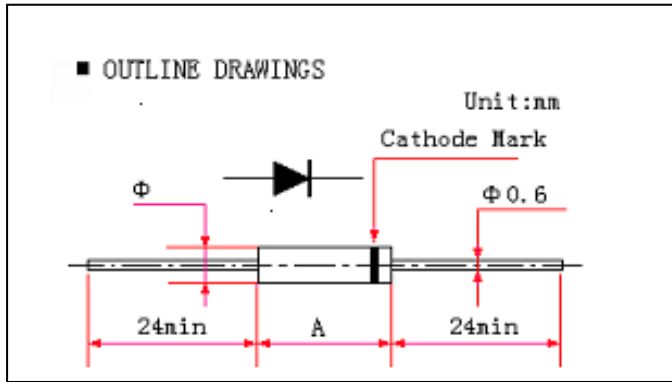
- 静电除尘用高压整流 High voltage rectifier used in electrostatic cleaning
- 高压发生器 High voltage generator
- 高压测试装置 High voltage testing equipment
- 一般高压电源整流，倍压装置 General purpose high voltage rectifier, voltage multiplier assembly

■ 最大额定值 (Maximum ratings)

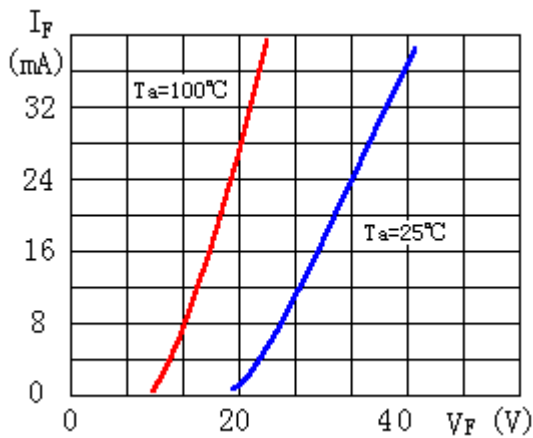
参数名称	符号	测试条件	2CL												单位
			69	70	71	72	73	74	75	76	77	79	82		
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	$T_a=25^{\circ}\text{C}$ $I_R=0.5\mu\text{A}$	4	6	8	10	12	14	16	18	20	25	30	kV	
正向平均整流电流 Average Forward Current	I_O		5.0												mA
非重复峰值浪涌电流 Surge Forward Current	I_{FSM}	正弦半波 50Hz, 电阻负载, $T_{break}=50^{\circ}\text{C}$ (50Hz Half-sine Wave , Resistance load @ $T_{break}=50^{\circ}\text{C}$)	0.5												A
工作结温 Junction Operating Temperature	T_j	正弦半波峰值电压 Half-sine wave peak voltage	125												$^{\circ}\text{C}$
允许工作环境温度 Operating Ambient Temperature	T_c		100												$^{\circ}\text{C}$
保存温度 Storage Temperature	T_{stg}		-40—120												$^{\circ}\text{C}$

■ 电气特性 (Electrical characteristics)

Rated Value	Sign	Condition	2CL												Unit
			70	70	71	72	73	74	75	76	77	79	82		
最大正向峰值电压 Forward Peak Voltage Max	V	$I_F=10\text{mA}$	18	20	25	30	35	40	43	45	45	50	55	V	
最大反向恢复时间 Reverse Recovery Time Max	T_{rr}	$I_F=2\text{mA}$ $I_R=4\text{mA}$	0.08												μS
最大反向漏电流 Peak Reverse Current	I_{R1}	$V_R=V_{RRM}$, 25°C	2.0												μA
	I_{R2}	$V_R=V_{RRM}$, 100°C	5.0												μA
最大结电容 Junction capacitance Max	C_j		2												pF

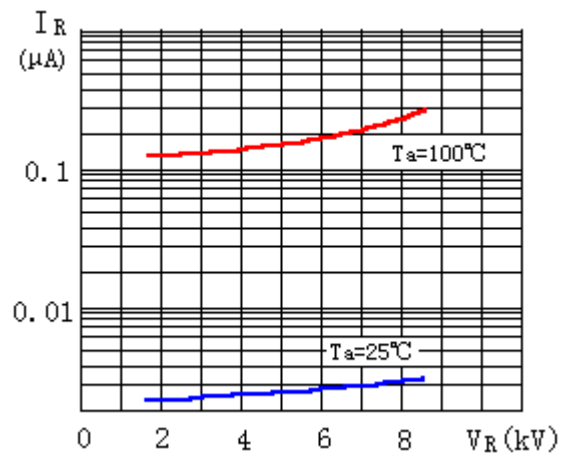
外形图示及尺寸


Type	A	Φ
2CL69	8	3
2CL70		
2CL71		
2CL72	10	
2CL73		
2CL74		
2CL75	12	
2CL76		
2CL77		
2CL79		
2CL82		

特性曲线


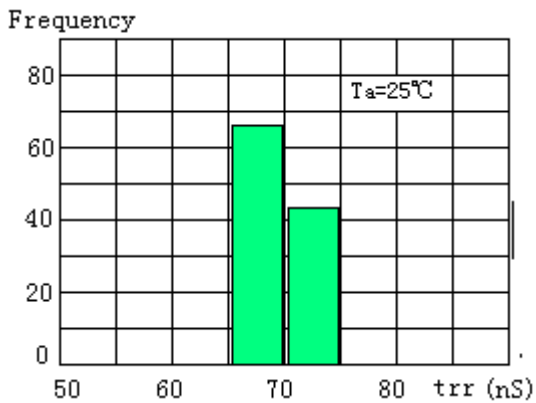
正向特性曲线

Forward Characteristics (2CL71)



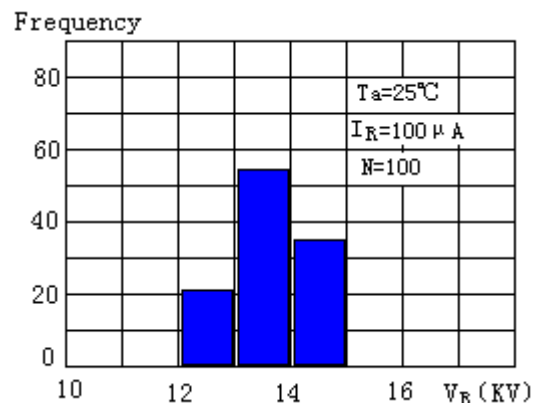
反向特性曲线

Reverse Characteristics (2CL71)



反向恢复时间分布

Reverse Recovery Time Distribution (2CL71)



反向雪崩电压分布

Avalanche Breakdown Voltage Distribution (2CL71)

反向恢复时间基本测试电路
Reverse Recovery Time Basic Test Circuit
